Light Industrial Panel Solution

Today, more and more customers are looking for advanced services such as round-the-clock service or just-in-time delivery. Service automation enables the exchange of information and communication between administrators and clients through the thin, low power consumption portable devices that fit with many circumstances. Upgrade your service platform with IEI service automation solutions, which have advanced communication functions and solid mechanical characteristics. These solutions help you keep up with your customers while staying a step ahead of the competition.

Light Industrial Panel PC Product Line

AFOLUX GEN III PPC

Sleek outlook, easy installation interactive PPC

● Narrow and symmetric bezel allows portrait mode or landscape mode
● Less screw design for easy installation

AFOLUX GEN II PPC

Flat bezel multi-functional PPC

● LED dash system for eye-catching notification
● IEI Light Fanless technology allows the system to turn on/off smart fan automatically according to environmental temperature, enhancing system stability.

AFOLUX PPC

Economical HMI PPC

● Competitive price
● Multi-functional all-in-one panel PCs
● Streamlined plastic housing

Selection Guide

AFOLUX PPC

AFOLUX GEN III Panel PC

Size	W7"	8.4"	W10.1"	12.1"	W15"	W19"	W22"
Intel® Dual Core Celeron® N2807	AFL3-W07A-BT						
Intel® Quad Core Celeron® J1900		AFL3-08A-BT	AFL3-W10A-BT	AFL3-12A-BT	AFL3-W15A-BT		
Intel® H81					AFL3-W15B-H81		
6th generation Intel® mobile ULT				AFL3-12C-ULT3	AFL3-W15C-ULT3	AFL3-W19C-ULT3	AFL3-W22C-ULT3
Intel® Apollo lake						AFL3-W19A-AL	

AFOLUX GEN II Panel PC

Size	8.0"	12.1"	17"	W22"
Intel® Atom™ N2600/N2800	AFL2-08A-N26			
Intel® Atom™ HM65		AFL2-12A-HM65		
Intel® Atom™ H61			AFL2-17A-H61	AFL2-W21A-H61

AFOLUX Panel PC

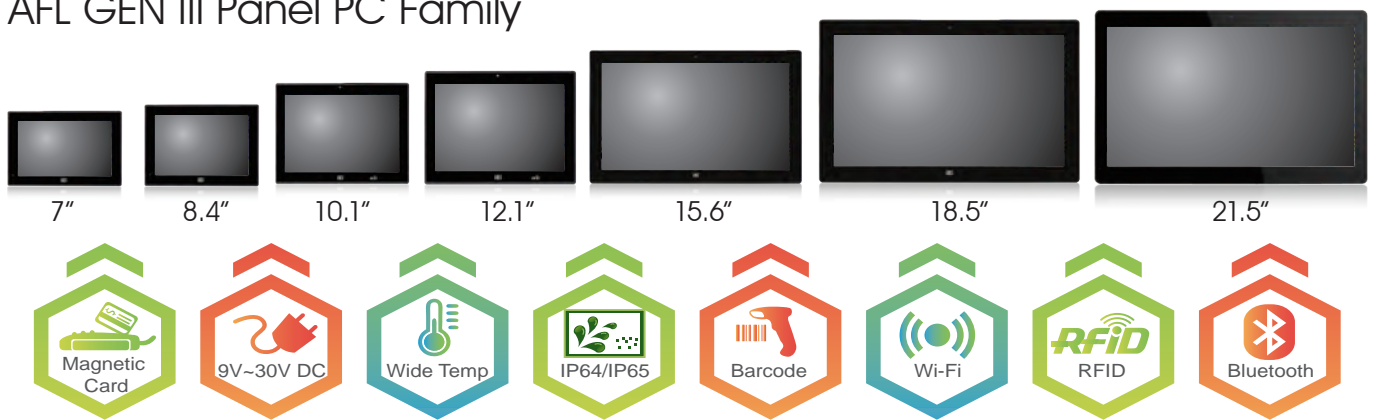| Size	W7"	8.4"	W10.2"	10.4"	12.1"	15"	17"	19"
AMD LX800	AFL-07A-LX	AFL-08AH-LX						
Intel® Atom™ N270			AFL-W10A-N270	AFL-10A-N270				
Intel® Atom™ N2600	AFL-07A-N26	AFL-08A-N26			AFL-12A-N26			
Intel® HM55						AFL-15i-HM55	AFL-17i-HM55	AFL-19i-HM55

AFOLUX GEN III Interactive Panel PC

Leading the Evolution of Intelligent HMI

AFOLUX GEN III Panel PC, a specialized all-in-one panel computer with 7-inch to 15.6-inch PCAP touchscreen, opens a new era of automation. It looks stylish like a tablet, and supports 802.11ac and Bluetooth 4.0 high speed connectivity. Its robustness meets industrial standards and its scalability make it easy to expand I/O options. The AFOLUX GEN III is designed for a wide range of applications which can be applied in different scenarios.

AFL GEN III Panel PC Family

7"   8.4"   10.1"   12.1"   15.6"   18.5"   21.5"

Magnetic Card | 9V~30V DC | Wide Temp | IP64/IP65 | Barcode | Wi-Fi | RFID | Bluetooth

Robustness

- IP65/IP64 front, IPx1 rear cover
- -10°C~50°C extended operating temperature
- 6H PCAP multi-touch

Stylish

- ABS plus PC plastic light weight hosing
- 2mm bezel seamless design
- Upright portrait installation possible for all touch devices
- Less screw design

Scalability

- 1D/2D barcode module for retail applications
- 13.56MHz Mifare reader: meets ISO 14443A/B,15693
- MSR card reader for identifications
- E-Window for function expansion

Connectivity

- Digital microphone, 2-megapixel camera, speakers
- Wireless 802.11ac connectivity
- Bluetooth 4.0 (optional)

Multiple Performance Choice

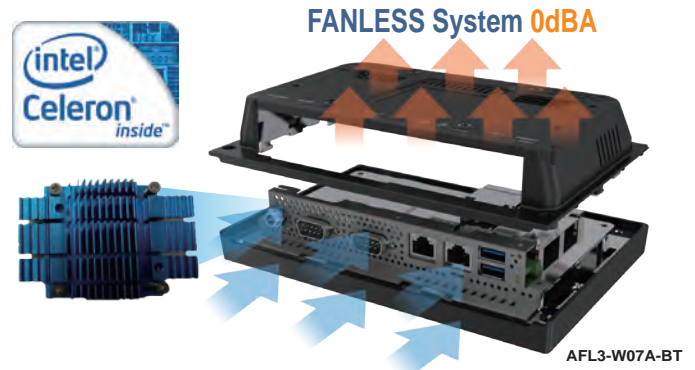## A. Fan-free Quad Core and Dual Core Intel® Celeron® Platform

Quad-core Intel® J1900 2.0 GHz/ Dual-core Intel® N2807 Processor

Green Memory
● Low voltage DDR3L supports up to 8 GB (Intel® Celeron® processor J1900)

Fan-free design
● Thermal simulation before hardware is built
● Rear metal bracket help to average the heat

Intel® HD Graphics Gen 7 Graphics Performance Allows Smooth 2D/3D Graphics Application
● 3D graphics hardware acceleration including support for DirectX*11, OCL 1.2, OGL ES Halti/2.0/1.1, OGL 3.2
● Video decode hardware acceleration including support for H.264, MPEG2, MVC, VC-1, WMV9 and VP8 formats
● Video encode hardware acceleration including support for H.264, MPEG2 and MVC formats

FANLESS System 0dBA

AFL3-W07A-BT

Double Graphics Power!
3DMark2001

6707

Intel® Celeron® Processor N2807
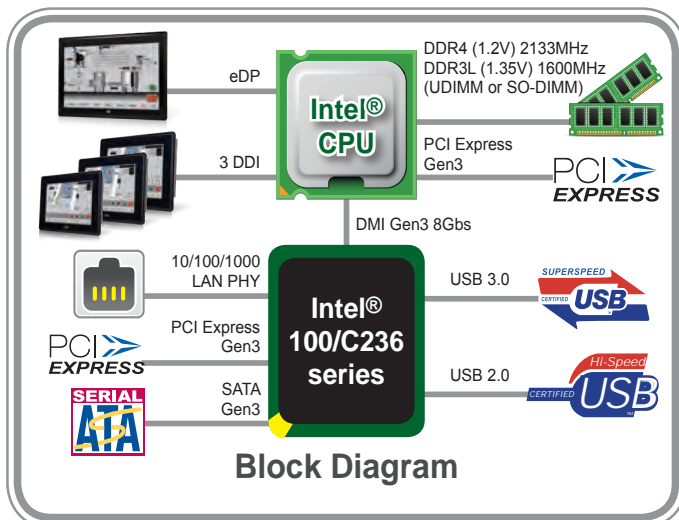**(1M Cache, up to 2.16 GHz)**

B. 7, 6th Generation Intel® Solution

Breakthrough Performance
● 15.6" , 18.5" and 22" fanless light-industrial Panel PC with Intel® Skylake / Kabylake Low power ULT BGA 1356 single package platform
● 14nm processor using 2nd generation 3-D tri-gate transistors
● Support dual-channel DDR4 & DDR3L memory (ECC optional)

Enhanced Graphics / Media
● Gen 9 graphics engine
● 3 independent displays with audio
● Display resolutions supporting up to 4K@60Hz

eDP

DDR4 (1.2V) 2133MHz
DDR3L (1.35V) 1600MHz
(UDIMM or SO-DIMM)

Intel® CPU

3 DDI

PCI Express Gen3

PCI EXPRESS

DMI Gen3 8Gbs

10/100/1000 LAN PHY

USB 3.0

SUPERSPEED CERTIFIED USB

Intel® 100/C236 series

PCI Express Gen3

PCI EXPRESS

SATA Gen3

SERIAL ATA

USB 2.0

Hi-Speed CERTIFIED USB

Block Diagram

Item	ULT			
	8 Series	9 Series	100 Series	100 Series
Platform Name	Haswell	Broadwell	Skylake	Kabylake
Process	22nm	14nm	14nm	14nm
CPU Package	BGA1168	BGA1168	BGA1356	BGA1356
Memory	DDR3L	DDR3/DDR3L 1600	DDR3L/DR4	DDR3L/DR4
PCI Express Lanes	Up to 8 Lanes PCIe (Gen2)	Up to 12 PCIe (Gen2)	Up to 12 PCIe (Gen3)	Up to 12 PCIe (Gen3)
PCH	PCH-LP	PCH-LP	PCH-LP Premium/Base	PCH-LP Premium/Base

Efficient Active Thermal Solution

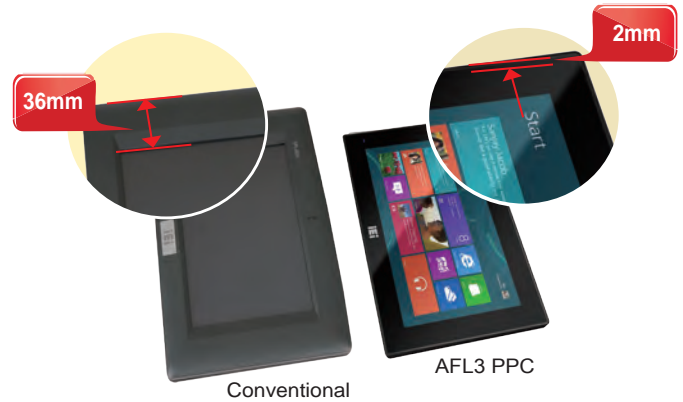IEI unique thermal design reduces the thermal space but with excellent air flow
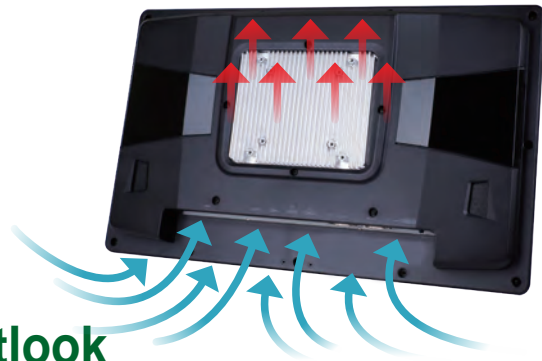
Easy Assembly and Stylish Outlook

Screw-less Design

Only 2 screws are needed for rear cover installation, making it easy to access and replace storage and PCIe Mini card quickly.
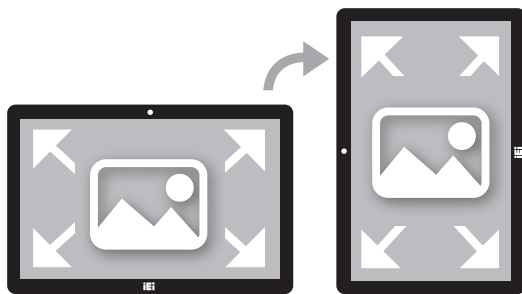
Rear Sliding Cover

2mm Narrow Bezel

36mm

2mm

Conventional

AFL3 PPC

Symmetric Bezel

Landscape/Portrait screen mode supports different applications

Light Weight Plastic Housing

The ABS plus PC plastic housing helps to shape the stylish outlook and only weight 1/3 of metal housing panel PC.

AFOLUX

Fast Transmission Wireless 802.11ac

- 2.4 GHz and 5 GHz dual band supplies faster and reliable signal
- The incredible wireless speed makes it ideal for handling multiple HD movie streams, high-resolution on-line games, stereo music, VoIPs and data streams at the same time stably and smoothly.

Maximum Speed: Next generation 802.11ac VS. 802.11n

WiFi Standard

802.11g

802.11n (3x3)

802.11ac

54   450 Speed (Mbps)   1300

Noise
2.4GHz

5GHz Wireless
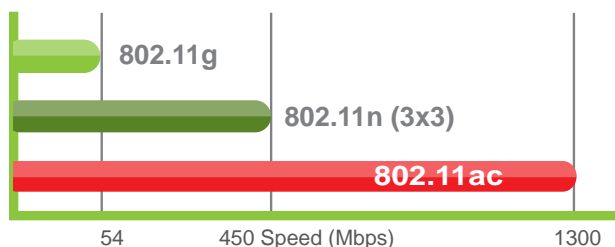
E-Window Tool Kit

Innovative E-windows technology is a new modular way of adding flexible functionality to a wide range of device. Using standardized component helps system integrators easily add more features without any costly efforts.

E-Window

GbE LAN
GPIO
COM
3G

E-MPCIE-LAN-R10

E-MPCIE-3G-R10
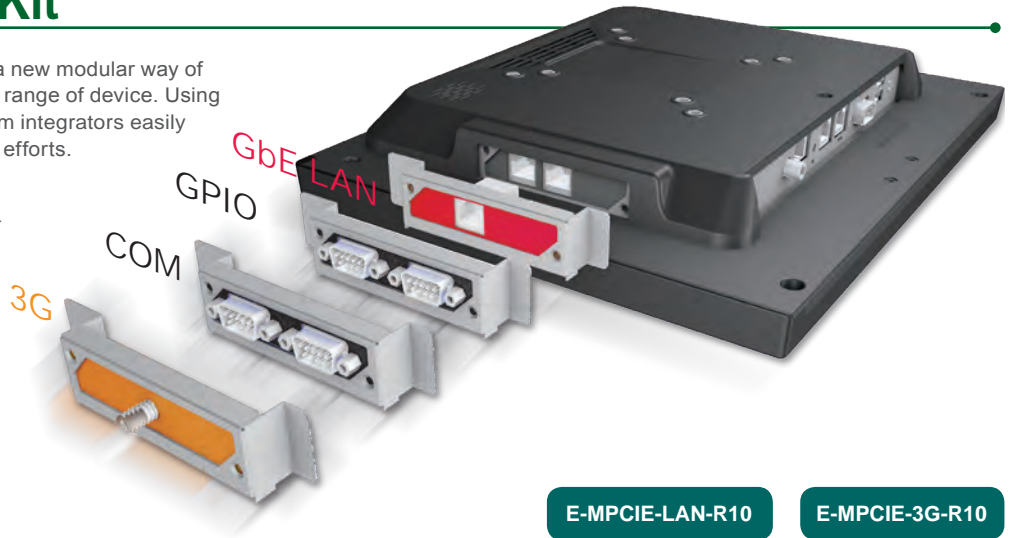
Features
- Easy maintenance
- Variety module & I/O plate with flexible customization
- Integration of multiple functions
- Easy for replacement with different modules

Ordering Information: (shipment by assembly to order)

Item	Description	Support list	
E-MPCIE-LAN-R10	PCIe mini card supports 1-port GbE with REALTEK RTL8111E controller, with PMS 194C I/O bracket and 250mm cable, R10	AFL3-12A-BT * AFL3-W15A-BT *	AFL3-W15C-UTL3 AFL3-W19C-UTL3 AFL3-W22C-ULT3
E-MPCIE-DLAN-R10	PCIe mini card supports PCIe mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable, R10	AFL3-12A-BT * AFL3-W15A-BT *	AFL3-W15C-UTL3 AFL3-W19C-UTL3 AFL3-W22C-ULT3
E-MPCIE-CClink-R10 CIFX 90E-CC\ET\F	PCIe mini card supports CC-Link Slave interface according to V2.0 and V1.1, with black C I/O bracket and 250mm cable, R10	AFL3-W15C-UTL3 AFL3-W19C-UTL3	AFL3-W22C-ULT3
E-MPCIE-PROFIBUS-R10 CIFX 90E-DP\F	PCIe mini card supports universal PROFI BUS DP card for Master or Slave, with black C I/O bracket and 250mm cable, R10	AFL3-W15C-UTL3 AFL3-W19C-UTL3	AFL3-W22C-ULT3
E-MPCIE-EtherCAT-R10 CIFX 90E-RE\F	PCIe mini card supports universal for all Real-Time Ethernet protocols, with black C I/O bracket and 280mm cable, R10	AFL3-W15C-UTL3 AFL3-W19C-UTL3	AFL3-W22C-ULT3
E-MPCIE-3G-R10	PCIe mini card supports 3G WWAN Module , with PMS 130C I/O bracket, RF antenna 300mm cable and GSM antenna cable, R10	AFL3-12A-BT AFL3-12C-BT AFL3-W15A-BT	AFL3-W15C-UTL3 AFL3-W19C-UTL3 AFL3-W22C-ULT3

* Remove AFL3-USBHUB-R10

Bluetooth 4.0 (optional)

- Bluetooth 4.0 (BLE :Bluetooth Low Energy)/ 3.0 + HS (High Speed) data rate up to 24 Mbit/s
- 10m~20m (depending on environment)

Version	Data rate	Maximum application throughput
Version 1.2	1 Mbit/s	0.7 Mbit/s
Version 2.0 + EDR	3 Mbit/s	2.1 Mbit/s
Version 3.0 + HS	Perhaps 24 Mbit/s	(note: only with AMP and depends on the AMP , BT itself remains 2.1 Mbit/s max)
Version 4.0	Perhaps 24 Mbit/s	(note: only with AMP and depends on the AMP , BT itself remains 2.1 Mbit/s max)

Engage exercisers with entertaining experience

Restaurant Bluetooth billing system

Selectable AT/ATX Power Mode

Convenient Power Mode Setting

AT   ATX

AT Power Mode

With the AT mode selected, the power is controlled by a central power unit rather than a power switch. The AFOLUX PPCs turns on automatically when the power is connected.

ATX Power Mode

With the ATX mode selected, the AFL series panel PC goes in a standby mode when it is turned off. The panel PC can be easily turned on via network or a power switch in standby mode. Remote power control is perfect for advertising applications since the broadcasting time for each panel PC can be set individually and controlled remotely.

Applications
● Plant environment monitoring system
● Factory automation platform
● Manufacturing shop flow

Advantages
● Easy to turn on/off with wall/ panel mounting
● Automatic start when power connected

### Applications
● Security surveillance
● Advertising terminal

Advantages
● Power management
● Remote control via network advantage

IP65 Front Panel /IPx1 Rear Protection

The IP 65 compliant front panel of the AFOLUX GEN III panel PC has passed tests to check if there is any water, dust or dirt passing the sealing design. Reference IEC60529 Testing Procedures:

Hose Diameter: 25.4 mm (UL50 Type 4X), The distance from water hose to DUT is 3 meters.
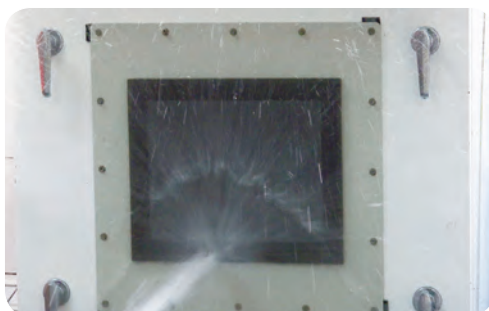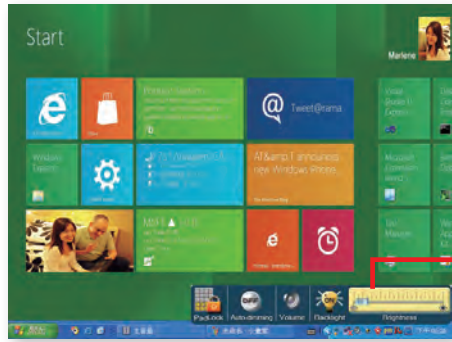

Test for protection against water

Test for protection against dust

Software OSD Configuration

IEI patented system software utility allows users to adjust system settings through the software interface in Windows environment instead of pressing the membrane keypad below the front panel.

Volume adjustment

Brightness adjustment

*Support OS
Windows 7
Windows 8 / Windows 8.1
Windows 10 / Windows 10.1

Rich Peripherals   A wide range of peripherals to fit different application needs

Camera and Microphone

Magnetic Card Reader

Barcode Reader

RFID

A. Built-in 13.56 MHz Mifare RFID Reader

RFID Card

IEI RFID Software Development Kit

- **COM Port Settings and Activation Area**
  Allows the user to select the serial port that communicates with the RFID reader module.
- **Commands Area**
  Displays various command options for user to select.
- **Data Input Area**
  The data input area is where the user enters block number, key,key data, and other information required by certain commands.
- **Raw Data Display Area**
  Shows all communication logs and responses of the executed commands.
- **Mifare Card ID Display Area**
  Displays the Mifare card ID when the Mifare card is detected.
- **Error Code Display Area**
  Shows the error message when an error occurs.

Model	AFL3-MF-RFID-KIT02-R10	
Support Protocol	ISO 15693/ISO 14443A/ISO 14443B	
RF Frequency	13.56 MHz	
RFID IC	TI TRF7960	
Operating Distance	2-3cm	
Interface	USB	
Driver Support	Windows® 2000 Windows® XP Windows® 7/8 Windows® 10	Windows® Server 2003 Windows® Server 2008 Windows® Server 2008 R2 (x86 and x64)

B. 1D/2D Barcode Reader

Modularized 1D/2D Barcode Scanner and Easy to Assemble

- Accurately decodes all 1D and 2D codes, even wrinkled, damaged or poorly printed
- 752×480 CMOS sensor captures high resolution images for decoding
- Horizontal 42° and Vertical 27.5° large scanning area

Technology	1D Code	2D Code
Read Condition	20 to 25 characters	100 to about 2,000 characters

Efficient Scanning Performance

- Area-scanning features non-direction reading drive scanning performance
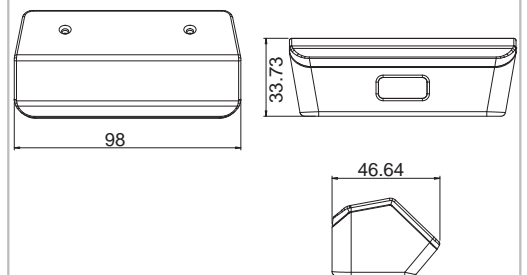- 120 mm scanning distance

No Directional Limitation

Modularized 1D/2D Barcode Scanner

AFL3-2D-R11 Specifications

Model		AFL3-2D-R11
Image Sensor		752 × 480 CMOS
Illumination		Red LED 625±10 nm
Symbologies	2D	PDF417, Data Matrix (ECC200,ECC000,050,080,100,140), QR Code, etc.
	1D	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.
Reading Precision		≥ 5mil
Depth of Field	UPC-A	55mm - 305mm (13mil);
	PDF417	65mm - 175mm (6.67mil); 50mm - 215mm (10mil)
	Data Matrix	50mm - 220mm (15mil);
	QR Code	65mm - 235mm (15mil)
Symbol Contrast		≥ 25%
Field of View		Horizontal 42°; Vertical 27.5°
Scan Angle**		Roll: 360°; Pitch: ±55°; Skew: ±55°
Interface		USB
Operating Temperature		-20°C to +60°C
Storage Temperature		-40°C to +80°C
Humidity		5% to 95% (non-condensing)
Ambient Light		0 ~ 100,000 LUX (natural light)
Scanning prompt		Buzzer

AFL3-2D-R11 Dimensions (Unit: mm)

33.73

98

46.64

C. Magnetic Card Reader

Model	AFLP-12AMSR-U-R11
Scan Speed	100 - 1000 mm / sec (3.9 - 39 inch / sec)
Direction	Bi-direction
Life Cycle	Approx. 300,000 passes
MTBF	24,000 hours
Interface	USB
Dimensions	21 cm X 11.7 cm X 5 cm
Weight	220 g
Temperature	-20 oC to 60 oC (-4 oF to 140 oF)
Humidity	20% to 95%

AFL3-W07A-BT
Intel® Celeron® N2807 (Dual Core, 1.58 GHz)

AFL3-08A-BT
Intel® Celeron® J1900 (Quad Core, 2.0 GHz)

Features

- W7"~8.4" light industrial interactive panel PC
- 9 V ~ 30 V wide range DC input with lockable DC jack
- Selectable AT/ATX power mode
- Built-in speakers
- One mSATA slot
- IP64/IP65 compliant front panel
- IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

Fanless | Bluetooth | Touchscreen | mSATA | Speakers | 9V~30V DC | One Key Recovery IEI symantec

Specifications

	Model	AFL3-W07A-BT	AFL3-08A-BT
LCD	Size	7"	8.4"
	Resolution	1024 x 600 (16:9)	800 x 600 (4:3)
	Brightness (cd/m²)	500	450
	Contrast Ratio	700:1	600:1
	LCD Color	16.2M	16.2M
	Pixel Pitch (mm)	0.0635 (H) x 0.1905 (V)	0.213 (H) x 0.213 (V)
	Viewing Angle (H-V)	150º / 145º	160º / 140º
	Backlight MTBF(hrs)	20000 hrs	50000 hrs
Touch	Touch Screen	Projected capacitive type	Resistive Touch Window/Projected capacitive type
	Touch Controller	EETI EXC3160	PenMount DMC 9000/EETI EXC3146
Motherboard	CPU	Intel® Celeron® N2807 (dual core, 1.58 GHz)	Intel® Celeron® J1900 (quad core, 2.0 GHz)
	RAM	2GB DDR3L onboard RAM/ 4GB DDR3L onboard RAM	One 204-pin 2 GB 1333MHz single-channel, 2GB DDR3L SDRAM pre-installed (system max. 8GB)
	Ethernet	2 x PCIe GbE by RTL8111E controller	2 x PCIe GbE by RTL8111E controller
	Audio Codec	ALC892	ALC892
Storage		mSATA	mSATA
I/O Ports & Switch		2 x RS-232 COM port (DB-9 connector) 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9-30V Lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x RJ-45 for GbE LAN 1 x Power switch 1 x Audio port (line-out) 1 x Reset button 1 x AT/ATX switch 1 x 9-30V DC Lockable power jack
Audio		AMP 2W (internal speaker, left channel output)	AMP 2W + 2W (internal speaker)
Camera and Microphone		N/A	2-megapixel with low light function, digital microphone
Wireless & Bluetooth		IEEE 802.11 a/b/g/n/ac, Bluetooth V4.0 (PCIe mini slot)	IEEE 802.11 a/b/g/n/ac (PCIe mini slot)
OSD Function		Software OSD	
Physical	Front Panel Construction	PC + ABS Plastic	
	Mounting	Panel, Wall, Stand, Arm, Rack VESA 75mm x 75mm	
	Color	Black C	
	Dimensions (WxHxD) (mm)	191 x 127 x 43	233 x 175 x 50
	Cut-out Dimensions (WxH) (mm)	182 x 111	207 x 143
	Net/Gross Weight (kgs)	0.73/1.81	0.8/2.44
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C~50°C	-15°C~55°C
	Storage Temperature (°C)	-20°C~60°C	-20°C~65°C
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 65 compliant front panel	IP 64 compliant front panel
	Safety&EMC	CE / FCC	
	Thermal Solution	Fanless	
Power	Power Requirement	9 V ~ 30 V	
	Power Consumption	12V@2.08 (Intel® N2807 CPU with 2GB 1333 MHz DDR3L memory)	12V@2A (Intel® J1900 CPU with 2GB 1333 MHz DDR3L memory)

Ordering Information

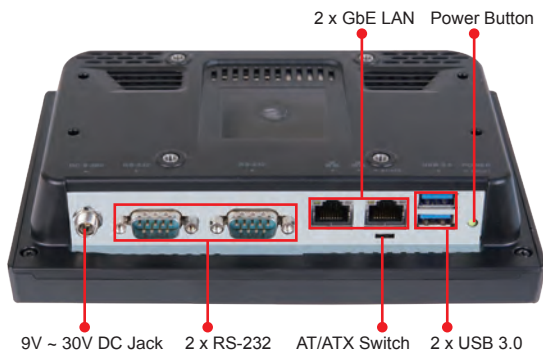| Part No.	Description
AFL3-W07A-BT-N1/PC/2G-R12	7" 500 cd/m² 1024 x 600 HD fanless panel PC with Intel® Celeron® N2807 dual core 1.58 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, on-board 2GB DDR3L RAM, R12
AFL3-W07A-BT-N1/PC/4G-R12	7" 500 cd/m² 1024 x 600 HD fanless panel PC with Intel® Celeron® N2807 dual core 1.58 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, on-board 4GB DDR3L RAM, R12
AFL3-W07A-BT-N1/PC/2G/MF-R12	7" 500 cd/m² 1024 x 600 HD fanless panel PC with Intel® Celeron® N2807 dual core 1.58 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, on-board 2GB DDR3L RAM, Mifare RFID,R12
AFL3-08A-BT-J1/PC/2G-R10	8.4" 450cd/m² SVGA fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac wireless module, projected capacitive touch screen, 2GB DDR3L RAM, R10
AFL3-08A-BT-J1/R/2G-R10	8.4" 450cd/m² SVGA fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11 a/b/g/n/ac wireless module, resistive touch window, 2GB DDR3L RAM,R10

Options

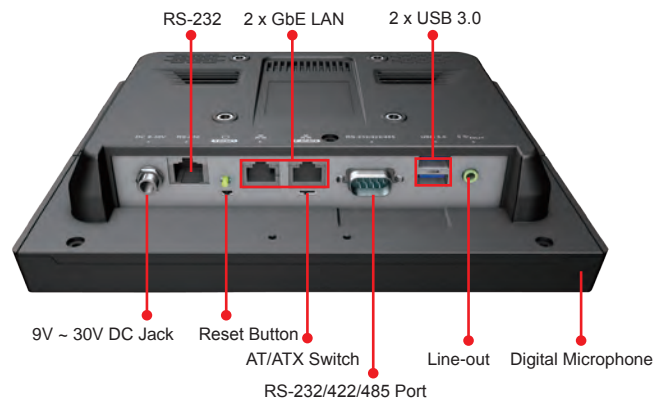| Item	AFL3-W07A-BT	AFL3-08A-BT
Panel Mounting Kit	AFL3PK-W07A-R11	AFL3PK-08A-R10
Wall Mounting Kit	AFLWK-12	AFLWK-12
Rack Mounting Kit	AFL3RK-W07A-R11	AFL3RK-08A-R10
Arm	ARM-11-RS/ARM-31-RS	ARM-11-RS/ARM-31-RS
Stand	STAND-B08/STAND-100-RS	STAND-B08/STAND-100-RS
V-Stand	VSTAND-A07-R11	VSTAND-A10-R11
Magnetic Card Reader	AFL3P-W7MSR-U-R10	AFL3P-W10MSR-U-R10
Barcode Scanner	N/A	AFL3-2D-R11
RFID Reader (13.56 MHz Mifare Type)	AFL3-W07A-BT-N1/PC/2G/MF-R12	N/A (Customized by project base)
*OS: Win 7 Embedded (64-bit)	AFL3-W07A-BT-WES7P64-R11 (for PCAP touch)	AFL3-W07A-BT-WES7P64-R11 (for PCAP touch) AFL3-W07A-BT-WES7E64-R11 (for Resistive touch)
*OS: Win 8 Embedded (64-bit)	AFL3-W07A-BT-WE8S64-R10	
*OS: Win 10 IOT Enterprise (64-bit)	AFL3-W07A-BT-W10E64-R10	

*OS image with CD-ROM without storage

Packing List

Item	Part No.	Q'ty	Description
One Key Recovery DVD	7B000-001083-RS	1	
Setting kit	46003-002600-RS	2	
Round head machine screw	44003-020041-RS	2	M2*4 round head machine screw
	44003-020041-RS	4	M2*4 round head machine screw
Pan head machine screw	44403-040061-RS	4	M4*6 pan head machine screw
Fix holder	46003-009500-RS	2	
Power cord	32702-000400-200-RS	1	
	32702-000200-100-RS	1	
Power adapter	63040-010036-121-RS	1	36W; Vin: 90V~264V AC; Vout: 12VDC; Φ2.5/Φ5.5/lock
Driver CD		1	
Touch pen	43125-0002C0-00-RS	1	Resistive touch screen only

AFL3−W07A
Fully Integrated I/O

2 x GbE LAN   Power Button

9V ~ 30V DC Jack   2 x RS-232   AT/ATX Switch   2 x USB 3.0

AFL3−08A
Fully Integrated I/O

RS-232   2 x GbE LAN   2 x USB 3.0

9V ~ 30V DC Jack   Reset Button   Line-out   Digital Microphone

AT/ATX Switch

RS-232/422/485 Port

AFL3-W07A-BT
Dimensions *(Unit: mm)*

43.4

190.9

17

127.3

178.6

75

107.7

75

111

Suggested
Cut Out Size

182
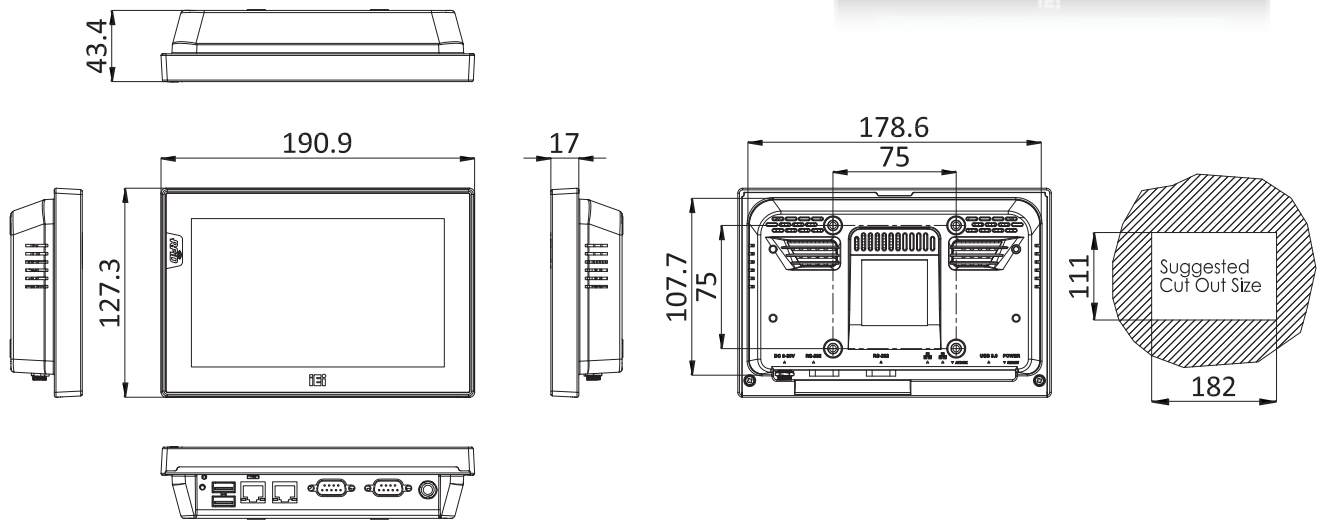
AFL3-08A-BT
Dimensions *(Unit: mm)*

203.35

233

172.30

50

21

4-KFE-M4-5L

75

129.60

175

139.90

75

207

142.9

Suggested cut out size

SCALE 1:2
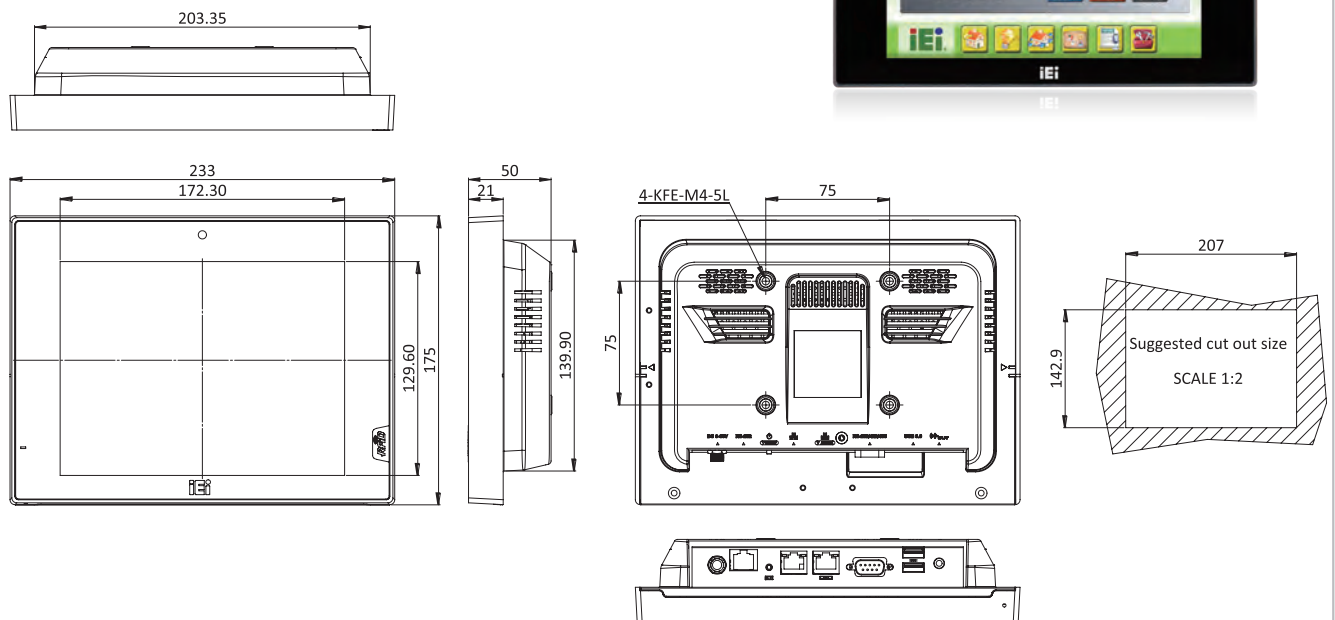
AFL3-W10A-BT	Intel® Celeron® J1900 (Quad Core, 2.0 GHz)
AFL3-12A-BT	Intel® Celeron® J1900 (Quad Core, 2.0 GHz)
AFL3-12C-ULT3	Intel® Core™ i5 and Celeron® ULT Processor

Preliminary

Features

- W10"~12.1" light industrial interactive panel PC
- Wide range DC input with lockable DC jack
- Selectable AT/ATX power mode
- Built-in speakers
- One mSATA slot
- IP64 compliant front panel
- IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

Fanless | Bluetooth | Touchscreen | IP64 | Camera | Speakers | One Key Recovery | iEi symantec

Specifications

	Model	AFL3-W10A-BT	AFL3-12A-BT	AFL3-12C-ULT3 *Preliminary*
LCD	Size	10.1"	12.1"	12.1"
	Resolution	1280 x 800 (16:10)	1024 x 768 (4:3)	1024 x 768 (4:3)
	Brightness (cd/m²)	350	500	500
	Contrast Ratio	800:1	700:1	700:1
	LCD Color	16.2M	16.2M	16.2M
	Pixel Pitch (mm)	0.1695 (H)×0.1695 (V)	0.240 (H) x 0.240 (V)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	170º / 170º	160º / 160º	160º / 160º
	Backlight MTBF(hrs)	15000 hrs	50000 hrs	50000 hrs
Touch	Touch Screen	Projected capacitive type	5-wire resistive touch window/ projected capacitive type	Projected capacitive type with USB interface (anti-UV)
	Touch Controller	EETI EXC3146	PenMount DMC9000/ EETI EXC3146	EETI EXC3180
Motherboard	CPU	Intel® Celeron® J1900 (quad core, 2.0 GHz)	Intel® Celeron® J1900 (quad core, 2.0 GHz)	6th Generation Intel® Core™ i5 and Celeron® on-board processor
	RAM	One 204-pin 2 GB 1333MHz single-channel, 2GB DDR3L SDRAM pre-installed (system max. 8GB)	One 204-pin 2 GB 1333MHz single-channel, 2GB DDR3L SDRAM pre-installed (system max. 8GB)	One 260-pin 2133MHz single-channel, 4GB DDR4L SDRAM pre-installed (system max. 8GB)
	Ethernet	2 x PCIe GbE by RTL8111E controller	2 x PCIe GbE by RTL8111E controller	2 x PCIe GbE by Intel® i211 controller
	Audio Codec	ALC892	ALC892	ALC892
Storage		mSATA	mSATA 2.5" SATA 3Gb/s HDD bay	2.5" SATA 3Gb/s HDD bay M.2 M key PCIe (2230) mSATA slot (PCIe/mSATA/USB)
I/O Ports & Switch		1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x USB 2.0 2 x RJ-45 for GbE LAN 1 x Power switch 1 x Audio port (line-out) 1 x Reset button 1 x AT/ATX switch 1 x 9-30V DC lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x USB 2.0 2 x RJ-45 for GbE LAN 1 x Power switch 1 x Audio port (line-out) 1 x Reset button 1 x AT/ATX switch 1 x 9-30V lockable power jack	1 x RS-232/422/485 (DB-9) 1 x RS232 (RJ-45) 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x DC jack (12-30V DC) 1 x HDMI 1 x Power switch 1 x Reset button 1 x AT/ATX switch
	E-Window Expansion	N/A	Yes, optional	Yes, optional
	Audio	AMP 2W + 2W (internal speaker)	AMP 3W + 3W (internal speaker)	AMP 3W + 3W (internal speaker)
	Camera and Microphone	2-megapixel with low light function, digital microphone		
	Wireless	IEEE 802.11a/b/g/n/ac (PCIe Mini slot)		IEEE 802.11 a/b/g/n/ac, Bluetooth V4.0, M.2 slot
	OSD Function	Software OSD		
Physical	Front Panel Construction	PC + ABS Plastic		
	Mounting	Panel, Wall, Stand, Arm VESA 75mm x 75mm	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm	Panel, Wall, Stand and Arm VESA 75mm x 75mm / VESA 100mm x 100mm
	Color	Black C		
	Dimensions (WxHxD) (mm)	262 x 181 x 42	304 x 243 x 44	304 x 243 x 58
	Cut-out Dimensions (WxH) (mm)	236 x 149	243 x 205	272 x 223
	Net/Gross Weight (kgs)	1.06/2.58	1.92/3.95	3/5.03
Environment	Operating Temperature (Ambient with air flow)	-10°C~50°C	-20°C~50°C	-20°C ~ 50°C
	Storage Temperature	-20°C~60°C	-20°C~60°C	-30°C ~ 60°C
	Humidity	10% to 95% (non-condensing)		
	IP Level	IP 64 compliant front panel		
	Safety&EMC	CE / FCC		CE , FCC , ErP 2009/125/EC
	Thermal Solution	Fanless		
Power	Power Requirement	9 V ~ 30 V DC		12 V ~ 30 V DC
	Power Consumption	12V@2.3A (Intel® J1900 CPU with 2GB 1333 MHz DDR3L memory)	12V@3.58A (Intel® J1900 CPU with 2GB 1333 MHz DDR3L memory)	12V@6A (Intel® Core™ i5-6300U CPU with 4GB DDR4 2133 MHz DDR4 memory)

Ordering Information

Part No.	Description
AFL3-W10A-BT-J1/PC/2G-R10	10.1" 350cd/m² 1280 x 800 fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, 2GB DDR3L RAM, 2-megapixel camera, microphone, R10
AFL3-12A-BT-J1/PC/2G-R12	12.1" 500 cd/m² XGA fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, 2GB DDR3L RAM, 2-megapixel camera, microphone, R12
AFL3-12A-BT-J1/R/2G-R12	12.1" 500 cd/m² XGA fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, resistive touch screen, 2GB DDR3L RAM, 2-megapixel camera, microphone, R12
AFL3-12C-ULT3-C/PC/4G-R10	12.1" 500cd/m² 1024 x 768 panel PC with 6th generation 14nm Intel® mobile Celeron® 3855U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10
AFL3-12C-ULT3-i5/PC/4G-R10	12.1" 500 cd/m² 1024 x 768 panel PC with 6th generation 14nm Intel® mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10

RFID

Card Reader

Options

Item	AFL3-W10A-BT	AFL3-12A-BT	AFL3-12C-ULT3
Panel Mounting Kit		AFL3PK-08A-R10	
Wall Mounting Kit	AFLWK-12	AFLWK-19B	AFLWK-19B
Rack Mounting Kit	AFL3RK-W10A-R10	AFL3RK-12A-R10	AFL3RK-12A-R10
Arm		ARM-11-RS/ARM-31-RS	
Stand	STAND-C12-R10	STAND-A12-RS/STAND-C12-R10/ STAND-100-RS	STAND-A12-RS/STAND-C12-R10/ STAND-100-RS
V-Stand	VSTAND-A10-R11	VSTAND-A12-R11	VSTAND-A12-R11
Magnetic Card Reader		AFL3P-W10MSR-U-R10	
Barcode Scanner		AFL3-2D-R11	
RFID Reader **(13.56 MHz Mifare Type) for ATO assembly	AFL3-MF-RFID-KIT02-R10	AFL3-MF-RFID-KIT02-R10**	AFL3-MF-RFID-KIT02-R10
*OS: Win 7 Embedded (64-bit)	AFL3-W07A-BT-WES7P64-R11* (for PCAP touch)	AFL3-W07A-BT-WES7P64-R11* (for PCAP touch) AFL3-W07A-BT-WES7E64-R11* (for Resistive touch)	AFL3-W12C-ULT3-WES7P64-R10* (for PCAP touch) AFL3-W12C-ULT3-WES7E64-R10* (for Resistive touch)
*OS: Win 10 IOT Enterprise		AFL3-W07A-BT-W10E64-R10	AFL3-W12C-ULT3-W10E64-R10

**RFID is supported from AFL3-xxA-BT R11 version
*OS image with CD-ROM without storage


E-Window
(for ATO assembly)

E-Window

E-Window (for ATO assembly)

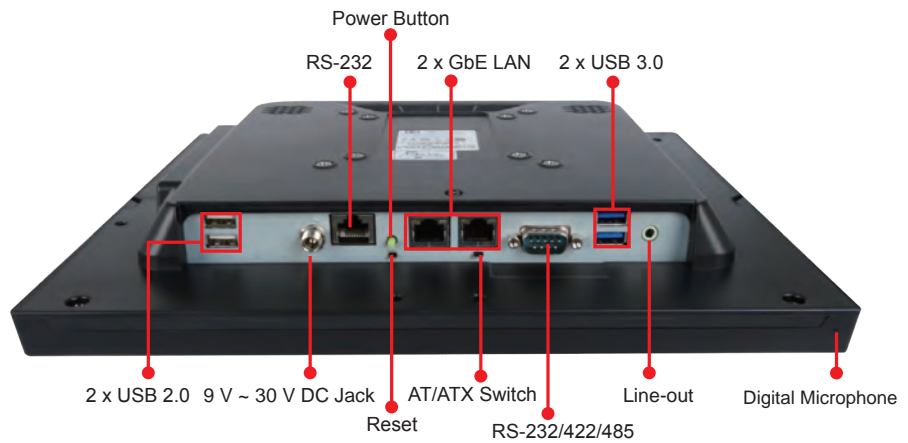| Part No.	Description	Supported Model
E-MPCIE-LAN-R10	PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 250mm cable, R10	AFL3-12A-BT-J1/PC/2G-R12 AFL3-12A-BT-J1/R/2G-R12 AFL3-12C-ULT3-C/PC/4G-R10 AFL3-12C-ULT3-i5/PC/4G-R10
E-MPCIE-DLAN-R10	PCIe Mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable, R10	
E-MPCIE-3G-R10	PCIe Mini card supports 3G WWAN, with PMS 130C I/O bracket, 300mm RF antenna cable and GSM antenna cable, R10	

Packing List

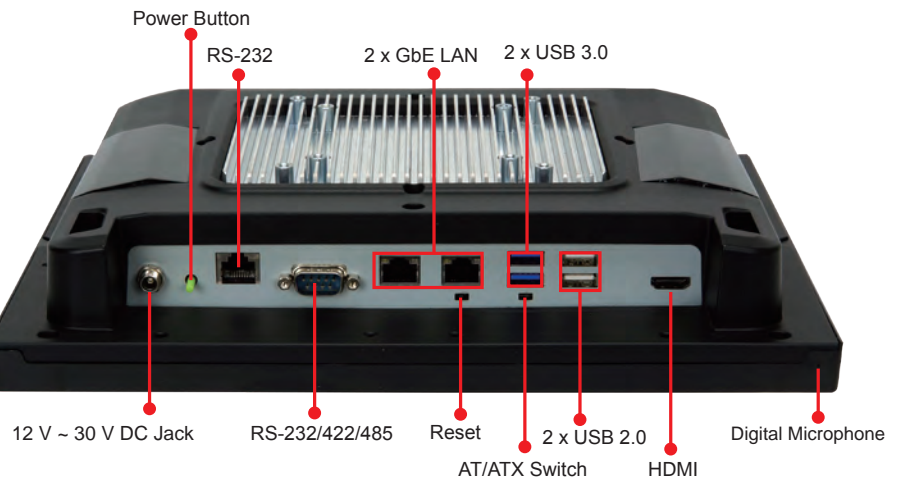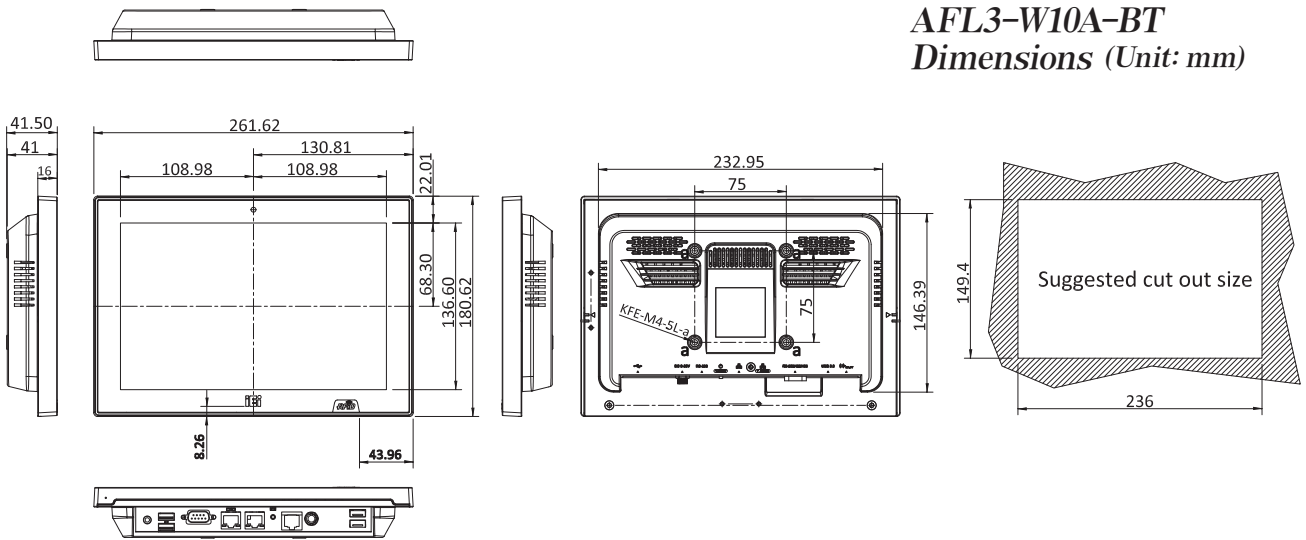| Item	Part No.	Q'ty	Description
One Key Recovery DVD	7B000-001083-RS	1	
Round head machine screw	44003-020041-RS (12A-BT)	2	M2*4 round head machine screw
Pan head machine screw	44403-040061-RS	4	M4*6 pan head machine screw
Fix holder	46003-009500-RS	2	
Power cord	32702-000200-100-RS	1	
Power adapter	63040-010036-121-RS (AFL3-W10A-BT) 63040-010060-120-RS (AFL3-12A-BT)	1	36W; Vin: 90V~264V AC; Vout: 12VDC 60W; Vin: 90V~264V AC; Vout: 12VDC
Driver CD		1	
RJ-45 to DB-9 COM port transfer cable	32005-000200-200-RS	1	300mm, 26AWG, (A) D-SUB 9 male, (B) RJ-45
Touch pen	43125-0002C0-00-RS	1	Resistive touch screen only

AFL3−W10A
Fully Integrated I/O
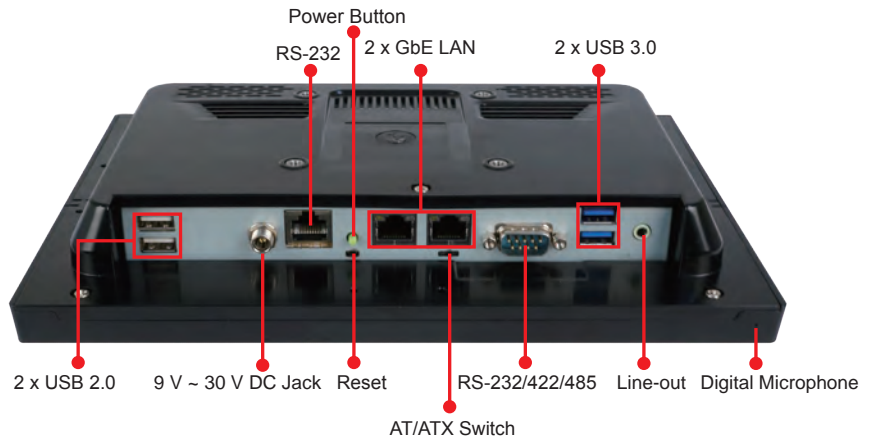
AFL3−12A
Fully Integrated I/O

AFL3−12C−ULT3
Fully Integrated I/O

AFL3-W10A-BT
Dimensions (Unit: mm)

41.50
41
16
261.62
130.81
108.98
108.98
22.01
68.30
136.60
180.62
8.26
43.96

232.95
75
75
146.39
149.4
KFE-M4-5L-a
a
a

Suggested cut out size
236

AFL3-12A-BT
Dimensions (Unit: mm)

303.43
248
44.42
19.42
186.4
243.35

240
100
75
100
75
8XM4
201.5

243
204.5
Cutout suggestion

AFL3-12C-ULT3
Dimensions (Unit: mm)

303.43
248
58.23
186.40
243.36

100
75
8XM4
75
100

272
223
Cutout suggestion
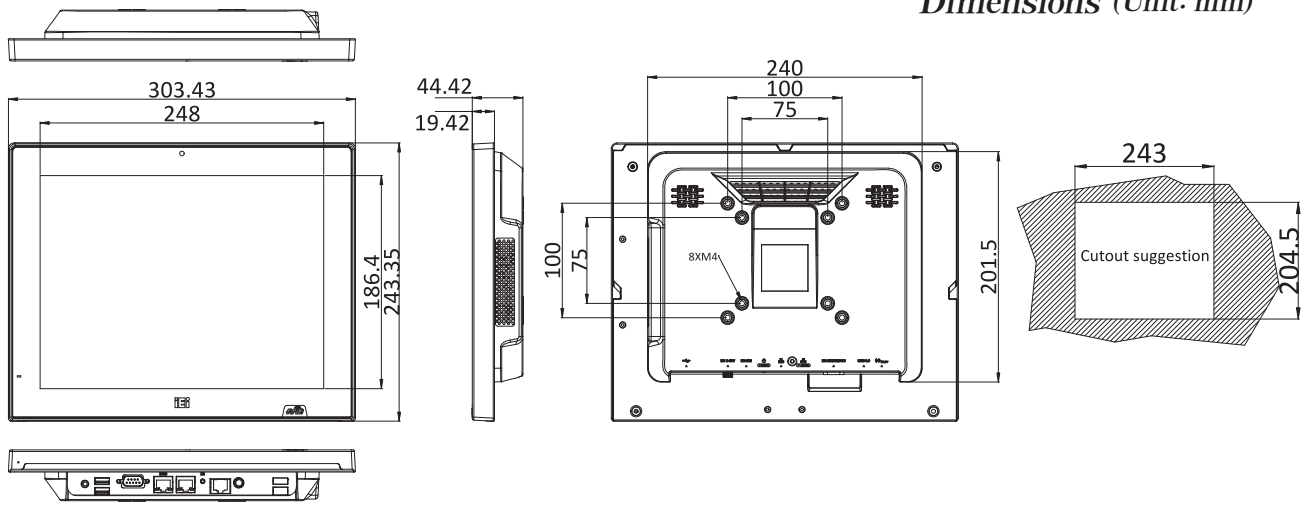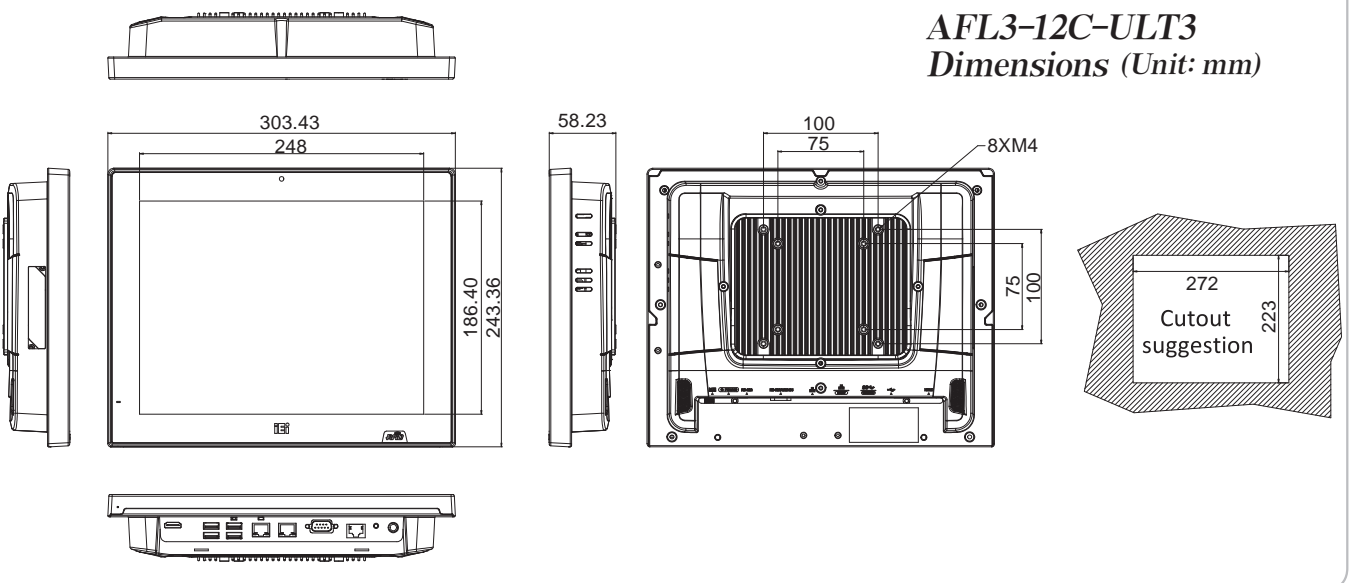
AFL3-W15A-BT	Intel® Celeron® J1900 (Quad Core, 2.0 GHz)
AFL3-W15B-H81	Intel® Core™ i7/i5/i3, Pentium® and Celeron®
AFL3-W15C-ULT3	Intel® Core™ i5 and Celeron® ULT Processor

NEW

Features

- W15" light industrial interactive panel PC
- 9 V ~ 30 V wide range DC power input
- Selectable AT/ATX power mode
- Built-in speakers
- One mSATA slot
- IP64 compliant front panel
- IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

Bluetooth · Touchscreen · IP64 · Camera · Speakers · 9V~30V DC · One Key Recovery IEI symantec

Specifications

Model		AFL3-W15A-BT	AFL3-W15B-H81	AFL3-W15C-ULT3
LCD	Size	15.6"		
	Resolution	1366 x 768 (16:9)		
	Brightness (cd/m²)	400		
	Contrast Ratio	500:1		
	LCD Color	16.2M		
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)		
	Viewing Angle (H-V)	170º / 160º		
	Backlight MTBF(hrs)	50000 (LED backlight)		
Touch	Touch Screen	5-wire resistive type with RS-232 interface / projected capacitive type with USB interface		
	Touch Controller	PenMount DMC9000 / EETI EXC3188	PenMount DMC9000 / EETI EXC7200	PenMount DMC9000 / EETI EXC3188
Motherboard	CPU	Intel® Celeron® J1900 (quad core, 2 GHz)	Intel® Core™ i7/i5/i3, Pentium®, Celeron® processor (TDP 35W)	6th Generation Intel® Core™ i5 and Celeron® on-board processor
	Chipset		Intel® H81	
	RAM	One 204-pin 1333 MHz single-channel DDR3L SDRAM, 2GB pre-installed (system max. 8GB)	Two 204-pin 1333 MHz single-channel DDR3L SDRAM, 4GB pre-installed (system max. 16GB)	Two 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB)
	Ethernet	2 x PCIe GbE by RTL8111E controller		2 x Intel® I211 PCIe GbE controller
	Audio Codec	ALC892		
Storage		(1) 1 x mSATA (2) 1 x 2.5" SATA 3Gb/s HDD bay		(1) 1 x 2.5" SATA 3Gb/s HDD bay (2) 1 x M.2 M key PCIe storage (2280 or 22110) (3) 1 x mSATA slot
I/O Ports & Switch		1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 2.0 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9-30V lockable power jack	1 x RS-232 COM port (DB-9 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x GbE LAN 4 x USB 2.0 2 x USB 3.0 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9-30V lockable power jack	1 x RS-232 by DB-9 (RI/5V/12V) 1 x RS-232/422/485 by DB-9 (RI/5V/12V) 2 x GbE LAN 4 x USB 3.0 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9-30V lockable power jack
E-Window Expansion		Yes, optional	N/A	Yes, optional
Audio		AMP 3W + 3W (internal speakers)		
Camera and Microphone		2-megapixel with low light function, digital microphone		
Wireless & Bluetooth		IEEE 802.11a/b/g/n/ac (PCIe Mini slot)	IEEE 802.11a/b/g/n/ac, Bluetooth v4.0 (PCIe Mini slot)	IEEE 802.11a/b/g/n/ac, Bluetooth v4.0 (M.2 slot)
OSD Function		Software OSD		
Physical	Front Panel Construction	PC + ABS Plastic		
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm		
	Color	Black C		
	Dimensions (WxHxD) (mm)	396 x 250 x 53	396 x 250 x 59	396 x 250 x 64
	Cut-out Dimensions (WxH) (mm)	273 x 226	369 x 226	369 x 226
	Net/Gross Weight (kgs)	3.3/5.6	3.74/5.74	4.5/6.5
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C~50°C	0°C~50°C	-20°C~50°C
	Storage Temperature (°C)	-20°C~60°C		
	Humidity	10% to 95% (non-condensing)		
	IP Level	IP 64 compliant front panel		
	Safety & EMC	CE / FCC		
	Thermal Solution	Fanless	Smart Fan	Fanless
Power	Power Requirement	9 V ~ 30 V		
	Power Consumption	12V@4.16A (Intel® J1900 CPU with 2GB 1333 MHz DDR3 memory)	12V@6.33A (Intel® Pentium® G3320TE CPU with 4GB 1333 MHz DDR3L memory)	12V@.6A (Intel® Core™ i5-6300U CPU with 4GB DDR4 2133 MHz DDR4 memory)

Ordering Information

● Intel® Celeron® Platform

Part No.	Description
AFL3-W15A-BT-J1/PC/2G-R12	Wide 15.6" 400 cd/m² 1366 x 768 fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, 2GB DDR3L RAM, 2-megapixel camera, microphone, R12
AFL3-W15A-BT-J1/R/2G-R12	Wide 15.6" 400 cd/m² 1366 x 768 fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, resistive touch window, 2GB DDR3L RAM, 2-megapixel camera, microphone, R12

● Intel® H81 Platform

Part No.	Description
AFL3-W15B-H81-P/R/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Pentium® G3320TE dual-core processor (2.3 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R10
AFL3-W15B-H81-i3/R/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i3-4330TE dual-core processor (2.4 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R10
AFL3-W15B-H81-i5/R/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i5-4570TE dual-core processor (2.7 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R10
AFL3-W15B-H81-P/PC/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Pentium® G3320TE dual-core processor (2.3 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R10
AFL3-W15B-H81-i3/PC/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i3-4330TE dual-core processor (2.4 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R10
AFL3-W15B-H81-i5/PC/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i5-4570TE dual-core processor (2.7 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R10

● Intel® Skylake ULT3 Platform

Part No.	Description
AFL3-W15C-ULT3-C/R/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, 2-megapixel camera, microphone, R10
AFL3-W15C-ULT3-i5/R/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with with Intel® 14nm 6th generation mobile Core™ i5- 6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, 2-megapixel camera, microphone, R10
AFL3-W15C-ULT3-C/PC/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10
AFL3-W15C-ULT3-i5/PC/4G-R10	Wide 15.6" 400 cd/m² 1366 x 768 panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10

Options

Item	AFL3-W15A-BT	AFL3-W15B-H81	AFL3-W15C-ULT3
Panel Mounting Kit	AFL3PK-W15A-R10	AFL3PK-W15A-R10	AFL3PK-W15A-R10
Wall Mounting Kit	AFLWK-19B		
Rack Mounting Kit	AFL3RK-W15A-R11	AFL3RK-W15B-R10	AFL3RK-W15B-R10
Arm	ARM-11-RS/ARM-31-RS		
Stand	STAND-A21-R10/ STAND-210-R11/STAND-A19-RS/STAND-C19-R10		
Magnetic Card Reader	AFL3P-W10MSR-U-R10		
Barcode Scanner	AFL3-2D-R11		
RFID Reader (13.56 MHz Mifare Type) (for ATO assembly)	AFL3-MF-RFID-KIT02-R10**	AFL3-MF-RFID-KIT02-R10	AFL3-MF-RFID-KIT02-R10
*OS: Win 7 Embedded (64-bit)	AFL3-W07A-BT-WES7P64-R11 (for PCAP touch) AFL3-W07A-BT-WES7E64-R11 (for resistive touch)	AFL3-W15B-H81-WES7P64-R10 (for PCAP touch) AFL3-W15B-H81-WES7E64-R10 (for resistive touch)	AFL3-W15C-ULT3-WES7P64-R10 (for PCAP touch) AFL3-W15C-ULT3-WES7E64-R10 (for resistive touch)
*OS: Win 8 Embedded (64-bit)	AFL3-W07A-BT-WE8S64-R10	N/A	N/A
*OS: Win 10 IoT Enterprise (64-bit)	AFL3-W07A-BT-W10E64-E-R10	AFL3-W15B-H81-W10E64-R10	AFL3-W15C-ULT3-W10E64-R10

**RFID is supported after AFL3-xxA-BT R11 version
*OS image with CD-ROM without storage

E-Window (for ATO assembly) **E-Window**

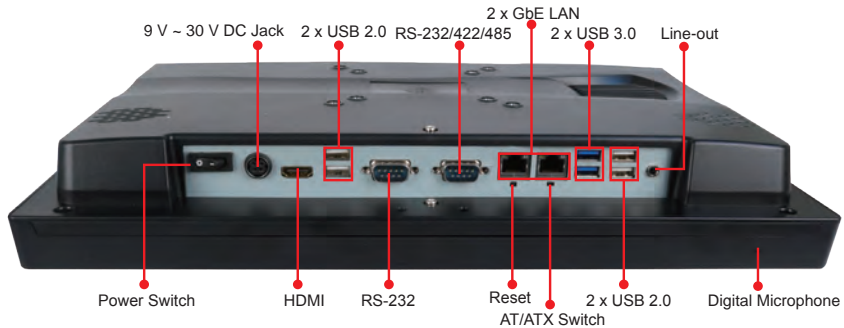| Part No.	Description	Supported Model
E-MPCIE-LAN-R10	PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 250mm cable, R10	AFL3-W15A-BT-J1/PC/2G-R12 AFL3-W15A-BT-J1/R/2G-R12 AFL3-W15C-ULT3-C/R/4G-R10 AFL3-W15C-ULT3-i5/R/4G-R10 AFL3-W15C-ULT3-C/PC/4G-R10 AFL3-W15C-ULT3-i5/PC/4G-R10
E-MPCIE-DLAN-R10	PCIe Mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable, R10	AFL3-W15A-BT-J1/PC/2G-R12 AFL3-W15A-BT-J1/R/2G-R12
E-MPCIE-CClink-R10	PCIe Mini card supports CC-Link Slave interface according to V2.0 and V1.1, with PMS black C I/O bracket and 250mm cable, R10	AFL3-W15C-ULT3-i5/R/4G-R10 AFL3-W15C-ULT3-C/PC/4G-R10 AFL3-W15C-ULT3-i5/PC/4G-R10
E-MPCIE-PROFIBUS-R10	PCIe Mini card supports universal PROFIBUS DP card for Master or Slave, with PMS black C I/O bracket and 250mm cable, R10	
E-MPCIE-EtherCAT-R10	PCIe Mini card supports universal Real-Time Ethernet protocols, with PMS black C I/O bracket and 280mm cable, R10	
E-MPCIE-3G-R10	PCIe Mini card supports 3G WWAN module , with PMS 130C I/O bracket, RF antenna 300mm cable and GSM antenna cable, R10	

Packing List

Item	Part No.	Q'ty	Description
One Key Recovery DVD	7B000-001083-RS	1	
Round head machine screw	44003-020041-RS (W15A-BT/15B-H81)	4	M2*4 round head machine screw
Pan head machine screw	44403-040061-RS	4	M4*6 pan head machine screw
Fix holder	46003-009500-RS	2	
Power cord	32702-000200-100-RS	1	
Power adapter	63040-010060-120-RS (W15A-BT)	1	60W; Vin: 90V~264V AC; Vout: 12VDC
	63040-010096-100-RS	1	96W; Vin: 90V~264V AC; Vout: 12VDC
Driver CD		1	
RJ-45 to DB-9 COM port transfer cable	32005-000200-200-RS (W15A-BT)	1	300mm, 26AWG, (A) D-SUB 9 male, (B) RJ-45
Touch pen	43125-0002C0-00-RS	1	Resistive touch screen only

AFL3-W15A-BT
Fully Integrated I/O
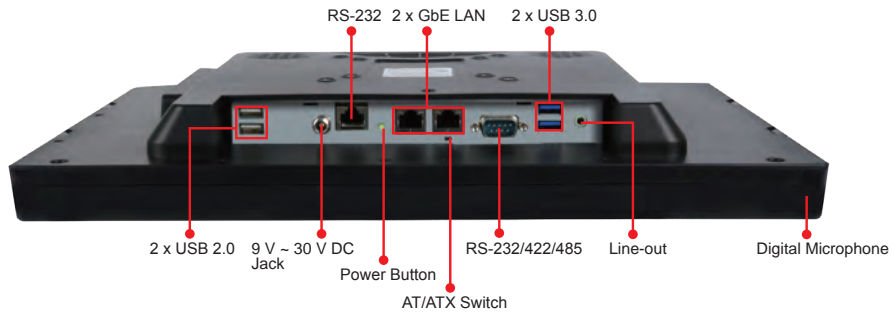
AFL3-15B-H81
Fully Integrated I/O

AFL3-W15C-ULT3
Fully Integrated I/O
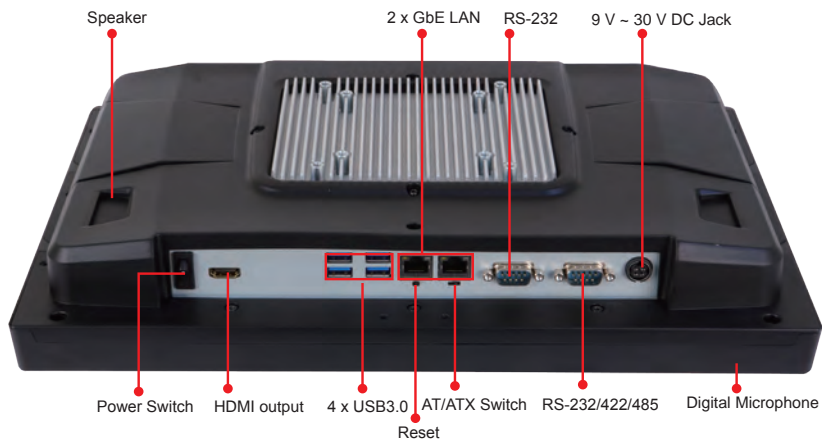
AFL3-W15A-BT
Dimensions *(Unit: mm)*

53
28
395.89
250.21
270
100
75
223
100
75
226
VESA MOUNT
M4 SCREW
273
Suggested
Cut Out Size
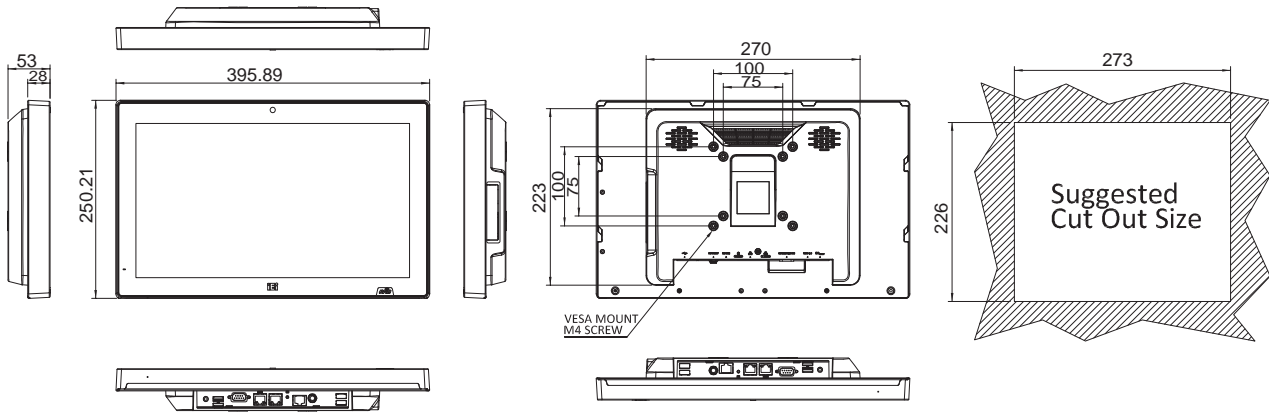
AFL3-W15B-H81
Dimensions *(Unit: mm)*

59.40
28
395.89
250.21
366
223
100
75
226
75
100
VESA MOUNT
M4 SCREW
369
Suggested
Cut Out Size
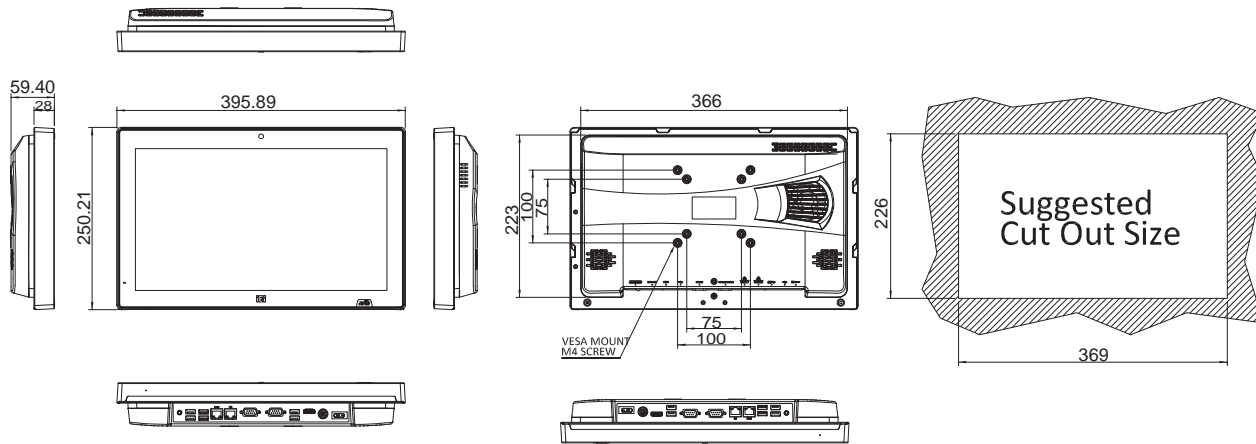
AFL3-W15C-ULT3
Dimensions *(Unit: mm)*

69.40
66
38 28
366
395.89
250.21
222.64
75
75
100
100
VESA MOUNT
M4 SCREW
369
226
Suggested
Cut Out Size
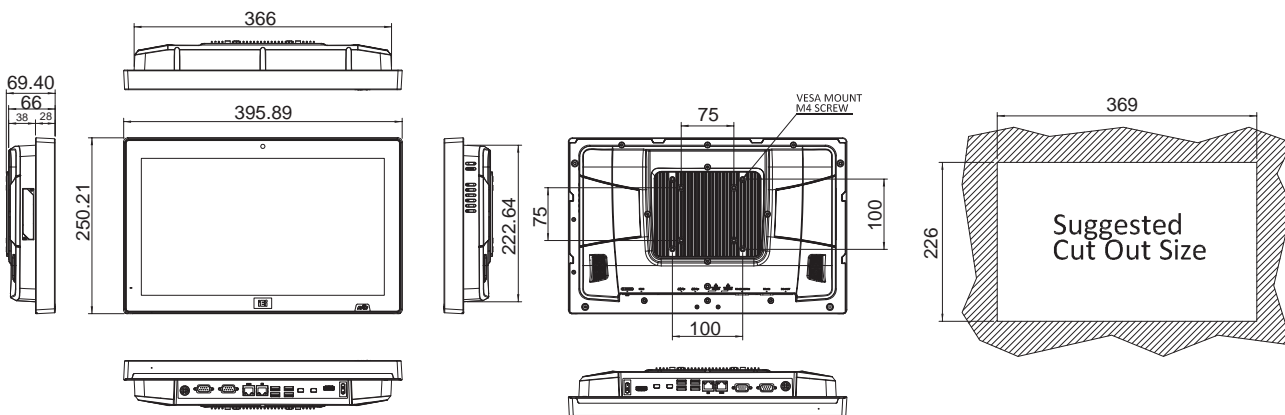
AFL3-W19C-ULT3
Intel® Core™ i5 and Celeron® ULT Processor

AFL3-W19A-AL
Intel® Celeron® / Atom™ Apollo Lake Processor

Preliminary
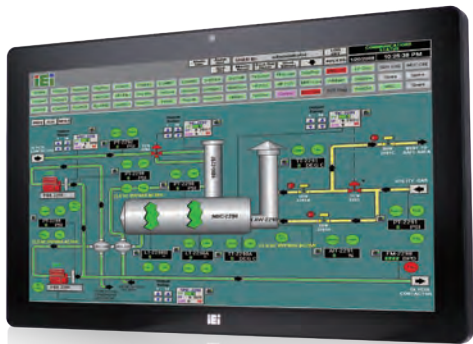
Features

- 18.5" light industrial interactive panel PC
- Wide range DC power input
- Selectable AT/ATX power mode
- Built-in speakers
- One mSATA slot
- IP64 compliant front panel
- IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

Fanless | Bluetooth | Touchscreen | IP64 | Camera | Speakers | One Key Recovery (iEi symantec)

Specifications

|	Model	AFL3-W19C-ULT3	AFL3-W19A-AL *Preliminary*
LCD	Size	18.5"	18.5"
	Resolution	1366 x 768 (16:9)	1366 x 768 (16:9)
	Brightness (cd/m²)	250	250/350
	Contrast Ratio	1000:1	1000:1
	LCD Color	262K	262K
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	170º/160º	170º/160º
	Backlight MTBF(hrs)	30,000 (LED backlight panel)	30,000 (LED backlight panel)
Touch	Touch Screen	Projected capacitive type with USB interface	Projected capacitive type with USB interface (anti-UV)
	Touch Controller	EETI EXC3180	EETI EXC3188
Motherboard	CPU	Intel® Core™ i5 and Celeron® ULT Processor	Intel® Atom™ Processor E3940 (2M Cache, 1.6 GHZ up to 1.80 GHz) ,TDP 9.5W Intel® Celeron® Processor N3350 (2M Cache, 1.1 GHZ up to 2.40 GHz) , TDP 6W
	RAM	Two 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB)	One 204-pin 1600/1333 MHz single-channel DDR3L SDRAM, 4GB pre-installed (system max. 8GB)
	Ethernet	2 x Intel® I211-AT PCIe GbE controller	2 x PCIe GbE by Intel® i211 controller
	Audio Codec	ALC892	
Storage		(1) 1 x 2.5" SATA 3Gb/s HDD bay (2) 1 x M.2 M key PCIe storage (2280 or 22110) (3) 1 x mSATA slot	(1) 1 x 2.5" SATA 3Gb/s HDD bay (2) 1 x mSATA slot
I/O Ports & Switch		1 x RS-232 by DB-9 (RI/5V/12V) 1 x RS-232/422/485 by DB-9 (RI/5V/12V) 2 x GbE LAN 4 x USB 3.0 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9V ~ 30V lockable power jack	1 x RS-232/422/485 by RJ-45 1 x RS-232 by RJ-45 2 x GbE LAN 2 x USB 3.0 2 x USB 2.0 1 x HDMI output 1 x 12V ~ 34V DC Jack 1 x Power switch 1 x AT/ATX switch 1 x Line out
Audio		AMP 3W + 3W (internal speaker)	
Camera and Microphone		2-megapixel with low light function, digital microphone	2-megapixel with low light function, digital microphone
Wireless & Bluetooth		IEEE 802.11a/b/g/n/ac, Bluetooth v4.0 (M.2 slot)	IEEE 802.11a/b/g/n/ac, Bluetooth v4.0 (M.2 slot)
OSD Function		Software OSD	
Physical	Front Panel Construction	PC + ABS Plastic	PC + ABS Plastic
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm	Panel, Wall, Stand and Arm VESA 100mm x 100mm
	Color	Black C	Black C
	Dimensions (W x H x D) (mm)	470 x 290 x 70	470 x 280 x 60
	Cut-out Dimensions (W x H) (mm)	443 x 261	418 x 230
	Net/Gross Weight (kgs)	7.3/10	6.3/9
Environment	Operating Temperature (Ambient with air flow)	-20ºC ~ 50ºC	-15ºC ~ 50ºC
	Storage Temperature	-20ºC ~ 60ºC	
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 64 compliant front panel	
	Safety & EMC	CE / FCC	
	Thermal Solution	Fanless	
Power	Power Requirement	9V ~ 30V DC	12V ~ 34V DC
	Power Consumption	12V@7.1A (Intel® Core™ i5-6300U CPU with 4GB DDR4 2133 MHz DDR4 memory)	12V@3.2A (Intel® Core™ i5-6300U CPU with 4GB DDR4 2133 MHz DDR4 memory)

Ordering Information

Part No.	Description
AFL3-W19C-ULT3-C/PC/4G-R10	Wide 18.5" 250 cd/m² 1366 x 768 Panel PC with withIntel® 14nm 6th Generation Mobile Celeron® 3955U (15W) on-board Processor (ULT), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2 M camera, microphone, R10
AFL3-W19C-ULT3-i5/PC/4G-R10	Wide 18.5" 250 cd/m² 1366 x 768 Panel PC with Intel® 14nm 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2 M camera, microphone, R10
AFL3-W19A-AL-E2/PC/4G-R10	Wide 18.5" 250 cd/m² 1366 x 768 Panel PC with with Intel® 14nm Atom™ Processor E3940 (9.5W) on-board Processor (Apollo lake), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2M camera, microphone, R10
AFL3-W19A-AL-N1/PC/4G-R10	Wide 18.5" 250 cd/m² 1366 x 768 Panel PC with with Intel® 14nm Celeron® Processor N3350 (6W) on-board Processor (Apollo lake), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2M camera, microphone, R10

Options

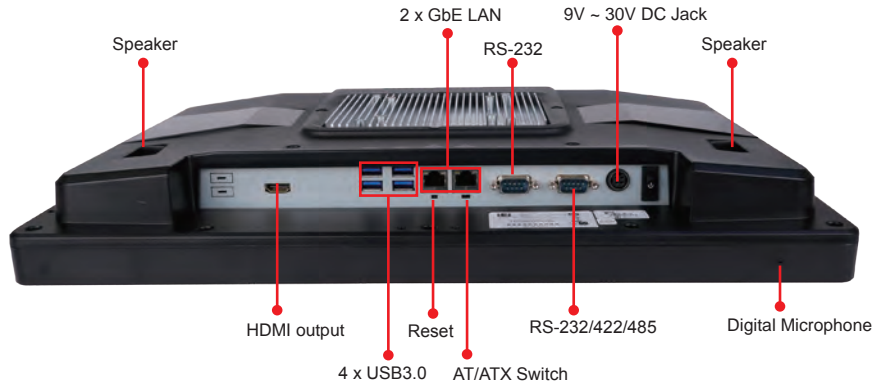| Item	AFL3-W19C-ULT3	AFL3-W19A-AL
Panel Mounting Kit	AFL3PK-W19C-R10	
Wall Mounting Kit	AFLWK-19B	
Arm	ARM-11-RS/ARM-31-RS	
Stand	STAND-A21-R10/ STAND-210-R11/STAND-A19-RS/STAND-C19-R10	
Magnetic Card Reader	AFL3P-W10MSR-U-R10	
Barcode Scanner	AFL3-2D-R11	
RFID Reader (13.56 MHz Mifare Type) (For ATO assembly)	AFL3-MF-RFID-KIT02-R10	
*OS: Win 7 Embedded (64-bit)	AFL3-W15C-ULT3-WES7P64-R10	N/A
*OS: Win 10 IOT Enterprise (64-bit)	AFL3-W15C-ULT3-W10E64-R10	AFL3-W19A-AL-W10E64-R10

*OS image with CD-ROM without storage

E-Window (for ATO assembly) **E-Window**

Part No.	Description
E-MPCIE-LAN02-R10	PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 340 mm cable, R10
E-MPCIE-CClink02-R10	PCIe Mini card supports CC-Link Slave interface according to V2.0 and V1.1, with PMS black C I/O bracket and 300mm cable, R10
E-MPCIE-PROFIBUS02-R10	PCIe Mini card supports universal PROFI BUS DP card for Master or Slave, with PMS black C I/O bracket and 300mm cable, R10
E-MPCIE-EtherCAT-R10	PCIe Mini card supports universal for all Real-Time Ethernet protocols, with PMS black C I/O bracket and 280mm cable, R10
E-MPCIE-3G-R10	PCIe Mini card supports 3G WWAN, with PMS 130C I/O bracket, RF antenna 300mm cable and GSM antenna cable, R10

Packing List

Item	Part No.	Q'ty	Description
One Key Recovery DVD	7B000-001083-RS	1	
Round head machine screw	44403-040061-RS	4	M2*4 round head machine screw
Pan head machine screw	44003-030052-RS	4	M4*6 pan head machine screw
Power cord	32702-000200-100-RS	1	
Power adapter	63040-010096-100-RS (AFL3-W19C-ULT3) 63040-010060-120-RS (AFL3-W19A-AL)	1	96W; Vin: 90V~264V AC; Vout: 12VDC 60W; Vin: 90V~264V AC; Vout: 12VDC
Driver CD		1	

AFL3-W19C-ULT3
Fully Integrated I/O

Speaker

2 x GbE LAN

9V ~ 30V DC Jack

RS-232

Speaker

HDMI output

Reset

RS-232/422/485

Digital Microphone

4 x USB3.0

AT/ATX Switch

AFL3-W19A-AL
Fully Integrated I/O

2 x DP-9 (RJ-45 Connecotr)

HDMI output

Speaker

12V ~ 34V DC Jack

2 x GbE LAN

2 x USB3.0

Speaker

2 x USB2.0

Clear CMOS

AT/ATX Switch

Line Out

Digital Microphone

Power Switch

Reset
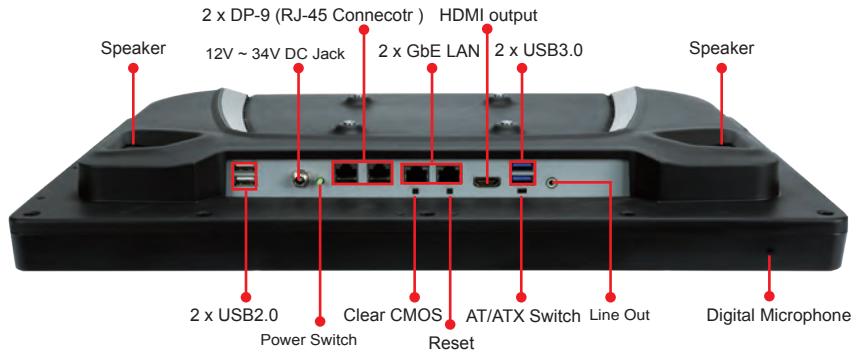
AFL3-W19C-ULT3 Dimensions *(Unit: mm)*

439.95

70.06

39.96

30.10

470

290.40

257.55

VESA MOUNT
M4 SCREW

100

75

100

100

75

261

Suggested
Cut Out Size

443
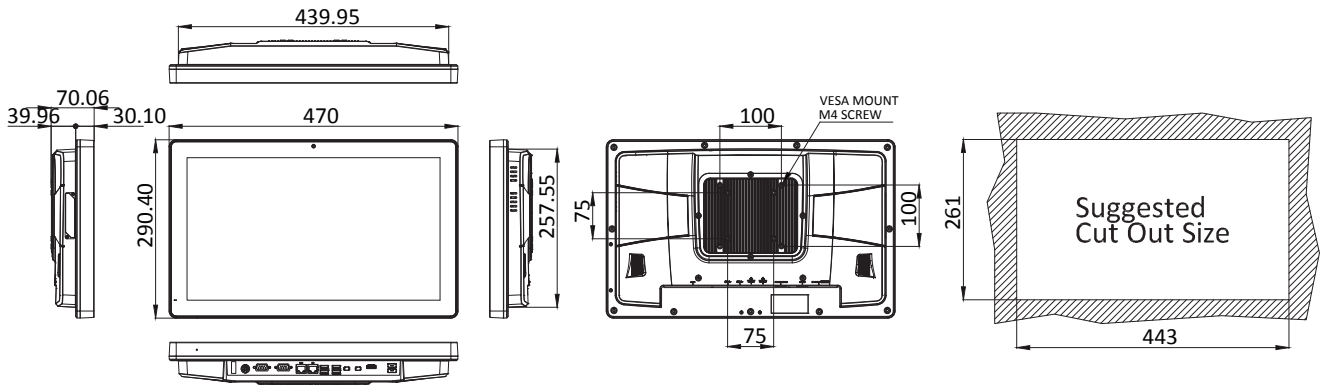
AFL3-W19A-AL Dimensions *(Unit: mm)*

415

60.16

29.36

30.80

470

290.40

226.67

VESA MOUNT
M4 SCREW

100

73.70

100

230

418

Suggested
Cut Out Size
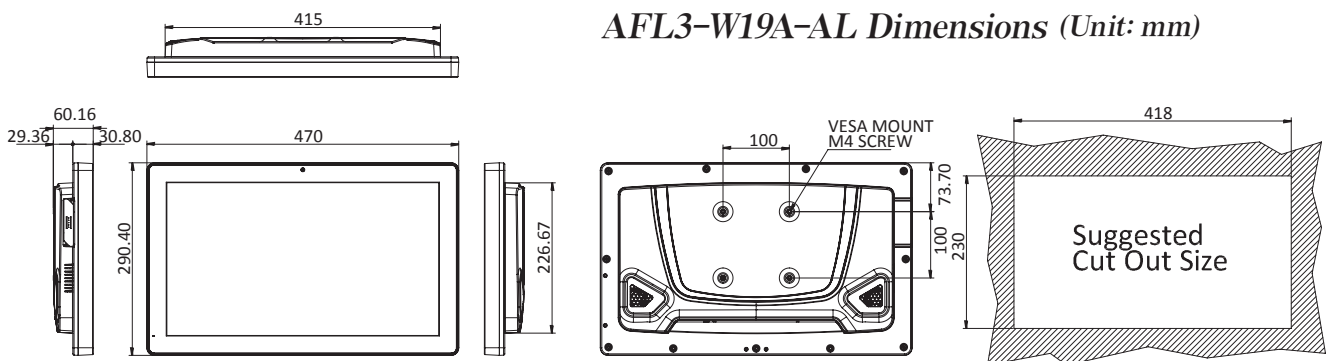
AFL3-W22C-ULT3

Intel® Core™ i5 and Celeron® ULT Processor

Preliminary
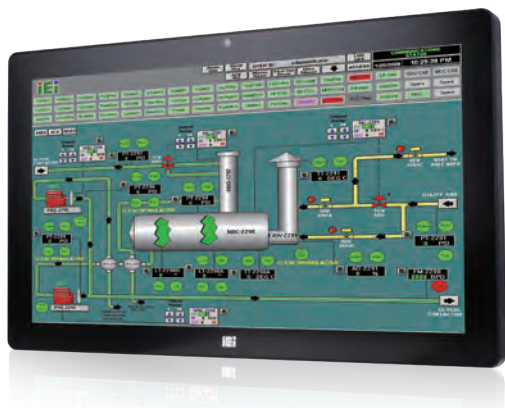
Features

- W21.5 light industrial interactive panel PC
- 9 V ~ 30 V wide range DC power input
- Selectable AT/ATX power mode
- Built-in speakers
- One mSATA slot
- IP64 compliant front panel
- IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

| Fanless | Bluetooth | Touchscreen | IP64 | Camera | Speakers | 9V~30V DC | One Key Recovery iEi symantec |

Specifications

Model		AFL3-W22C-ULT3 *Preliminary*
LCD	Size	21.5"
	Resolution	1920 x 1080
	Brightness (cd/m²)	250
	Contrast Ratio	1000:1
	LCD Color	16.7M
	Pixel Pitch (mm)	248.25 (H) × 248.25 (V)
	Viewing Angle (H-V)	170º/160º
	Backlight MTBF(hrs)	30,000 (LED backlight panel)
Touch	Touch Screen	Projected capacitive type with USB interface
	Touch Controller	EETI EXC3180
Motherboard	CPU	Intel® Core™ i5 and Celeron® ULT Processor
	RAM	Two 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB)
	Ethernet	2 x Intel® I211-AT PCIe GbE controller
	Audio Codec	ALC892
Storage		(1) 1 x 2.5" SATA 3Gb/s HDD bay (2) 1 x M.2 M key PCIe storage (2280 or 22110) (3) 1 x mSATA slot
I/O Ports & Switch		1 x RS-232 by DB-9 (RI/5V/12V) 1 x RS-232/422/485 by DB-9 (RI/5V/12V) 2 x GbE LAN 4 x USB 3.0 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9-30V lockable power jack
Audio		AMP 3W + 3W (internal speaker)
Camera and Microphone		2-megapixel with low light function, digital microphone
Wireless & Bluetooth		IEEE 802.11a/b/g/n/ac, Bluetooth v4.0 (M.2 slot)
OSD Function		Software OSD
Physical	Front Panel Construction	PC + ABS Plastic
	Mounting	Panel, Wall, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm
	Color	Black C
	Dimensions (W x H x D) (mm)	528 x 336 x 68
	Cut-out Dimensions (W x H) (mm)	502 x 303
	Net/Gross Weight (kgs)	8.27/11.27
Environment	Operating Temperature (Ambient with air flow)	-20ºC ~ 50ºC
	Storage Temperature	-20ºC ~ 60ºC
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety & EMC	CE / FCC
	Thermal Solution	Fanless
Power	Power Requirement	9 V ~ 30 VDC
	Power Consumption	12V@6A (Intel® Core™ i5-6300U CPU with 4GB DDR42133 MHz DDR4 memory)

Ordering Information

Part No.	Description
AFL3-W22C-ULT3-C/PC/4G-R10	Wide 21.5" 250 cd/m² 1920x1080 panel PC with 6th generation 14nm Intel® mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10
AFL3-W22C-ULT3-i5/PC/4G-R10	Wide 21.5" 250 cd/m² 1920x1080 panel PC with 6th generation 14nm Intel® mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, 2-megapixel camera, microphone, R10

Packing List

Item	Part No.	Q'ty	Description
One Key Recovery DVD	7B000-001083-RS	1	
Round head machine screw	44403-040061-RS	4	M2*4 round head machine screw
Pan head machine screw	44003-030052-RS	4	M4*6 pan head machine screw
Power cord	32702-000200-100-RS	1	
Power adapter	63040-010096-100-RS	1	96W; Vin: 90V~264V AC; Vout: 12VDC
Driver CD		1	

Options

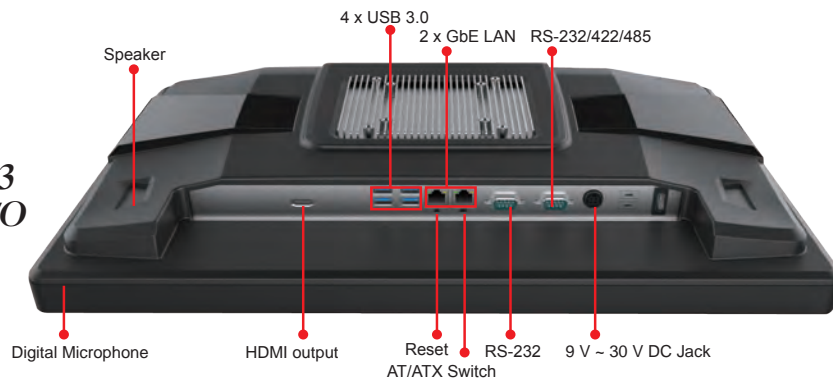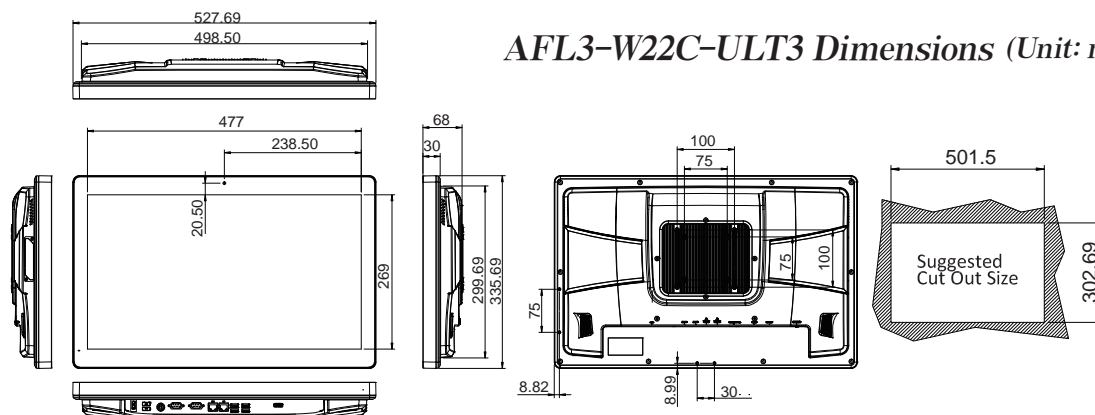| Item	AFL3-W22C-ULT3
Panel Mounting Kit	AFL3PK-W22C-R10
Wall Mounting Kit	AFLWK-19B
Arm	ARM-11-RS/ARM-31-RS
Stand	STAND-A21-R10/ STAND-210-R11/STAND-A19-RS/STAND-C19-R10
Magnetic Card Reader	AFL3P-W10MSR-U-R10
Barcode Scanner	AFL3-2D-R11
RFID Reader (13.56 MHz Mifare Type) (For ATO assembly)	AFL3-MF-RFID-KIT02-R10
*OS: Win 7 Embedded (64-bit)	AFL3-W15C-ULT3-WES7P64-R10
*OS: Win 10 IOT Enterprise (64-bit)	AFL3-W15C-ULT3-W10E64-R10

*OS image with CD-ROM without storage

E-Window (for ATO assembly) E-Window

Part No.	Description
E-MPCIE-LAN02-R10	PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 340 mm cable, R10
E-MPCIE-CClink02-R10	PCIe Mini card supports CC-Link Slave interface according to V2.0 and V1.1, with PMS black C I/O bracket and 300mm cable, R10
E-MPCIE-PROFIBUS02-R10	PCIe Mini card supports universal PROFI BUS DP card for Master or Slave, with PMS black C I/O bracket and 300mm cable, R10
E-MPCIE-EtherCAT-R10	PCIe Mini card supports universal for all Real-Time Ethernet protocols, with PMS black C I/O bracket and 280mm cable, R10
E-MPCIE-3G-R10	PCIe Mini card supports 3G WWAN , with PMS 130C I/O bracket, RF antenna 300mm cable and GSM antenna cable, R10

AFL3−W22C−ULT3 Fully Integrated I/O

4 x USB 3.0
2 x GbE LAN   RS-232/422/485
Speaker
Digital Microphone   HDMI output   Reset AT/ATX Switch   RS-232   9 V ~ 30 V DC Jack

AFL3−W22C−ULT3 Dimensions (Unit: mm)

527.69
498.50
477
238.50
68
30
20.50
269
299.69
335.69
100
75
75
100
75
8.82
8.99
30
501.5
302.69
Suggested Cut Out Size

AFOLUX GEN II Panel PC

New Flat Bezel, Multi-touch, Wide Voltage AFOLUX Panel PC

From the heritage of affordable Luxury AFOLUX Panel PC, AFOLUX II Panel PC shows it's spirit to exceed the history. The AFOLUX II Panel PC is slim and stylish and provides two types of touch option. RFID reader, wide voltage power input are its features which make it more flexible and more powerful than ever!

Innovative product design:
- AFOLUX II flat bezel design is thinner than AFOLUX
- Projected capacitive multi-touch and resistive single touch screen options

AFOLUX PPC

New technology and multiple functions:
- LED dash system for eye-catching notification
- Integrated EM/ Mifare RFID reader
- Light fanless temperature management
- 9 V ~36V DC wide voltage input fits all power requirements
- IEI Light Fanless technology allows the system to turn on/ off fan automatically, enhancing system stability.
- Exclusive LED Light Bar Simulation displays light signals

Rugged while Stylish

Flat Bezel Design with IP64 Protection

AFOLUX II series is designed in flat bezel panel and against dust and water, enduring flawless operation.

Flat-bezel Features:
- Better visual effects
- No edge effect
- Sleek and stylish
- Easy to clean

IP64

Enhanced Touch Technology – Projected Capacitive Touch

Projected capacitive touch panel is stronger and with higher transparency than the resistive type touch panel. It also supports Windows 7 multi-touch function compatible with glove-wearing users and enhancing ease-of-use.

Model	AFL2-17A-H61/PC	AFL2-17A-H61/R
Type of Touch	Projected capacitive type	5-wire resistive type touch
Touch Function	Multi-touch	Single-touch
Transparency	85%	78%
Hardness	≥6H	≥3H
Input Flexibility	Hand/ glove	Hand/ glove/ stylus
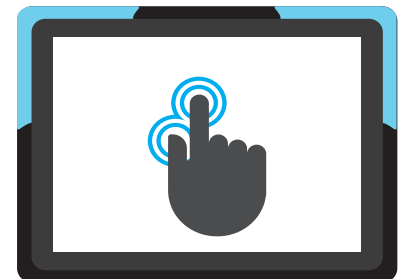
6H Anti-scratch Surface (Projected Capacitive Type Touchscreen)

Projected capacitive touch technology utilizes a durable glass front surface. 6H hardness is stronger than the conventional touch panel and therefore is able to protect the screen from damage.

Typical Panel	Fingernail	Knife	Steel	Quartz	Beryl	Diamond
2H	3H	5H	6H	7H	8H	10H

MOH's Hardness Rating
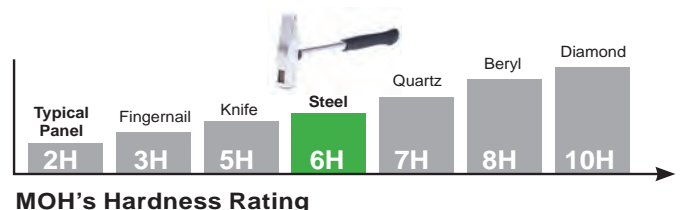
Superior Performance

The Best C/P Value Intel® H61 Platform

Comparing to mobile solution, Intel® H61 with desktop CPU provides low power consumption but high performance.

Mobile 2nd Core i3 V.S. Desktop Pentium & 2nd Core i3
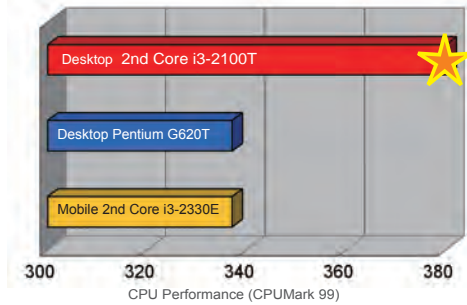
Desktop 2nd Core i3-2100T
Desktop Pentium G620T
Mobile 2nd Core i3-2330E

300   320   340   360   380

CPU Performance (CPUMark 99)

Mobile Celeron V.S. Desktop Celeron

Desktop Celeron G530T
Mobile Celeron B810

0   50   100   150   200   250   300   350

CPU Performance (CPUMark 99)

CPU Type	Intel® 2nd Core™ i3-2330E (Mobile 35W CPU)	Intel® Pentium® G620T (Desktop 35W CPU)	Intel® 2nd Core™ i3-2100T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	337	337	380
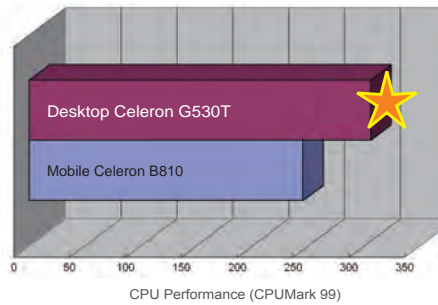
CPU Type	Intel® Celeron® B810 (Mobile 35W CPU)	Intel® Celeron® G530T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	245	306

Better Performance with Intel® Atom™ Cedarview Dual Core Processor

AFOLUX II Cedarview panel PC integrates with Intel dual core processor running with DDR3 memory. With fanless system, it reduces system noise and dust accumulation.

N2600 CPU performance is 31% better than N270, Graphics performance is 36% better than N270, Memory performance is 21% better than N270

■ Intel® Atom™ processor N270 (1.6GHz)
■ Intel® Atom™ processor D425 (1.8GHz)
■ Intel® Atom™ processor N2600 (1.6GHz)

1.31x   1.36x   1.21x

1.4 1.2 1 0.8 0.6 0.4 0.2 0.0

N270 D425 N2600 | N270 D425 N2600 | N270 D425 N2600

CPU PC Mark 2005 | 3D 3D Mark 2001 SE | Memory Sisoftware sandra pro 2007
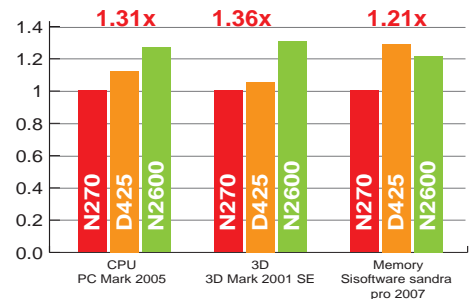
Secondary Display on Full HD

Latest Display Technology: HDMI

HDMI is a compact audio/video interface for transferring uncompressed digital video data and compressed/uncompressed digital audio data from an HDMI-compliant device to a compatible digital audio device, computer monitor, video projector, or digital television. HDMI is a digital replacement for existing analog video standards.

	Maximum clock rate(MHz)	Maximum total TMDS throughput(Gbit/s)	Maximum color depth (bit/px.)	Maximum resolution over single link at 24-bit/px	Dolby TrueHD bitstream capable	3D over HDMI
Version 1.0 to 1.2	165	4.95	24	1920 x 1200	No	No
Version 1.3	340	10.2	48	2560 x 1600	Yes	No
Version 1.4	340	10.2	48	2096 x 2160	Yes	Yes

Advantages
● Backward compatible with DVI via an adapter.
● Support audio transport (v.s. DVI canonly transmit image).

Latest Display Technology: DisplayPort

It's not only used to connect a video source to a display device, but also be used to transmit audio, USB, and other forms of data. DisplayPort lets you take advantage of today's high-bandwidth content, enabling you to create a professional and powerfully compelling digital signage solution.

External connect to multiple display device
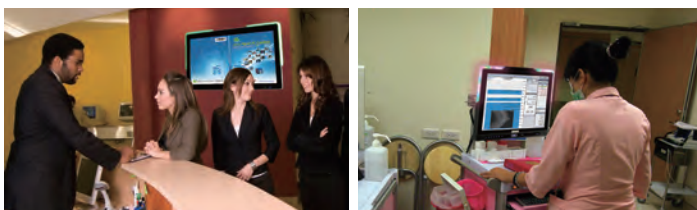
Reception

Hospital-Medical Imaging

Advantages
● Backward compatible with DVI/HDMI with the adapter.
● Support multi-display: It can works with monitors, notebooks or all-in-one computers.

Flexible Design to Fit Various Scenarios

Wide Application to Extreme Circumstance

Power supply requirement varies from applications. Incorrect voltage input will damage electronic components thus cause system break down. AFOLUX GEN II offers wide voltage power input, which fits different application scenarios and increase stability of the system.

Wide Range Power Input	9~ 36V DC*

Wide range 9~36VDC input *
Wide range DC input fits different power source depends on what circumstance needed.

Automation Central Control

Factory Manufacture Control

Truck Control (24V)

Easy to Use

LED Indicator and Function Key

● Function key can be more convenient for panel PC users to operate this panel without any keyboard or mouse.

● Indicator is located in front of panel, it can tell users which function is enable or disable

● **Function Key**

● LED Indicators

AT/ATX Mode   Wi-Fi   Bluetooth   MIC

Power   CPU Temperature Alert   RFID   Auto-Dimming   Audio Mute
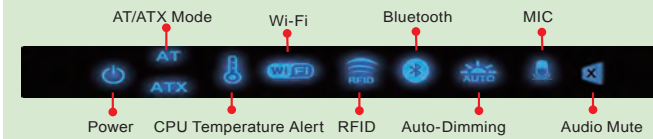
● Brightness of LED indicator can be set by manual (3-step) or auto-adjust by ambient light (new function support from AFL2-xxA-N26 R11, AFL2-xxA-N28-R11, AFL2-xxA-H61 R12, AFL2-W21A-H61 R10)

Fn — **Fn**

Backlight On/Off

Audio -

Audio +

Brightness -

Brightness +

Fn + — **RFID Enable/Disable**

Fn + — **Audio Mute**

Fn + — **Camera Enable/Disable**

Fn + — **Front Side USB Enable/Disable**

Fn + — **Power On / Off**

Mini USB 2.0 Port & microSD Card Slot on Front Panel

Mini USB 2.0
The AFOLUX GEN II new series has a mini USB 2.0 port on the front panel for easy connecting.

MicroSD card
The AFOLUX GEN II new series has a microSD slot on the front panel for easier access.

Auto-dimming Advantages

Auto-dimming Advantages
● Power Consumption Saving
● Comfortable Viewing Brightness
● Extend Product Lifetime

Auto-dimming
Automatically adjust the optimal brightness to fit the environment.

Day: Higher Ambient Luminance

Night: Lower Ambient Luminance

IEI Light Fanless System

IEI Light Fanless System is a highly effective smart system, embedded with a smart sensor to sense the ambient temperature. It can operate quietly with high performance in various applications, such as a patient's bedside multimedia platform, gaming machines, airport kiosks etc.
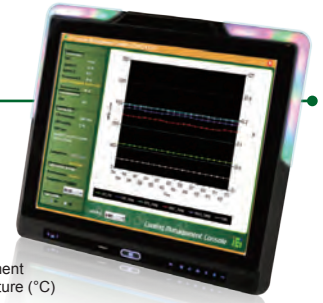
Benefits
- **Power Saving**
  Auto switch on/off fan can reduce redundant power consumption
- **Expanding system lifecycle**
  Helping users to run system more effectively, it also enhances the lifecycle of CPU.
- **Effectively manage system environment**
  User can monitor the information of the system easily
- **High performance with noiseless**
  IEI supports noiseless situation to have quiet environment and high performance simultaneously.

Environment Temperature (°C)

High Performance With Light Fanless

iCMC Setting (default: 32°C)

Smart-Fan Mode

Light Fanless Mode

IEI Light Fanless Applications

Patient Bedside Entertainment System

Clean Room

Semi-outdoor Kiosk

iCMC (IEI Cooling Management Console)

iCMC, IEI's exclusive software, provides reliable embedded features for system integrators. It simplifies integration for the AFOLUX II and upgrades system configuration from the BIOS level to the operating system level.

Real-time Monitoring

CPU Information

Light Fanless Settings
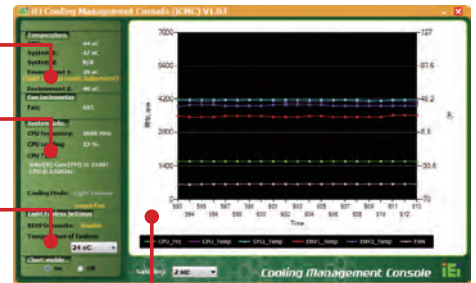
Graphical Data

LED Light Visual Management

Function button

Display time adjustment

30/34/50 light buttons

Access key

Scripts

Full colors

Features
- Programmable LED RGB colors
- Signaling light display user demand
- Manual scripts for LED lighting programs
- 100% software programmable colors, light duration, and light patterns
- 30 light sections for AFL2-17A-H61, 34 light sections for AFL2-W19A-H61 50 light sections for AFL2-W21A-H61, each light section can be configured independently.

Support LED Light Bar control API for the customer to suit their own software program. Light bar signal are correspond to the light button. User can customize their own light patterns for different conditions.

LED Dash Board for Visual Visual Alert System and Status Notification

Achieving a smooth production line

Medical care alert system

Showing appealing light simulation

AFOLUX GEN II Selection Guide

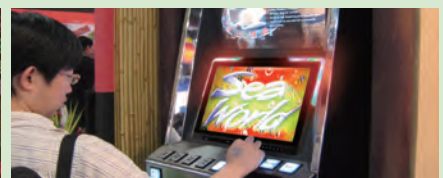|	Model	AFL2-08A-N26	AFL2-10A-N28	AFL2-12A-HM65
LCD Specifications	Size	8"	10.4"	12.1"
	Resolution	800 (W) x 600 (H)	800 (W) x 600 (H)	1024 (W) x 768 (H)
	Brightness (cd/m²)	250 cd/m²	400 cd/m²	600
	Contrast Ratio	500:1	700:1	700:1
	LCD Color	16.2 M	262K/16.2M	16.2 M
	Pixel Pitch (mm)	0.2025(H) x 0.2025(V)	0.264 (H) x 0.264 (V)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	140°(H) / 130°(V)	160°(H) / 140°(V)	160° / 140°
	Backlight MTBF	30000 hrs (LED backlight)		50000 hrs (LED backlight)
Touch	Touch Screen	5-wire resistive type with RS-232 interface		5-wire rsistive type with RS-232 interface / projected capacitive type with USB interface
	Touch Controller	PenMount DMC9000		PenMount DMC9000 (Resistive type) / EETI EXC7200 & EXC5400 (Projected capacitive type)
System	CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU	Intel® Atom™ N2800 dual core 1.86 GHz CPU	2nd Generation Intel® Core™ i7/ i5/ i3 and Celeron® processor
	Chipset	Intel® NM10		Intel® HM65
	RAM	Support one 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2GB) pre-installed wiith 2GB	Support one 1066MHz 204-pin DDR3 SO-DIMM slot (max. 4GB) pre-installed wiith 2GB	Support one 204-pin DDR3 SO-DIMM slot (max. 4GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0		Realtek RTL8111E PCIe GbE controller supports ASF 2.0
	Audio Codec	Realtek ALC892 HD Audio codec		Realtek ALC888 HD Audio codec
	Storage	mSATA	2.5" SATA 2.0 HDD bay	2.5" SATA 6Gb/s SSD bay
	Input / Output	1 x Mini USB 2.0 port on front panel 1 x MicroSD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x Mini USB 2.0 port on front panel 1 x MicroSD card slot on front panel Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x RS-232 (DB-9 connector) 1 x RS-232 (RJ-45 connector) 1 x RS-422/485 (4-pin box header) 1 x GbE LAN (RJ-45 connector) 2 x USB 2.0 2 x USB 3.0 1 x Mini USB 2.0 port on front panel 1 x Audio jack (line-out) 1 x HDMI port 1 x MicroSD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC jack
Other Features	Audio	AMP 0.8 W + 0.8 W	AMP 1.5 W + 1.5 W	AMP 3W + 3W (internal speaker)
	Camera		2M pixels with low light function	1.3 megapixels with low light function
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)		EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)		MSR card reader (optional)
	OSD Function	LCD on/off, brightness up/down, volume up/down,hotkey		LCD on/off, brightness up/down, volume up/down, Hot Key
	Ambient Light Sensor	Yes		Yes
	Infrared Remote Controller	Yes		Yes
	System Cooling	Fanless		Smart fan
Connectivity	Wireless	IEEE 802.11b/g/n module Telec certified		IEEE 802.11b/g/n module Telec certified
Physical	Construction Front Panel	PC + ABS plastic front frame		PC + ABS Plastic
	Mounting	Wall, Panel, Stand, RACK Mounting and VESA 75 mm x 75mm		Panel, Wall, Rack, Stand and Arm VESA 100 mm x 100 mm
	Color	Black		Black
	Dimensions (mm)	215 (W) x 188 (H) x 46 (D)	282.5 (W) x 242.7 (H) x 51 (D)	310 x 265 x 52.6
	Weight (N/G)	1.43 kg / 2.2 kg	2.98 kg / 4.5 kg	3.8 kg / 6.1 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C	-20°C ~ 45°C	-20°C ~ 50°C with SSD
	Storage Temperature (°C)	-20°C ~ 60°C		
	Humidity	10% to 95% (non-condensing)		
	IP Level	IP 64 compliant front panel		
	Safety&EMC	CE / FCC		
Power	Power Supply	40W adapter Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC	60W power adapter, Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC	90W power adapter Input: 100VAC~240VAC, 50/60Hz Output: 19VDC
	Power Requirement	9 ~ 36 VDC		9 ~ 36 VDC
	Power Consumption	12V@2.27A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)	12V@2.75A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)	19V@2.68A (Intel® Core™ i5-2510E processor with 4GB DDR3 memory)

AFOLUX GEN II Selection Guide

Model		AFL2-17A-H61	AFL2-W21A-H61
LCD Specifications	Size	17" (4:3)	W21.5" (16:9)
	Resolution	1280 (W) x 1024 (H)	1920(W) x 1080(H)
	Brightness (cd/m²)	350	250
	Contrast Ratio	1000:1	1000 : 1
	LCD Color	16.7M	16.7M
	Pixel Pitch (mm)	0.264 (H) x 0.264 (V)	0.248mm x 0.248mm
	Viewing Angle (H-V)	170° / 160°	165° / 165°
	Backlight MTBF	50,000 (LED backlight)	30,000 (LED backlight)
Touch	Touch Screen	5-wire rsistive type with RS-232 interface / projected capacitive type with USB interface	Projected capacitive type with USB interface
	Touch Controller	PenMount DMC9000 (Resistive Type) / EETI EXC7200 & EXC5404 (Projected capacitive type)	EETI EXC7200 & EXC5404
System	CPU	2nd/3rd Generation of Intel®Core™ i7/i5/i3 and Pentium® processors	2nd/3rd Generation of Intel®Core™ i7/i5/i3 and Pentium® processors
	Chipset	Intel® H61	
	RAM	Support two 204-pin DDR3 SO-DIMM slot (system Max. 16GB)	Support two 204-pin DDR3 SO-DIMM slots (System Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	
	Audio Codec	Realtek ALC892 HD Audio codec	
	Storage	2.5" SATA 3Gb/s HDD bay	
	CD-ROM	1 x Slim Type CD-ROM bay	
	Input / Output	2 x RS-232 (DB-9 connector) 1 x RS-422/485 (DB-9 connector) 2 x GbE LAN (one on the bottom, one on the left) 2 x USB 3.0 3 x USB 2.0 (two on the bottom, one on the left) 1 x Mini USB port on front panel 1 x MicroSD card slot on front panel	2 x RS-232 (DB-9 Connector) 1 x RS-422/485 COM Port (DB-9 connector) 2 x GbE LAN (RJ-45 connector) 3 x USB 2.0 2 x USB 3.0 1 x HDMI on bottom side 1 x Line out/MIC on left side 1 x VGA port (DB-15 Connector) 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Clear CMOS button 1 x Type K 1 x 9~36V DC jack
	Expansion Interface	1 x PCIe Mini slot reserved	
Other Features	Audio	AMP 2W + 2W (internal speaker)	AMP 3W + 3W (internal speaker)
	Camera	2 M pixels with low light function	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)	MSR card reader (optional)
	TPM	Reserved by pin-header	
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key	
	Ambient Light Sensor	Yes	
	Infrared Remote Controller	Yes	
	LED Light Bar	Yes	
	System Cooling	Light fanless (smart fan operates above default temperature setting)	Light fanless (smart fan operates above default temperature setting)
Connectivity	Wireless	IEEE 802.11b/g/n module Telec certified	
Physical	Construction Front Panel	PC + ABS Plastic	PC + ABS Plastic
	Mounting	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm	Wall, Panel, Stand and VESA 100 mm x 100mm
	Color	Black	Black
	Dimensions (WxHxD)(mm)	418 x 378 x 65	547 x 346 x 71, withLED Light Bar
	Weight (N/G)	6.9 kg / 9.0 kg	7.3 Kg / 9.4 Kg (with LED Light Bar)
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C	-10°C ~ 50°C
	Storage Temperature (°C)	-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 64 compliant front panel	
	Safety&EMC	CE / FCC	
Power	Power Supply	120W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC	120W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC
	Power Requirement	9 ~ 36 VDC	9 ~ 36 VDC
	Power Consumption	19V@5.3A (Intel® Core™ i3-2100T CPU with 4GB 1333 Mhz 4GB DDR3 memory)	19V@3.82A (Intel® Core™ i3-2120T processor with 4GB DDR3 memory)

AFL2-08A-N26

Intel® Atom™ N2600 Dual Core Processor

Features

- Flat-bezel LCD with LED backlight
- Intel® Atom™ N2600 dual core 1.6 GHz processor
- One 800 MHz 204-pin DDR3 SO-DIMM slot (system max. 2GB) pre-installed with 2GB
- 5-wire resistive type touch screen supported
- Wi-Fi 802.11b/g/n high speed wireless
- Built-in EM or Mifare RFID reader (optional)
- IP64 compliant front panel
- Auto dimming control

Wireless 802.11b/g/n · **RFID** · **Camera** · **Speakers** · **Touchscreen** · **-20°C~40°C** · **IP64**

Specifications

	Model	AFL2-08A-N26
LCD Specifications	Size	8"
	Resolution	800 (W) x 600 (H)
	Brightness (cd/m²)	350 cd/m²
	Contrast Ratio	500:1
	LCD Color	16.2 M
	Pixel Pitch (mm)	0.2025 (H) x 0.2025 (V)
	Viewing Angle (H-V)	140°(H) / 130°(V)
	Backlight MTBF	30000 hrs (LED backlight)
Touch	Touch Screen	5-wire rsistive type with RS-232 interface
	Touch Controller	PenMount DMC9000
System	CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
	Chipset	Intel® NM10
	RAM	Support one 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2GB) pre-installed wiith 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC892 HD Audio codec
	Storage	mSATA
	Input / Output	1 x Mini USB 2.0 port on front panel 1 x MicroSD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
Other Features	Audio	AMP 0.8 W + 0.8 W
	Camera	2megapixel with low light function
	Microphone	Digital Microphone
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)
	OSD Function	LCD on/off, brightness up/down, volume up/down,hotkey
	Ambient Light Sensor	Yes
	Infrared Remote Controller	Yes
	System Cooling	Fanless
Connectivity	Wireless	IEEE 802.11b/g/n module Telec certified
Physical	Construction Front Panel	PC + ABS plastic front frame
	Mounting	Wall, Panel, Stand, RACK Mounting and VESA 75 mm x 75mm
	Color	Black
	Dimensions (WxHxD)(mm)	215 x 188 x 46
	Weight (N/G)	1.43 kg / 2.2 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C
	Storage Temperature (°C)	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety&EMC	CE / FCC
Power	Power Supply	36W power adapter Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC
	Power Requirement	9 ~ 36 VDC
	Power Consumption	12V@2.27A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)

Ordering Information

Part No.	Description
AFL2-08A-N26/R/2G-R12	8" 350 cd/m² SVGA fanless panel PC with Intel® Atom™ N2600 dual core 1.6GHz, 802.11b/g/n wireless module, resistive touch screen, microphone, 2megapixel webcam, 2GB DDR3 RAM, R12

Options

Item	AFL2-08A-N26
Panel Mounting Kit	AFL2PK-08A
Wall Mounting Kit	AFLWK-12
Rack Mounting Kit	AFL2RK-08A
Stand	STAND-B08/STAND-C12-R10 / STAND-100-RS
V-stand	VSTAND-A07-R11
Magnetic stripe reader	AFL2P-08AMSR-U-R10
EM RFID Reader	AFL2-EM-RFID-KIT01-R10
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R11
OS: Win XPE (CD-ROM)	AFL2-W07A-CV-XPE-R12
OS: Win 7 Embedded (DVD-ROM)	AFL2-W07A-CV-WES7E-R12 (for Resistive Touch)

Packing List

Item	P/N	Q'ty	Description
Utility CD	7B000-000889-RS	1	drivers and user manual
One Key Recovery CD		1	
Power adapter	63040-010036-111-RS	1	90VAC~264VAC, 50/60 Hz, Output: 12VDC, 36W (Meet PSE)
Power cord	32000-000002-RS	1	European standard, 1830mm
RJ-11 to DB-9 COM port cable		1	
IR remote controller	7Z000-SLPCB001-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

Fully Integrated I/O
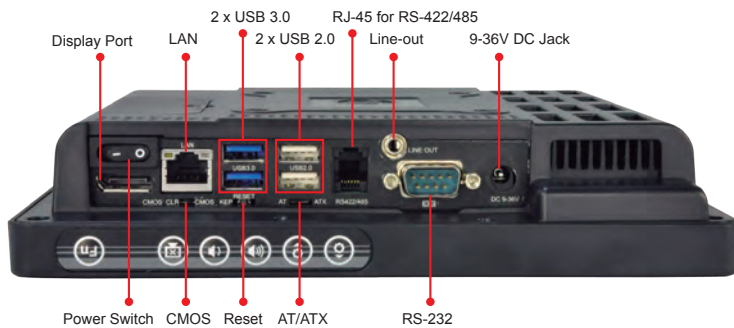
AFL2-08A Dimensions

(Unit: mm)
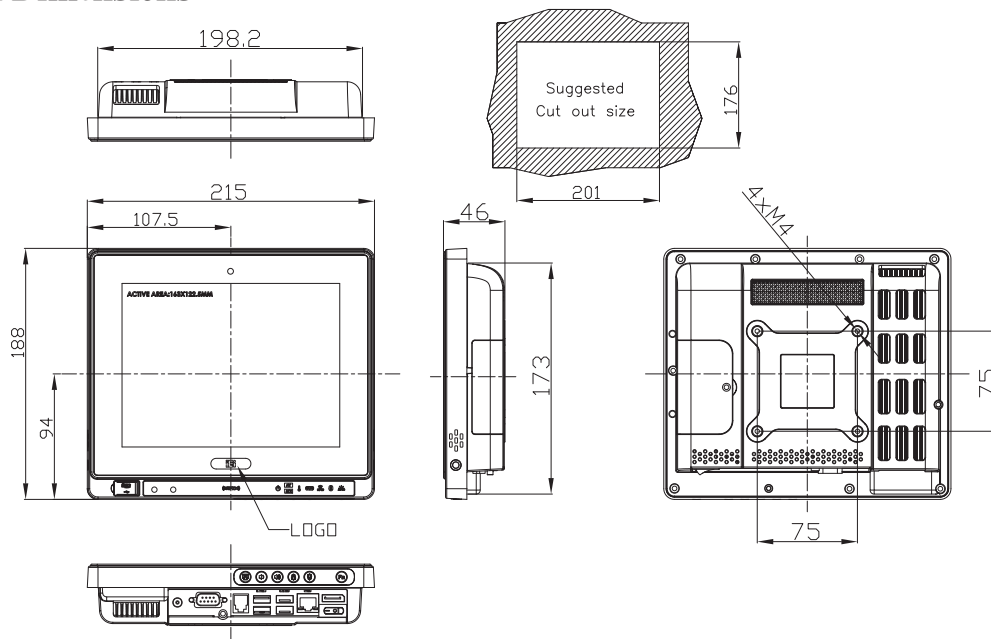
AFL2-10A-N28

Intel® Atom™ N2800 Dual Core Processor

Features

- Flat-bezel LCD with LED backlight
- Intel® Atom™ N2800 dual core 1.86 GHz processor
- One 1066 MHz 204-pin DDR3 SO-DIMM slot (system max. 4GB) pre-installed with 2GB
- 5-wire resistive type touch screen supported
- Wi-Fi 802.11b/g/n high speed wireless
- EM or Mifare RFID reader
- Built-in 2M pixels webcam with AF, AE and AWB capabilities
- Built-in two 1.5W speakers and microphone
- IP 64 compliant front panel

Wireless 802.11b/g/n | RFID | Camera | Speakers | Touchscreen | -20°C~45°C | IP64

Specifications

Model		AFL2-10A-N28
LCD Specifications	Size	10.4"
	Resolution	800 (W) x 600 (H)
	Brightness (cd/m²)	400 cd/m²
	Contrast Ratio	700:1
	LCD Color	262K/16.2M
	Pixel Pitch (mm)	0.264 (H) x 0.264 (V)
	Viewing Angle (H-V)	160°(H) / 140°(V)
	Backlight MTBF	30000 hrs (LED backlight)
Touch	Touch Screen	5-wire rsistive type with RS-232 interface
	Touch Controller	PenMount DMC9000
System	CPU	Intel® Atom™ N2800 dual core 1.86 GHz CPU
	Chipset	Intel® NM10
	RAM	Support one 1066MHz 204-pin DDR3 SO-DIMM slot (max. 4GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC892 HD Audio codec
	HDD	2.5" SATA 2.0 HDD bay
	Input / Output	1 x Mini USB 2.0 port on front panel 1 x MicroSD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
Other Features	Audio	AMP 1.5 W + 1.5 W
	Camera and Microphone	2M pixels with low light function, digital microphone
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)
	OSD Function	LCD on/off, brightness up/down, volume up/down, hotkey
	System Cooling	Fanless
Connectivity	Wireless	IEEE 802.11b/g/n Telec certified
Physical	Construction Front Panel	PC + ABS plastic front frame
	Mounting	Wall, Rack, Stand, RACK Mounting and Arm VESA 75mm x 75mm
	Color	Black
	Dimensions (WxHxD) (mm)	282.5 x 242.7 x 51
	Weight (N/G)	2.98 kg / 4.5 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 45°C
	Storage Temperature (°C)	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety&EMC	CE / FCC
Power	Power Supply	60W power adapter, Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC
	Power Requirement	9 ~ 36 VDC
	Power Consumption	12V@2.75A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)

Ordering Information

Part Number	Description
AFL2-10A-N28/R/2G-R11	10.4" 400cd/m² SVGA fanless panel PC with Intel® Atom™ cedarview N2800 dual core 1.86GHz, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, 2GB DDR3 RAM, R11

Options

Item	AFL2-10A-N28
Panel Mounting Kit	AFL2PK-10A
Wall Mounting Kit	AFLWK-12
Rack Mounting Kit	AFL2RK-10A
Stand	STAND-C12-R10/STAND-A21-R10
V-stand	VSTAND-A10-R11
Magnetic Stripe Reader	AFL2P-12AMSR-U-R10
EM RFID Reader	AFL2-EM-RFID-KIT01-R10
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R11
OS: Win XPE (CD-ROM)	AFL2-W10A-CV-XPE-R11
OS: Win 7 Embedded (DVD-ROM)	AFL2-W10A-CV-WES7E-R11 (for Resistive Touch)

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power adapter	63040-010060-130-RS	1	(Meet PSE)
Power cord	32702-000200-100-RS	1	European standard, 1830mm
Power transfer cord	32702-000300-100-RS	1	

Fully Integrated I/O

AFL2-10A Dimensions
(Unit: mm)

AFL2-12A-HM65

Intel® Core™ i7/i5/i3 Processor

Features

- 12.1" 600nits 1024 x 768 flat-bezel LCD with LED backlight
- Supports projected capacitive touchscreen or 5-wire resistive type touchscreen
- Built-in two 3W speakers and microphone
- GbE LAN for high speed network applications
- One 204-pin DDR3 SO-DIMM slot (system max. 4GB)
- Wi-Fi 802.11b/g/n high speed wireless
- EM or Mifare RFID reader
- IP 64 compliant front panel
- Auto-dimming control
- Built-in 2 megapixels webcam with AF AE and AWB capabilities
- Wide range 9~36 VDC input

| Wi-Fi Wireless 802.11b/g/n | RFID | Camera | Speakers | Touchscreen | -20ºC~50ºC | IP64 |

Specifications

	Model	AFL2-12A-HM65
LCD Specifications	Size	12.1"
	Resolution	1024 (W) x 768 (H)
	Brightness (cd/m²)	600
	Contrast Ratio	700:1
	LCD Color	16.2 M
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	160° / 140°
	Backlight MTBF	50000 hrs (LED backlight)
Touch	Touch Screen	5-wire rsistive type with RS-232 interface / projected capacitive type with USB interface
	Touch Controller	PenMount DMC9000 / EETI EXC7200 & EXC5400
System	CPU	2nd Generation Intel® Core™ i7/ i5/ i3 and Celeron® processor
	Chipset	Intel® HM65
	RAM	Support one 204-pin DDR3 SO-DIMM slot (Max. 4GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	
	Storage	2.5" SATA 6Gb/s SSD bay
	Input / Output	1 x RS-232 (DB-9) 1 x HDMI port 1 x RS-232 (RJ-45) 1 x MicroSD card slot on front panel 1 x RS-422/485 (4-pin box header) 1 x Power switch 2 x GbE LAN (RJ-45) 1 x AT/ATX switch 2 x USB 2.0 1 x Reset button 2 x USB 3.0 1 x Clear CMOS button 1 x Mini USB 2.0 port on front panel 1 x DC input jack 1 x Audio jack (line-out)
Other Features	Audio	AMP 3W + 3W (internal speaker)
	Camera	2 M pixels with low light function
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key
	Ambient Light Sensor	Yes
	Infrared Remote Controller	Yes
	System Cooling	Smart fan
Connectivity	Wireless	IEEE 802.11b/g/n module Telec certified
Physical	Construction Front Panel	PC + ABS Plastic
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100 mm x 100 mm
	Color	Black
	Dimensions (WxHxD)(mm)	310 x 265 x 52.6
	Weight (N/G)	3.8 kg / 6.1 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C with SSD
	Storage Temperature (°C)	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety&EMC	CE / FCC
Power	Power Supply	90W power adapter Input: 100VAC~240VAC, 50/60Hz Output: 19VDC
	Power Requirement	9 ~ 36 VDC
	Power Consumption	19V@2.68A (Intel® Core™ i5-2510E processor with 4GB DDR3 memory)

Ordering Information

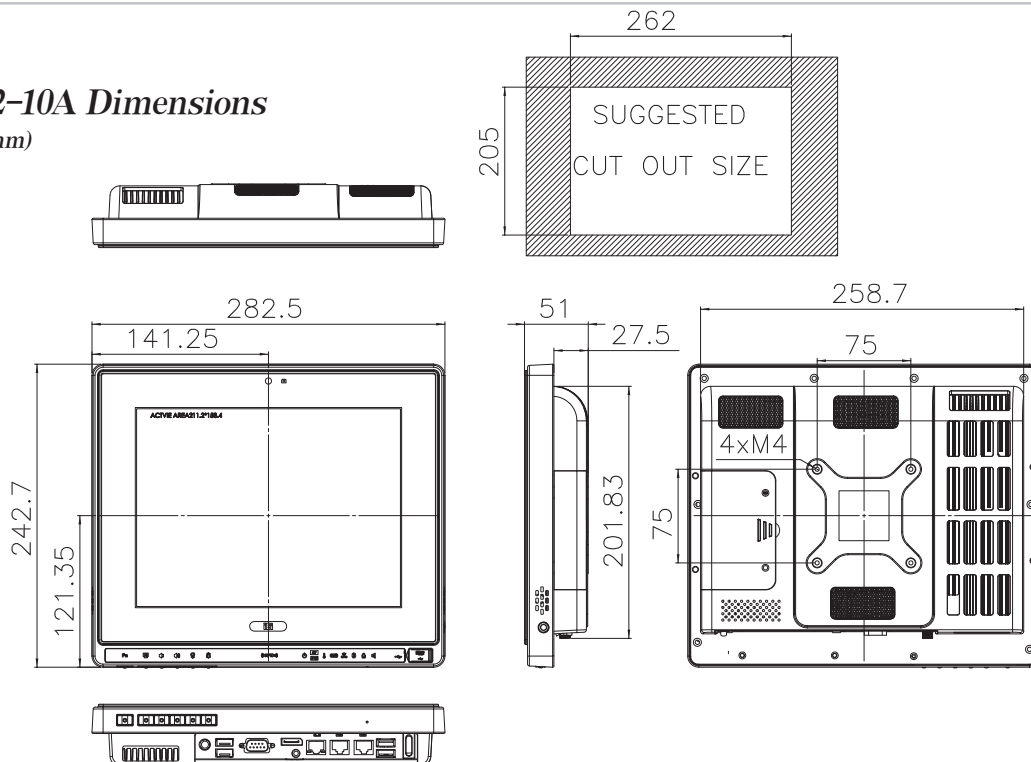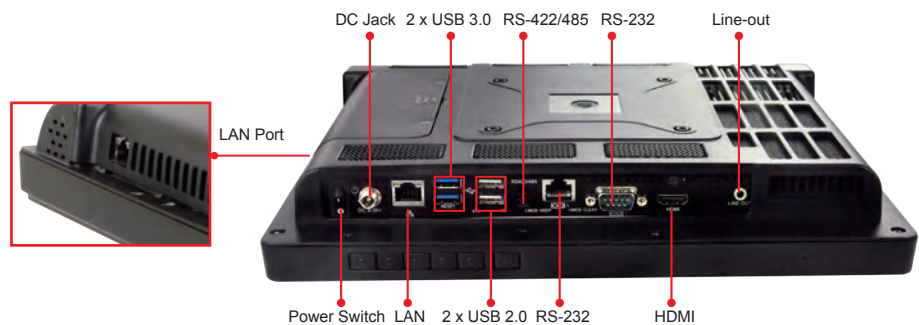| Part No.		Description
Resistive Touch Screen	AFL2-12A-HM65/R-R15	12.1" 600cd/m² XGA panel PC, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, dual GbE LAN, R15
Projective Capacitive Touch Screen	AFL2-12A-HM65/PC-R15	12.1" 600cd/m² XGA panel PC, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, dual GbE LAN, R15
CPU Selection	CPU-MB-i7-2640M	2nd Generation Intel® Core™ i7 Processor [Mobile], PPGA-988, dual core 2.8GHz, 35W, iAMT
	CPU-MB-i5-2510E	2nd Generation Intel® Core™ i5 Processor [Mobile], PPGA-988, dual core 2.5GHz, 35W, iAMT
	CPU-MB-i3-2310M	2nd Generation Intel® Core™ i3 Processor [Mobile], PPGA-988, dual core 2.1GHz, 35W
	CPU-MB-CM-B810	Intel® Celeron® Mobile Processor, PPGA-988, dual core 1.6GHz, 35 W
	CPU-MB-CM-B710	Intel® Celeron® Mobile Processor, PPGA-988, single core 1.6GHz, 35 W
Memory Selection	DDR3-SO-1333-1GB	SO-DIMM DDR3 1333MHz 1GB
	DDR3-SO-1333-2GB	SO-DIMM DDR3 1333MHz 2GB
	DDR3-SO-1333-4GB	SO-DIMM DDR3 1333MHz 4GB

Options

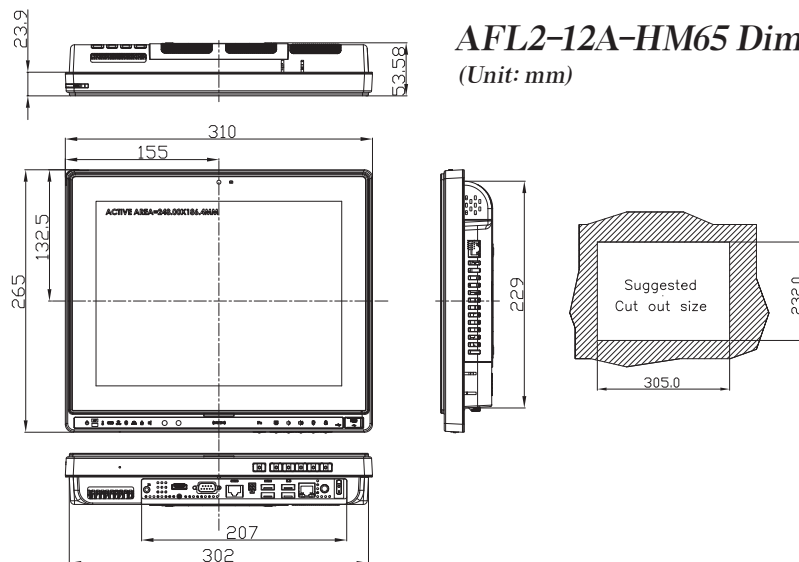| Item	AFL2-12A-HM65
Panel Mounting Kit	AFLPK-15
Wall Mounting Kit	AFLWK-19B
Rack Mounting Kit	AFL2RK-12
Arm	ARM-11-RS
Stand	STAND-A12-RS/STAND-A19-RS/STAND-A21-R10/STAND-C12-R10
V-Stand	VSTAND-A12-R11
Magnetic Stripe Reader Kit	AFL2P-12AMSR-U-R10
EM RFID Reader	AFL2-EM-RFID-KIT01-R10
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R11
OS: Win XPE (2GB CF Card)	AFL2-12A-HM65-XPE-R15*
OS: Win XPE (4GB CF Card)	AFL2-12A-HM65-XPE-R15*
OS: Win 7 Embedded (4GB CF Card)	AFL2-12A-HM65-WES7P-R15* (for Projected Capacitive Touch) AFL2-12A-HM65-WES7E-R14* (for Resistive Touch)

*OS image with CD-ROM or DVD-ROM

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
One Key Recovery CD		1	
Power Adapter	63040-010090-120-RS	1	90W ;19VDC output
Power Cord	32702-000401-100-RS	1	1500 mm, European Standard
Power Transfer Cord	32702-000300-100-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3*4 for securing HDD
M4 Screw Pack	44403-040061-RS	4	M4*4 VESA screw
Touch Pen	43125-0002C0-00-RS	1	
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1	
IR Remote Controller	7Z000-SLPCB005-RS	1	
RS-422 Cable	32205-002400-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

AFL2−12A−HM65 Fully Integrated I/O

DC Jack   2 x USB 3.0   RS-422/485   RS-232   Line-out

LAN Port

Power Switch   LAN   2 x USB 2.0   RS-232   HDMI

AFL2−12A−HM65 Dimensions
(Unit: mm)

23.9
53.58
310
155
132.5
265
ACTIVE AREA=246.00X184.4MM
229
Suggested Cut out size
232.0
305.0
207
302

AFL2-17A-H61

Intel® Core™ i7/i5/i3 and Pentium® Processor

Optional CD-ROM available

Features

- Programmable colorful LED light bar
- Intel® Core™ i5/ i3 and Pentium® processor
- Two 204-pin DDR3 SO-DIMM slot (system max. 16GB) preinstalled with 4GB (2GB x 2)
- Projected capacitive touchscreen and 5-wire resistive type touchscreen supported
- Wi-Fi 802.11b/g/n
- EM or Mifare RFID reader
- Built-in 2-megapixel webcam with AF, AE and AWB capabilities
- Built-in two 2W speakers and microphone
- IP 64 compliant front panel
- Auto dimming control
- Light fanless design
- Type K thermocouple temperature sensor
- Wide range 9~36 VDC input

Wireless 802.11b/g/n	RFID	Camera	Speakers	Touchscreen	-20ºC~50ºC	IP64

Specifications

Model		AFL2-17A-H61
LCD Specifications	Size	17" (4:3)
	Resolution	1280 (W) x 1024 (H)
	Brightness (cd/m²)	350
	Contrast Ratio	1000:1
	LCD Color	16.7M
	Pixel Pitch (mm)	0.264 (H) x 0.264 (V)
	Viewing Angle (H-V)	170° / 160°
	Backlight MTBF	50,000 (LED backlight)
Touch	Touch Screen	5-wire rsistive type with RS-232 interface / projected capacitive type with USB interface
	Touch Controller	PenMount DMC9000 / EETI EXC7200 & EXC5404
System	CPU	2nd/3rd Generation Intel® Core™ i7/i5/i3 and Pentium® processors
	Chipset	Intel® H61
	RAM	Support two 204-pin DDR3 SO-DIMM slot (max. 16GB) preinstalled with 4GB (2GB x 2)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC892 HD Audio codec
	HDD	2.5" SATA 3Gb/s HDD bay
	CD-ROM	1 x Slim Type CD-ROM bay
	Input / Output	2 x RS-232 (DB-9 connector) 1 x RS-422/485 (DB-9 connector) 2 x GbE LAN (one on the bottom, one on the left) 2 x USB 3.0 3 x USB 2.0 (two on the bottom, one on the left) 1 x Mini USB port on front panel 1 x MicroSD card slot on front panel 1 x Line out (on the left)
	Expansion Interface	1 x PCIe Mini slot reserved
Other Features	Audio	AMP 2W + 2W (internal speaker)
	Camera	2 M pixels with low light function
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)
	TPM	Reserved by pin-header
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key
	Ambient Light Sensor	Yes
	Infrared Remote Controller	Yes
	LED Light Bar	Yes
	System Cooling	Light fanless (smart fan operates above default temperature setting)
Connectivity	Wireless	IEEE 802.11b/g/n Telec certified
Physical	Construction Front Panel	PC + ABS Plastic
	Mounting	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm
	Color	Black
	Dimensions (WxHxD)(mm)	418 x 378 x 65
	Weight (N/G)	6.9 kg / 9.0 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C
	Storage Temperature (°C)	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety&EMC	CE / FCC
Power	Power Supply	120W power adapter , Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC
	Power Requirement	9 ~ 36 VDC
	Power Consumption	19V@5.3A (Intel® Core™ i3-2100T CPU with 4GB 1333 Mhz 4GB DDR3 memory)

Ordering Information

LED Bar	Model	Description
LED Bar	AFL2-17A-H61-i5/R-R13	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R13
	AFL2-17A-H61-i5/PC-R13	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R13
	AFL2-17A-H61-i3/R-R13	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R13
	AFL2-17A-H61-i3/PC-R13	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R13
	AFL2-17A-H61-P/R-R13	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R13
	AFL2-17A-H61-P/PC-R13	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R13
Without LED Bar	AFL2-17AB-H61-i5/R-R13	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R13
	AFL2-17AB-H61-i5/PC-R13	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R13
	AFL2-17AB-H61-i3/R-R13	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2) 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R13
	AFL2-17AB-H61-i3/PC-R13	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R13
	AFL2-17AB-H61-P/R-R13	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R13
	AFL2-17AB-H61-P/PC-R13	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R13

Options

Item	AFL2-17A-H61
Panel Mounting Kit	AFL2PK-17A
Wall Mounting Kit	AFLWK-19B
Rack Mounting Kit	AFL2RK-17A
Arm	ARM-31-RS
Stand	STAND-A19-RS/STAND-A21-R10/STAND-C19-R10
Magnetic Stripe Reader	AFL2P-W19AMSR-U-R10
Slim DVD Burner	AFL2-DVD-KIT01-R10
Module (TPM)	TPM-IN01-R11
EM RFID Reader	AFL2-EM-RFID-KIT01-R10
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R11
OS: Win 7 Embedded (DVD-ROM)	AFL2-17A-H61-WES7P-R13 (for Projected Capacitive Touch) AFL2-17A-H61-WES7E-R13 (for Resistive Touch)

Packing List

Item	P/N	Q'ty	Description
Utility CD	7B000-000956-RS	1	drivers and user manual
One Key Recovery CD	7B000-000781-RS	1	
Power Adapter	63040-010120-210-RS	1	FSP120-AAB;90~264VAC input ; 120W ;19VAC output (Meet PSE)
Power Cord	32702-000401-100-RS	1	European, 1500mm
Power Transfer Cord	32000-089400-RS	1	
Infrared Remote Controller	7Z000-SLPCB005-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3 x 4 for securing HDD
M4 Screw Pack	44033-040061-RS	4	M4 x 4 for VESA screw
I/O Bracket	41013-0290C2-00-RS	1	I/O Bracket
Temperature Sensor Cable	32133-004300-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

CD-RW/DVD-RW Driver Spec.
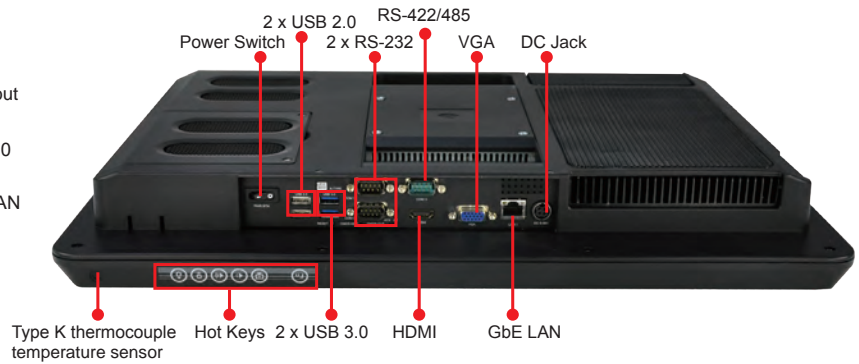
The drive is able to write CD-R/RW disks, DVD+R/RW disks and DVD-R/RW disks

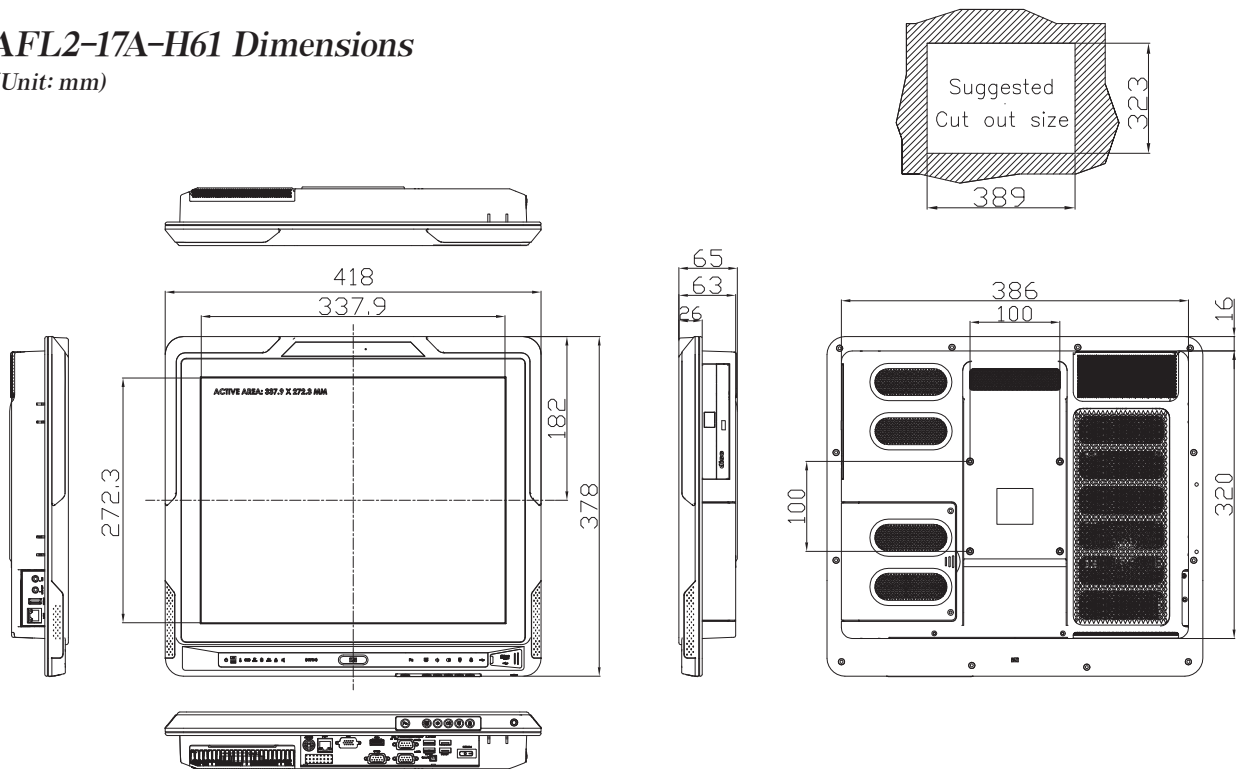| Drive Type	Internal Slim CD-RW/DVD Combo Drive	
Data Transfer Rate	Write: DVD+R/DVD+RW/DVD-R: 8X DVD-RW: 6X CD-R/CD-RW: 24X	Read: DVD-ROM: 8X CD-ROM: 24X
Interface	SATA	
Buffer Memory	2MB	

Function Keys

Fn	**Fn**				
⊠	**Backlight On/Off**	Fn + ⊠	**RFID enable / disable**
◀)	**Audio -**	Fn + ◀)	**Audio mute**
◀))	**Audio +**	Fn + ◀))	**Camera enable / disable**
☼	**Brightness -**	Fn + ☼	**Front side Mini USB&MicroSD enable / disable**
☼	**Brightness +**	Fn + ☼	**Power on / off**

Power Switch
2 x USB 2.0
2 x RS-232
RS-422/485
VGA
DC Jack

Mic, Line-out
1 x USB 2.0
1 x GbE LAN

Type K thermocouple temperature sensor
Hot Keys
2 x USB 3.0
HDMI
GbE LAN

AFL2-17A-H61 Dimensions
(Unit: mm)

Suggested Cut out size
32.3
389

418
337.9
ACTIVE AREA: 337.9 X 272.3 MM
272.3
182
378

65
63
26

386
100
100
320
16

AFL2-W21A-H61

Intel® Core™ i7/i5/i3 and Pentium® Processor

IEI designed a completely new model for its new AFOLUX GEN II Panel PCs. AFL2-W21A-H61 with exclusive LED light bar function combining

Features

- Two 204-pin DDR3 SO-DIMM slot (system max. 16GB) pre-installed with 4GB (2GB x 2)
- Projected capacitive touchscreen supported
- Wi-Fi 802.11b/g/n high speed wireless
- EM or Mifare RFID reader
- Programmable colorful LED light bar
- Built-in two 3W speakers and microphone
- Auto dimming control
- Light fanless design
- Wide range 9~36 VDC input

| Wi-Fi Wireless 802.11b/g/n | RFID | Camera | Speakers | Touchscreen | -20ºC~50ºC | ICMC | IP64 |

Full HD Second Display Through HDMI Interface

Full-HD 1080p (1920x1080) reacts the resolution of panel, which is a set of high-definition video modes with 1920 of horizontal resolution and 1080 of vertical resolution. Widescreen aspect ratio of 16:9 supports perfect display sight, with brighter digital display.

HDMI

1080p 30p

1920 lines of horizontal resolution supporting a 16:9 ratio to perform perfect display sight.

IEI Customized Expansion

Standard Connector Type Easy to Design Expansion Module

The AFL2-W21A-H61 can customize the expansion board depending on user's necessary. Customer can choose digital TV, 3G,video capturing…and so on.

| HSUPA 3.5G | DVB-T/ATSC/Hybrid | Serial Port / UART |
| Ethernet | USB 3.0 | Video card |

Features

- Reliable board to board connection
- IEI provides ODM service which customize boards of user's demand.

Use one system in different markets!

| Digital TV | 3G/3.75G | 4-Port Video Capture |

Kiosk System

Mobile Broadcasting System

Surveillance System

Specifications

Model	AFL2-W21A-H61			
LCD Specifications	LCD Display	W21.5" (16:9)	EM and Mifare RFID	Optional: EM 125 KHz or Mifare 13.56 MHz card reader
	Max Resolution	1920 (W) x 1080 (H)	LED Light Bar	Programmable R/G/B colorful LED light bar (SMBus Control)
	Brightness (cd/m²)	250		
	Contrast Ratio	1000 : 1		
	LCD Color	16.7M	Function Key	6 x function keys: Key1 Backlight On/Off Key2 Audio - Key3 Audio + Key4 Brightness - Key5 Brightness+ Key6 Fn Combinations: Fn+Key1 RFID Enable/Disable Fn+Key2 Audio Mute Fn+Key3 Camera Enable/Disable Fn+Key5 Power ON/OFF
	Pixel Pitch (mm)	0.248 mm x 0.248 mm		
	Viewing Angle (H-V)	170° / 160°		
	Backlight MTBF (Hrs)	30000 (LED backlight)		
Touch	Touch Screen	projected capacitive type with USB interface		
	Touch Controller	EETI EXC7200 & EXC5404		
System	CPU	Intel® Core™ i7/i5/i3 and Pentium® processors		
	Chipset	Intel® H61		
	RAM	Support two 204-pin DDR3 SO-DIMM slot (max. 16GB) preinstalled with 4GB (2GB x 2)	Infrared	IR receiver 38KHz
	Storage	1 x 2.5" SATA 3Gb/s HDD Bay	Light Sensor	Ambient light sensor for panel brightness adjustment
	Optical Drive	1 x Slim Type DVD-ROM bay	TPM	Reserved by pin-header
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	OS Support	Windows Embedded Standard 7 Windows XP Embedded,
	Audio Codec	Realtek ALC892 HD Audio codec	Connectivity / Wireless	IEEE 802.11b/g/n module Telec certified
	Audio	Amplifier 3W + 3W	Physical / Construction Material	PC + ABS plastic for front cover and rear cover
	Webcam & Microphone	2-megapixel camera with low light function Digital Microphone	Mounting	Wall, Stand and VESA 100 mm x 100mm
	I/O Ports	2 x RS232 (DB9 Connector) 1 x RS422/485 COM Port (DB9 connector) 2 x GbE LAN (RJ-45 connector) 3 x USB 2.0 2 x USB 3.0 1 x HDMI 1 x VGA port (DB-15 Connector) 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Clear CMOS button 1 x Type K 1 x 9~36V DC jack 1 x Line out 1 x Mic	Enclosure Color	Sliver + Black
			Dimension (mm)	546.85 (W) x 345.82 (H) x 70.35 (D)
			Weight (Net/Gross)	8.27 Kg / 11.27 Kg
			Enviornment / Operating Temperature (with air flow)	-10°C ~ 50°C
			Storage Temperature	-20°C ~ 60°C
			Humidity	10% to 90% (non-condensing)
			IP Level	IP 64 compliant front panel
			Safety and EMC	CE & FCC
	Expansion Interface	1 x PCIe Mini for Wi-Fi Module 1 x PCIe Mini reserved	Power / Power Adapter	120W power adapter Input: 100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC
	Cooling System	Light Fanless	Power Input	9 ~ 36V DC-IN
			Power Consumption	19V@3.82A (Intel® Core™ i3-2120T processor with 4GB DDR3 memory)

Ordering Information

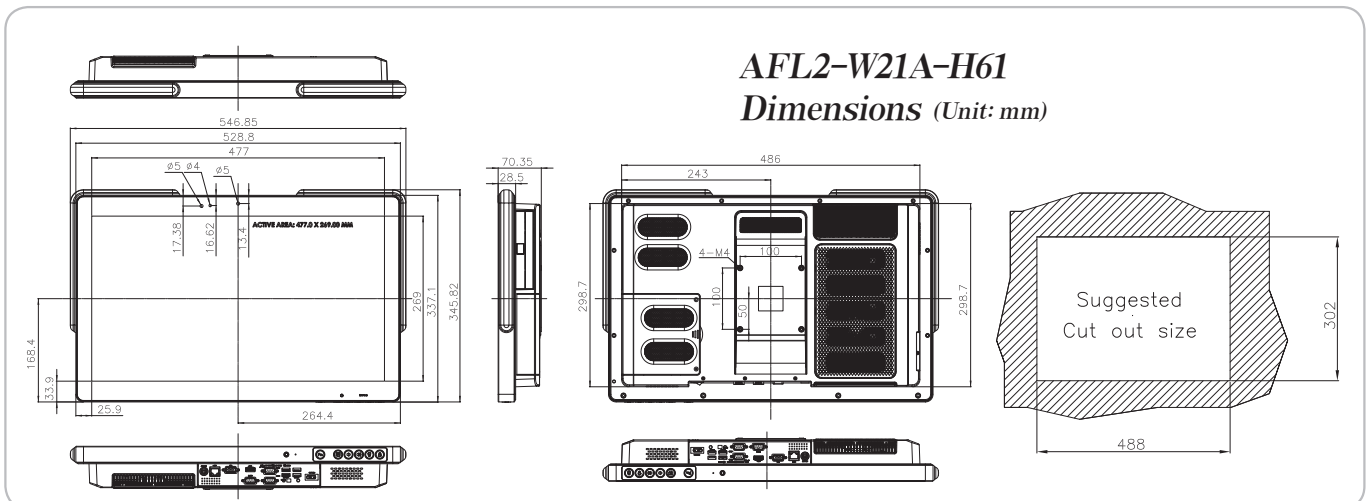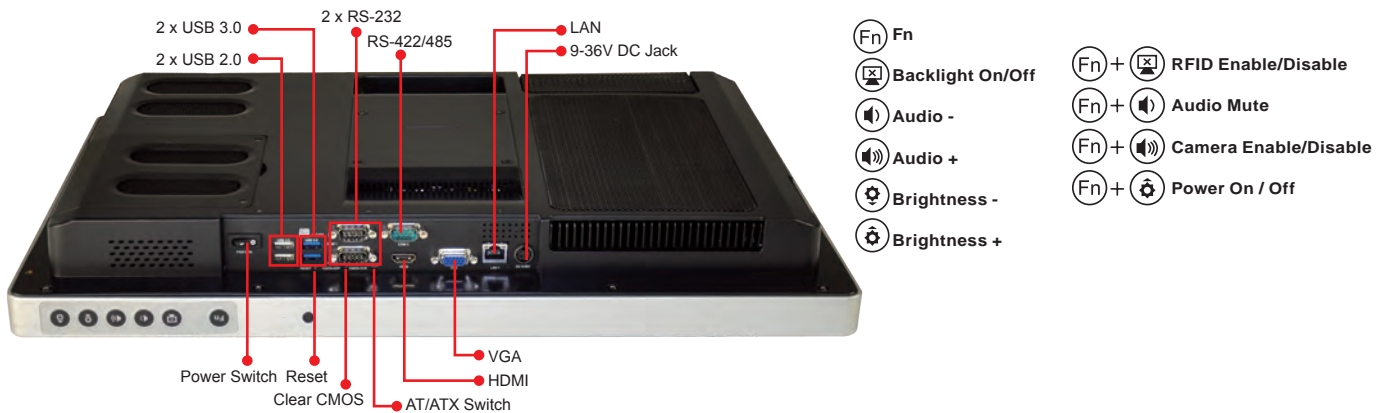| LED Bar	Model	Description
LED Bar	AFL2-W21A-H61-i5/PC-R11	21.5" 250cd/m² FHD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
	AFL2-W21A-H61-i3/PC-R11	21.5" 250cd/m² FHD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
	AFL2-W21A-H61-P/PC-R11	21.5" 250cd/m² FHD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
Without LED Bar	AFL2-W21AB-H61-i5/PC-R11	21.5" 250cd/m² FHD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
	AFL2-W21AB-H61-i3/PC-R11	21.5" 250cd/m² FHD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
	AFL2-W21AB-H61-P/PC-R11	21.5" 250cd/m² FHD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 4GB DDR3 (2GB x 2), 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11

Options

Item	AFL2-W21A-H61
Panel Mount Kit	AFL2PK-W21A
Wall Mounting Kit	AFLWK-19B
Stand	STAND-A21-R10
ARM	ARM-31-RS
Slim DVD Burner Installation Kit (Including SATA Cable)	AFL2-DVD-KIT01-R10
Magnetic Stripe Reader	AFL2P-W21AMSR-U-R10
Trusted Platform Module (TPM)	TPM-IN01-R11
EM RFID Reader	AFL2-EM-RFID-KIT01-R10
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R11
OS: Windows® XP Embedded (CD-ROM)	AFL2-W21-H61-XPE-R11
OS: Windows® Embedded Standard 7 (DVD-ROM)	AFL2-W21-H61-WES7P-R11
Temperature Sensor Cable	32133-004300-100-RS

Packing List

Item	P/N	Q'ty	Description
Utility CD	7B000-000952-RS	1	drivers and user manual
One Key Recovery CD	7B000-000781-RS	1	
Power Adapter	63040-010120-210-RS	1	FSP120-AAB ; 90~264VAC input ; 120W ; 19VAC output (Meet PSE)
Power Cord	32702-000401-100-RS	1	European, 1500mm
Power Transfer Cord	32000-089400-RS	1	
Infrared Remote Controller	7Z000-SLPCB005-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3 x 4 for securing HDD
M4 Screw Pack	44033-040061-RS	4	M4 x 4 for VESA screw

Fully Integrated I/O

AFL2-W21A-H61 Dimensions (Unit: mm)

AFOLUX Selection Guide

LCD Size		7"		8.4"		12.1"
Model		**AFL-07A-LX**	**AFL-W07A-N26**	**AFL-08AH-LX**	**AFL-08A-N26**	**AFL-12A-N26**
Display	LCD Size	Wide 7"		8.4 "		12.1"
	Max Resolution (WxH)	800 x 480		800 x 600		1024 x 768
	Brightness (cd/m²)	500		450		500
	Contrast Ratio	400:1		600:1		700:1
	LCD Color	262K		262K		262K
	Pixel Pitch (mm) (HxV)	0.0635 (H) x 0.1905 (V)		0.213 (H) x 0.213 (V)		0.240 (H) x 0.240 (V)
	Viewing Angle (H/V)	140º/110º		160º/140º		160º/160º
	Backlight MTBF (hrs)	50000 (LED backlight panel)		50000 (LED backlight panel)		
Motherboard	CPU	AMD Geode LX800 500MHz	Intel® Atom™ N2600 dual core 1.6 GHz CPU	AMD Geode LX800 500MHz Processor	Intel® Atom™ N2600 dual core 1.6 GHz CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
	Chipset	AMD Geode LX800 + AMD CS5536	Intel® NM10	AMD Geode LX800 + AMD CS5536	Intel® NM10	Intel® NM10
	RAM	One 200-pin DDR SO-DIMM (max. 1GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2G) pre-installed wiith 2GB	One 200-pin DDR SO-DIMM socket, (max. 1GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB) pre-installed wiith 2GB	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB) pre-installed wiith 2GB
I/O Ports and Switches		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x 9-28V lockable DC Jack 1 x RJ-45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out	1 x 9-28V lockable DC Jack 1 x RJ-45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 4 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
Drive Bay Storage	HDD	--	--	--	--	1 x 2.5" SATA HDD 1 x mSATA SSD
	CF	CF Type II	mSATA	CF Type II	mSATA	--
Wireless Connection	Wi-Fi	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11b/g/n (internal PCIe Mini card) Telec certified	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g (internal Mini PCI) Telec certified	IEEE 802.11b/g/n (internal PCIe Mini card) Telec certified
Physical	Dimensions (WxHxD) (mm)	226 x 140 x 41		234 x 134 x 42		304 x 246 x 50
	Net Gross Weight	0.8 Kg	0.6 Kg	0.8 Kg		1.8 Kg
System Cooling		Fanless				
Environment	Operation Temperature	0°C~50°C	-10°C~50°C	0°C~50°C	-10°C ~50°C	-10°C~50°C
	Storage Temperature	-20°C~60°C		-20°C~60°C		
Power Requirement		12 VDC	9-28V DC	12VDC	9-28V DC	9-28 VDC

AFOLUX Selection Guide

LCD Size	15"	17"	19"
Model	**AFL-15i-HM55**	**AFL-17i-HM55**	**AFL-19i-HM55**
Display — LCD Size	15"	17"	19"
Max Resolution (WxH)	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	400 or 250	350	350
Contrast Ratio	700:1	800:1	1000 : 1
LCD Color	262K or 16.7M	16.7M	16.7M
Pixel Pitch (mm) (HxV)	0.297 (H) x 0.297 (V)	0.264(H) x 0.264(V)	0.294 (H) x 0.294 (V)
Viewing Angle (H/V)	160º / 140º or 170º / 160º	170º / 160º	170º / 160º
Backlight MTBF (hrs)	50000 (LED backlighting) or 30000	50000	50000 hrs (LED backlighting)
Motherboard — CPU	Intel® Core™ i7/i5/i3/Celeron® Processor	Intel® Celeron® M P4500 CPU Intel® Core™ i7/i5/i3	Intel® Core™ i7/i5/i3/Celeron® Processor
Chipset	Intel® HM55	Intel® HM55	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)	Two 204-pin DDR3 SO-DIMM (max. 8GB)	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports and Switches	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port
Drive Bay — HDD	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
CF	--	--	--
Wireless Connection — Wi-Fi	IEEE 802.11b/g/n (internal Mini PCI) Telec certified	IEEE 802.11b/g/n (internal PCIe Mini card) Telec certified	IEEE 802.11b/g/n (internal Mini PCI) Telec certified
Physical — Dimensions (WxHxD) (mm)	394 x 309 x 66	428 x 350 x 71	470 x 383 x 72
Net Gross Weight	5.8 Kg	6.0 Kg	6.2Kg
System Cooling	Active with fan	Active with fan	Active with fan
Environment — Operation Temperature	0°C~50°C	0°C~50°C	0°C~50°C
Storage Temperature			
Power Requirement	12VDC	12 VDC	12 VDC

System

Display System

7" Wide Screen WVGA AFOLUX PPC

AFL-07A-LX — AMD Geode™ LX 800 500 MHz Processor

AFL-W07A-N26 — Intel® Atom™ N2600 1.6GHz Processor

9V ~ 28V Wide DC Power Input

The compact fanless AFL-W07A-N26 model with widescreen high-brightness panel is ideal for setup in a place where space and light is limited. This makes it an ideal choice for mobile and transportation PC applications.

16:9 Wide Screen

Features

- 7" widescreen WVGA LED backlight TFT LCD with resistive touch screen
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Compact design with plastic housing
- Fanless cooling system
- Selectable AT/ATX power mode
- System memory up to 2 GB SDRAM
- Built-in 802.11b/g/n Wireless LAN
- Built-in speakers
- One compactFlash® slot
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (suggest with over 4GB storage capacity)

Wireless 802.11b/g/n | Speakers | Dual Display | mSATA | IP64 | One Key Recovery iEi symantec

Specifications

Model	AFL-07A-LX	AFL-W07A-N26
LCD Size	7"	
Max Resolution	800 x 480	
Brightness (cd/m²)	500	
Contrast Ratio	400:1	
LCD Color	262K	
Pixel Pitch (mm)	0.0635 (H) x 0.1905 (V)	
Viewing Angle (H-V)	140º / 110º	
Backlight MTBF	50000 hrs (LED Backlight)	
SBC Model	AFLMB-LX-800	AFLMB-CV-N2600-R10
CPU	AMD Geode™ LX 800 (500Mhz)	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX800 + AMD CS5536	Intel® NM10
RAM	Supports one 333MHz or 400MHz DDR SO-DIMM (1GB Max.)	One 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2G) pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
Storage	CF Type II	mSATA
Watchdog Timer	Software programmable supports 1~255 sec. system reset	
Audio	N/A	AMP 1.5W + 1.5W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11b/g/n 2T2R Module (internal PCIe Mini card interface) Telec certified
Construction Front Panel	ABS + PC Plastic front frame	
LED Function	1 x LED on front panel for power on/off	
Mounting	Panel, Wall, Rack, Stand or Arm mounting VESA 75mm x 75mm	
Front Panel Color	Gray 7539U	
Dimensions (WxHxD) (mm)	226 x 140 x 41	
Operation Temperature (°C)	0~50°C	-10°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C	
N/G Weight	0.6 Kg	
IP Level	Front Frame IP64	
Safety & EMC	CE / FCC	
Touch Screen	4-wire Resistive Type (touch controller IC is on board)	
Power Adapter	P/N: 63040-010036-111-RS 36W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010036-121-RS 36W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC	9-28V DC
Power Consumption	20W	23W

Ordering Information

Part Number	Description
AFL-07A-LX/R/512-R24	7" 500 cd/m², WVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 512MB DDR RAM, R24
AFL-W07A-N26/R/2G-R11	7" 500cd/m², WVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R11

ISMM Support Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-07A-LX	V			V	V	
AFL-W07A-N26	V			V	V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63040-010036-111-RS (for AFL-07A-LX) 63040-010036-121-RS (for AFL-07A-N26)	1	90~264V AC; 12V DC; 36W (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	
RJ45 to RS-232 Transfer Cable	32005-000200-200-RS	1	300MM; RJ45 to D-SUB 9P transfer cable

Options

Model	AFL-07A-LX	AFL-W07A-N26
Panel Mounting Kit	AFLPK-12	
Wall Mounting Kit	AFLWK-12	
Rack Mounting Kit	AFLRK-07	
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-100-RS	
VSTAND	VSTAND-A07-R11	
9~30VDC to 12VDC Converter Module	IDD-930160-KIT	
OS: Win CE 5.0 (128 MB CF card)	AFLCF-07-LX-CE-R21	--
OS: Win CE 6.0 (128 MB CF card)	AFLCF-07-LX-CE060-R21	--
OS: Win XPE (1 GB CF card)	AFLCF-07-LX-XPE-R21	AFL-W07-N26-XPE-R11*
OS: Win 7 Embedded (4 GB CF card or CD-ROM)	--	AFL-W07-N26-WES7E-R11*
Magnetic Stripe Reader	AFLP-08AMSR-U	
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)	

*OS image with CD-ROM

AFL-07A-LX
Fully Integrated I/O

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- 12VDC Power Jack or 18~30VDC Input
- Power Switch
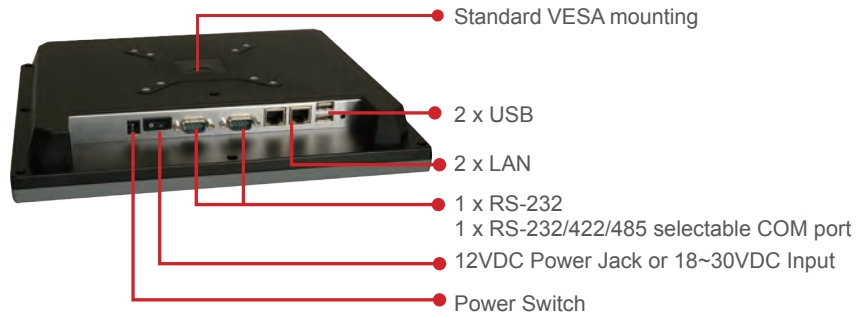
AFL-W07A-N26
Fully Integrated I/O

- RS-232
- RS-232/422/485
- 2 x LAN Port
- Power Switch
- Line Out
- Lockable DC Jack
- VGA
- Reset Button
- 2 x USB 2.0
- AT/ATX Switch

Dimensions (Unit: mm)

213.5

226.0

151.4

90.4

40.2

15.7

125.3

140.0

(Optional Stand Kit)

210.5

45°

66.5

124.4

Suggested
Cut out size

127.27

215.55
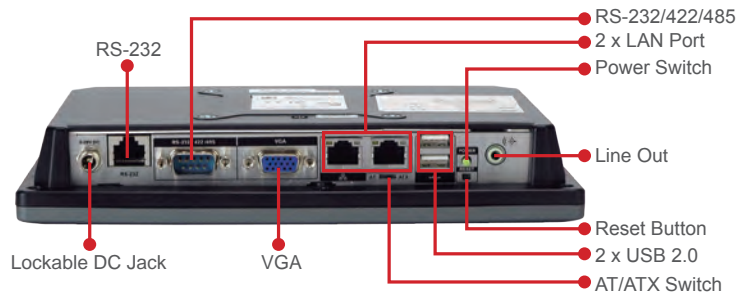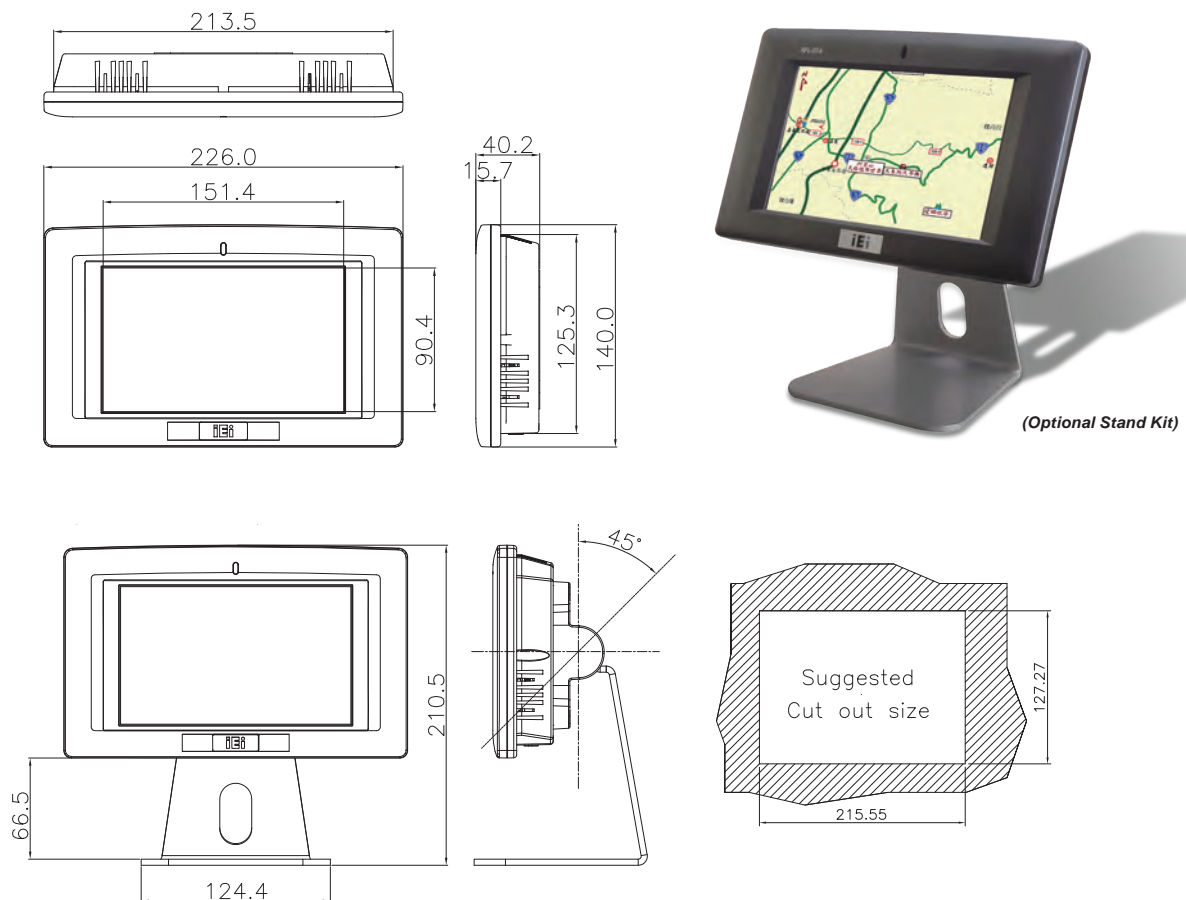
8.4" SVGA AFOLUX Panel PC

AFL-08AH-LX	AMD Geode™ LX 800 500 MHz Processor
AFL-08A-N26	Intel® Atom™ N2600 1.60 GHz Processor

Features

- 8.4" TFT LED Backlight LCD with resistive touch screen
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Fanless cooling system
- Selectable AT/ATX power mode
- System memory up to 2GB SDRAM
- Built-in 802.11b/g/n Wireless LAN
- Built-in speakers
- One CompactFlash® slot
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Specifications

Model	AFL-08AH-LX	AFL-08A-N26
LCD Size	8.4"	
Max Resolution	800 x 600	
Brightness (cd/m²)	450	
Contrast Ratio	600:1	
LCD Color	262K	
Pixel Pitch (mm)	0.213 (H) x 0.213 (V)	
Viewing Angle (H-V)	160º / 140º	
Backlight MTBF	50000 hrs (LED Backlight)	
SBC Model	AFLMB-LX-800	
CPU	AMD Geode™ LX 800 (500MHz)	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX 800 + AMD CS5536	Intel® NM10
RAM	Supports one 400MHz or 533MHz DDR SO-DIMM (Max.1GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB) pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack	1 x 9-28V lockable DC Jack 1 x RJ-45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
Storage	CF Type II	mSATA
Watchdog Timer	Software programmable supports 1~255 sec. system reset	
Audio	N/A	AMP 1.5W + 1.5W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11b/g/n Module (internal PCIe Mini card interface) Telec certified
Construction Front Panel	ABS + PC Plastic front frame	
LED Function	1 x Power on/off LED on front panel	
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm	
Front Panel Color	Gray 7539U	
Dimensions (WxHxD) (mm)	234 x 184 x 42	
Operation Temperature (°C)	0°C ~ 50°C	-10°C ~50°C
Storage Temperayure (°C)	-20°C ~ 60°C	
N/G Weight	0.8 Kg	
IP Level	IP 64 compliant front panel	
Safety & EMC	CE / FCC	
Touch Screen	4-Wire Resistive Type (touch controller IC is on board)	
Power Adapter	P/N: 63040-010036-111-RS 36W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010036-121-RS 36W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC	9-28V DC
Power Consumption	20W	29W

Ordering Information

Part Number	Description
AFL-08AH-LX/R/512-R24	8.4" 450 cd/m², SVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 512MB DDR RAM, R24
AFL-08A-N26/R/2G-R11	8.4" 450cd/m², SVGA fanless panel PC with Intel® Atom™ N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R11

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Cash Drawer
AFL-08AH-LX	V			V		V	
AFL-08AH-N26	V			V		V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63040-010036-111-RS (for AFL-08AH-LX) 63040-010036-121-RS (for AFL-08A-N26)	1	90~264V AC; 12V DC; 36W (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	
RJ45 to RS-232 Transfer Cable	32005-000200-200-RS	1	300MM; RJ45 to D-SUB 9P transfer cable

Options

Model	AFL-08AH-LX	AFL-08A-N26
Panel Mounting Kit	AFLPK-12	
Wall Mounting Kit	AFLWK-12	
Rack Mounting Kit	AFLRK-08	
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-100-RS	
VSTAND	VSTAND-A10-R11	
9~30VDC to 12VDC Converter Module	IDD-930160-KIT	
OS: Win CE 5.0 (128 MB CF card)	AFLCF-08-LX-CE-R21	--
OS: Win CE 6.0 (128 MB CF card)	AFLCF-08-LX-CE060-R21	--
OS: Win XPE (1 GB CF card)	AFLCF-08-LX-XPE-R21	AFL-W07-N26-XPE-R11*
OS: Win 7 Embedded (4 GB CF card or CD-ROM)	--	AFL-W07-N26-WES7E-R11*
Magnetic Stripe Reader	AFLP-08AMSR-U	
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)	
DC jack to terminal block power converter cable	32002-005500-100-RS	

*OS image with CD-ROM

AFL-08AH-LX
Fully Integrated I/O

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- 12VDC Power jack or 18~30VDC input
- Power switch

AFL-08A-N26
Fully Integrated I/O

- RS-232
- RS-232/422/485
- 2 x LAN Port
- Power Switch
- Line Out
- Reset Button
- 2 x USB 2.0
- AT/ATX Switch
- Lockable DC Jack
- VGA
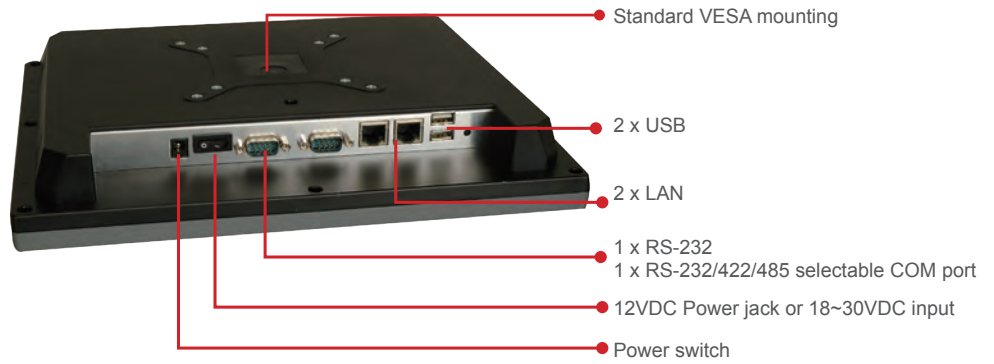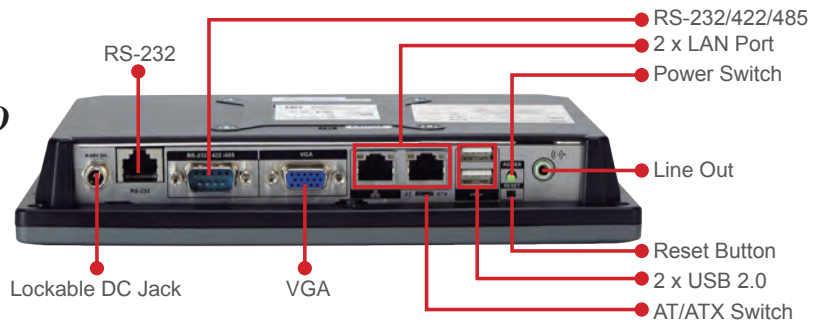
AFL-08AH/AFL-08A
Dimensions (Unit: mm)

219.8

233.9
170.4
127.8

41.1
17.0
171.8
183.9

Suggested
Cut out size
174.76
222.76

205.2
45°
21.4
124.4
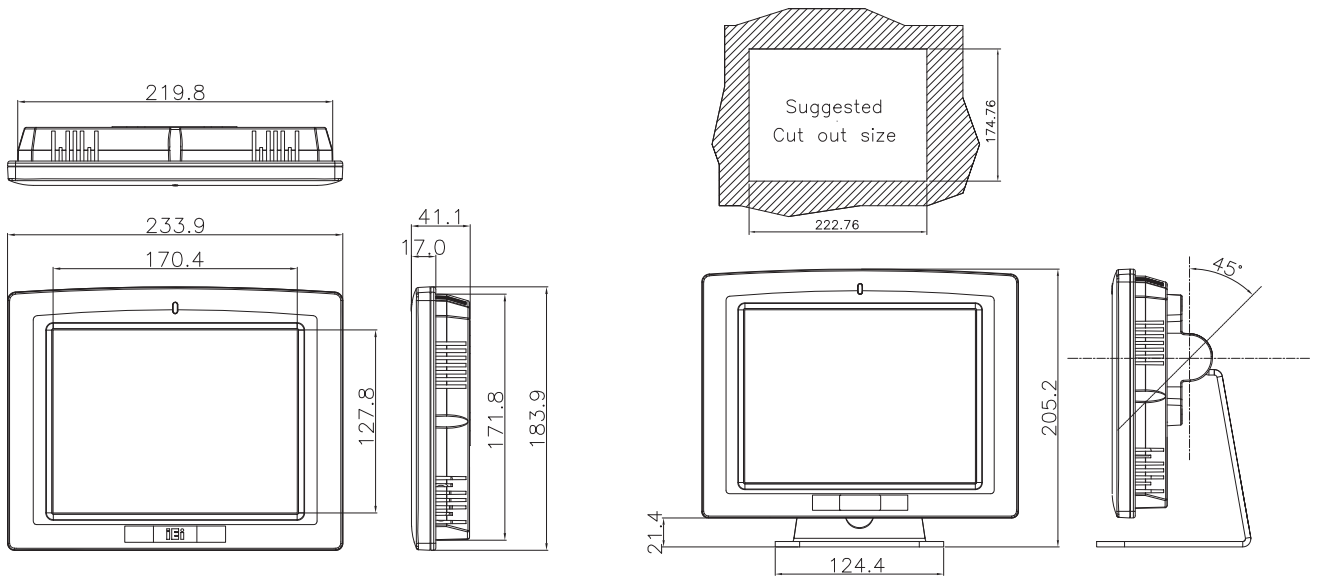
12.1" XGA AFOLUX Panel PC

AFL-12A-N26

Intel® Atom™ N2600 1.6GHz Processor

Features

- 12.1" TFT LED backlight LCD with resistive touch screen
- Fanless cooling system
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Selectable AT/ATX power mode through the switch inside the chassis
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Wireless 802.11b/g/n | Speakers | Fanless | IP64 | mSATA | One Key Recovery | IEI | Symantec

Specifications

Model	AFL-12A-N26
LCD Size	12.1"
Max Resolution	1024 x 768
Brightness (cd/m²)	500
Contrast Ratio	700 : 1
LCD Color	262K
Pixel Pitch (mm)	0.240 (H) x 0.240 (V)
Viewing Angle (H-V)	160° / 160°
Backlight MTBF	50000 (LED Backlight)
SBC Model	AFLMB-CV-N2600-R10
CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	Intel® NM10
RAM	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB) pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack 1 x 9-28V lockable DC Jack 1 x RJ-45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 4 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
Storage	mSATA
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 2W + 2W (internal speaker)
Wireless Connection	Wireless LAN 802.11b/g/n Module (internal PCIe Mini card interface) Telec certified
Drive Bay	1 x 2.5" SATA HDD & 1 x mSATA SSD
Construction Front Panel	ABS + PC Plastic front frame
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm
Front Panel Color	Gray 7539U
Dimensions (WxHxD) (mm)	304 x 246 x 50
Operation Temperature (°C)	-10°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C
N/G Weight	1.8 Kg
IP Level	IP 64 compliant front panel
Safety & EMC	CE / FCC
Touch Screen	5-wire resistive type (touch controller IC is on board)
Power Adapter	P/N: 63040-010060-120-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	9-28V DC
Power Consumption	32W

Ordering Information

Part Number	Description
AFL-12A-N26/R/2G-R11	12.1" 500cd/m², XGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R11

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Cash Drawer
AFL-12A-N26	V			V		V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63040-010060-120-RS 63040-010060-130-RS	1	90~264V AC; 12V DC; 60W (for N2600) (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	
RJ45 to RS-232 Transfer Cable	32005-000200-200-RS	1	300MM; RJ45 to RS-232 transfer cable

Options

Model	AFL-12A-N26
Panel Mounting Kit	AFLPK-12
Wall Mounting Kit	AFLWK-12
Rack Mounting Kit	AFLRK-12
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A12-RS / STAND-100-RS
VSTAND	VSTAND-A12
9~30VDC to 12VDC Converter Module	IDD-930160-KIT
OS: Win XPE (1 GB CF card)	AFL-W07-N26-XPE-R11*
OS: Win 7 Embedded (4 GB CF card or CD-ROM)	AFL-W07-N26-WES7E-R11*
Magnetic Stripe Reader	AFLP-12AMSR-U
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)
DC jack to terminal block power converter cable	32002-005500-100-RS

AFL−12A−N26
Fully Integrated I/O

Lockable DC Jack
2 x USB 2.0
RS-232/422/485
2 x LAN Port
2 x USB 2.0
Line Out
Reset Button
AT/ATX Switch
VGA
RS-232
Power Switch

Dimensions (Unit: mm)
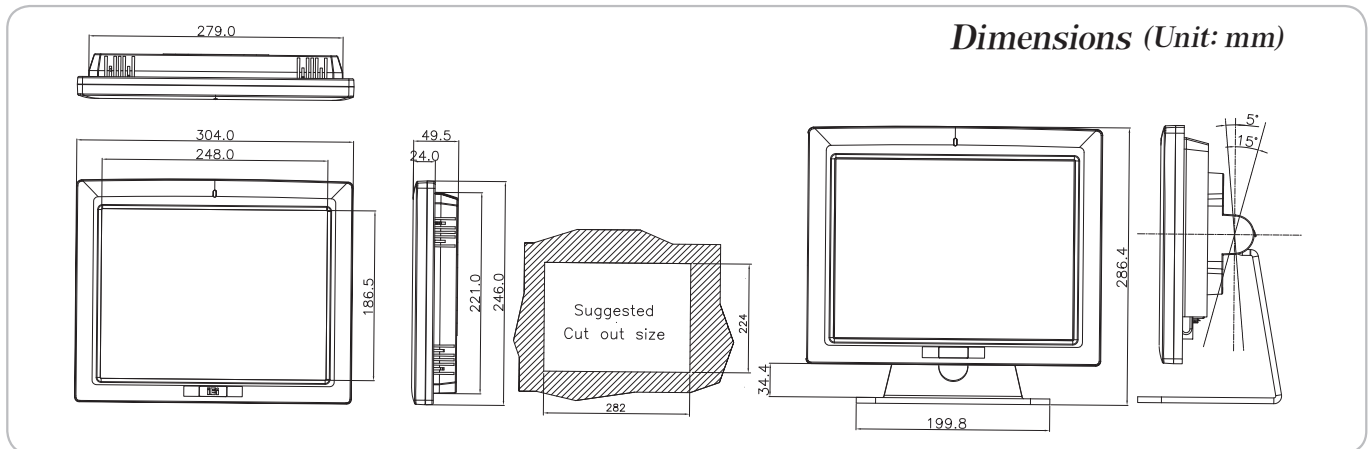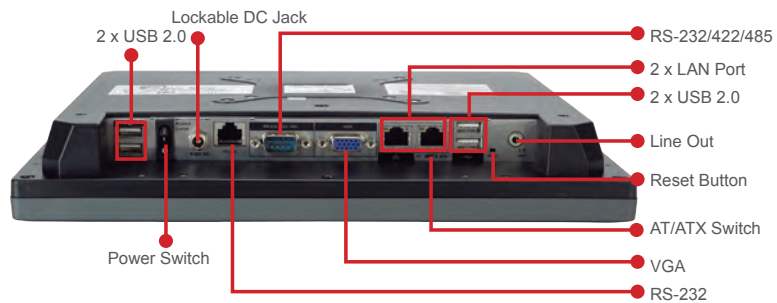
15" XGA AFOLUX Panel PC

AFL-15i-HM55

Intel® Core™ i7/i5/i3/Celeron® Processor

Features

- Intel® Core i7-620M CPU with Intel® HM55 chipset
- DDR3 1066MHz system memory up to 4GB
- HDMI/VGA port delivers high quality image on the second display
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wireless 802.11b/g/n | Speakers | IP64 | One Key Recovery iEi symantec

Specifications

Model	AFL-15i-HM55
LCD Size	15"
Max Resolution	1024 x 768
Brightness (cd/m²)	450
Contrast Ratio	700:1
LCD Color	16.7M
Pixel Pitch (mm)	0.297(H) x 0.297(V)
Viewing Angle (H-V)	160º/150º
Backlight MTBF	50000 hrs (LED backlighting)
SBC Model	AFLMB2-HM55-R10
CPU	Intel® Core™ i7/i5/i3/Celeron® Processor
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port
Storage	1 x 2.5" SATA HDD bay
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11b/g/n Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	LCD on/off, Brightness up/down, Volume up/down (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	394 x 309 x 66
Operation Temperature (°C)	0°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C
N/G Weight	5.8 Kg
IP Level	Front Frame IP64
Touch Screen	Resistive Type 5-Wire
Power Adapter	P/N: 63040-010096-100-RS 96W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	80W

Ordering Information

Part Number	Description
AFL-15i-HM55-P45/R/1G-R30	15" 450cd/m² XGA LED backlighting panel PC with Intel® Celeron P4500 1.86G CPU, 1GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R30
AFL-15i-HM55i3-35/R/2G-R30	15" 450cd/m² XGA LED backlighting panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R30
AFL-15i-HM55i5-52/R/2G-R30	15" 450cd/m² XGA LED backlighting panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R30
AFL-15i-HM55i7-62/R/2G-R30	15" 450cd/m² XGA LED backlighting panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R30

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-15i-HM55	V	V	V	V	V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adapter	63040-010060-110-RS	1	90~264V AC; 12V DC; 96W (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

Options

Model	AFL-15i-HM55
Panel Mounting Kit	AFLPK-15B
Wall Mounting Kit	AFLWK-19B
Rack Mounting Kit	AFLRK-15i-R10
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A19-RS / STAND-A21-R10-R10 / STAND-210-R11
OS: Win XPE	AFLSD-15-HM55-2G-XPE-R21 (w/o storage)
OS: Win 7 Embedded	AFL-15i-HM55-WES7E-R21
Hybrid Card Reader	AFLP-17AMSI-U
Magnetic Stripe Reader	AFLP-17AMSR-U
DC 12V Input UPS	AUPS-B10-R10 (14.8V 3800mAH)
DC 9~36V Input UPS	AUPS-B20-R10 (14.8V 3800mAH)

Fully Integrated I/O

- VESA 100 x 100
- 2 x RJ-45 Giga LAN
- 4 x USB 2.0
- 1 x Line-out
- 1 x VGA
- 1 x HDMI
- AT/ATX Switch
- Reset Button
- 1 x RS-232
- 1 x RS-232/422/485
- 12 V DC Input
- Power Switch

Membrane Keypad
• LCD on/off • Brightness up
• Volume up • Brightness down • Volume down
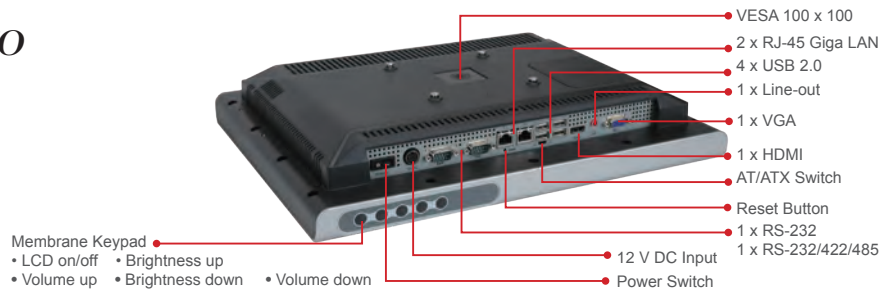
AFL-15i Dimensions (Unit: mm)

Suggested Cut out area
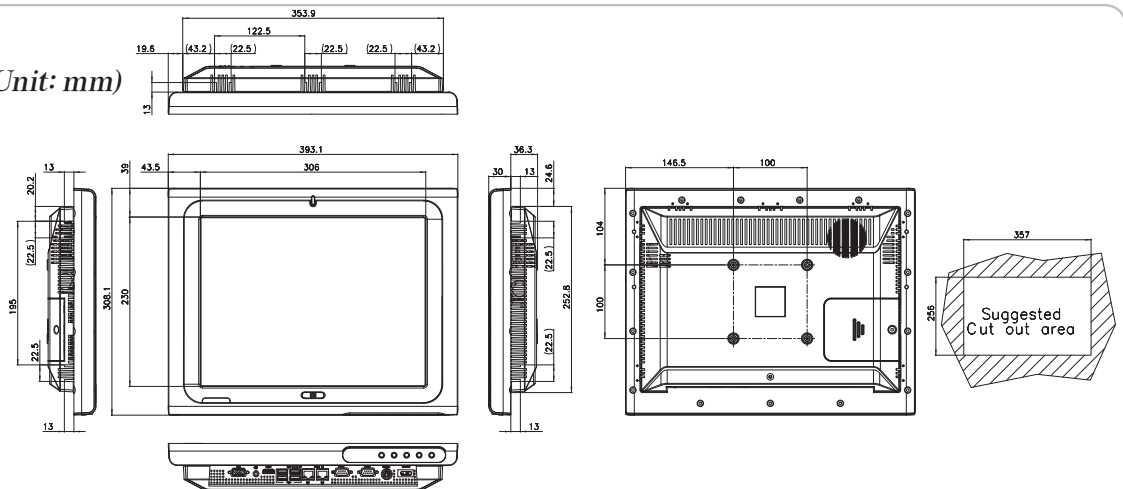
17" SXGA AFOLUX Panel PC

AFL-17i-HM55

Intel® Core™ i7/i5/i3/Celeron® Processor

New HM55 Platform Features:

- Powered by high performance 2.66 GHz Intel® Core i7-620M CPU with Intel® HM55 chipset
- DDR3 800/1066MHz system memory up to 8GB
- HDMI port delivers high image quality on the second display
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wireless 802.11b/g/n | **Touchscreen** | **IP64** | **Speakers** | **HDMI** | **One Key Recovery** iEi symantec

Specifications

Model	AFL-17i-HM55
LCD Size	17"
Max Resolution	1280 x 1024
Brightness (cd/m²)	350
Contrast Ratio	800 : 1
LCD Color	16.7M
Pixel Pitch (mm)	0.264 (H) x 0.264 (V)
Viewing Angle (H-V)	170º / 160º
Backlight MTBF	50000 hrs
SBC Model	AFLMB2-HM55-R10
CPU	Intel® Core™ i7/i5/i3/Celeron® Processor
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-Out) 1 x VGA 1 x Power Jack 1 x HDMI Port
Storage	1 x 2.5" SATA HDD bay
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11b/g/n Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	LCD On/Off, Brightness Up/Down, Volume Up/Down (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	428 x 350 x 71
Operation Temperature (°C)	0ºC ~ 50ºC
Storage Temperature (°C)	-20°C ~60°C
N/G Weight	6.0 Kg
IP Level	IP 64 compliant front panel
Touch Screen	5-wire resistive type (touch controller IC is on board)
Power Adapter	P/N: 63040-010096-100-RS 96W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	85W

Ordering Information

Part Number	Description
AFL-17i-HM55-P45/R/1G-R20	17" 350cd/m² SXGA panel PC with Intel® Celeron® P4500 1.86G CPU, 1GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R20
AFL-17i-HM55i3-35/R/2G-R20	17" 350cd/m² SXGA panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R20
AFL-17i-HM55i5-52/R/2G-R20	17" 350cd/m² SXGA panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R20
AFL-17i-HM55i7-62/R/2G-R20	17" 350cd/m² SXGA panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R20

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT
AFL-17i-HM55	V	V	V	V	V

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63040-010096-100-RS	1	90~264V AC; 12V DC; 96W (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

Options

Model	AFL-17i-HM55
Panel Mounting Kit	AFLPK-17B
Wall Mounting Kit	AFLWK-19B
Rack Mounting Kit	AFLRK-17i-R10
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A19-RS / STAND-A21-R10 / STAND-210-R11
OS: Win XPE	AFLSD-15-HM55-2G-XPE-R21 (without storage)
OS: Win 7 Embedded	AFL-15i-HM55-WES7E-R21
Magnetic Stripe Reader	AFLP-17BMSR-U
DC 12V Input UPS	AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)
DC 9~36V Input UPS	AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)

Note: Win CE application without digital microphone function

Fully Integrated I/O

VESA 100 x 100
2 x RJ-45 Giga LAN
4 x USB 2.0
1 x Line-out
1 x VGA
1 x HDMI
AT/ATX Switch
Reset Button
1 x RS-232
1 x RS-232/422/485
12 V DC Input
Power Switch

Membrane Keypad
• LCD on/off   • Brightness up
• Volume up   • Brightness down   • Volume down

Dimensions (Unit: mm)

Suggested Cut out Size

19" SXGA AFOLUX Panel PC

AFL-19i-HM55

Intel® Core™ i7/i5/i3/Celeron® Processor

New HM55 Platform Features:

● Powered by high performance 2.66 GHz Intel® Core™ i7-620M CPU with Intel® HM55 chipset
● 1066MHz DDR3 system memory up to 4GB
● HDMI port delivers high image quality on the second display
● IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wi Fi Wireless 802.11b/g/n | **Touchscreen** | **IP64** | **HDMI** | **One Key Recovery** iEi symantec.

Specifications

Model	AFL-19i-HM55
LCD Size	19"
Max Resolution	1280 x 1024
Brightness (cd/m²)	350
Contrast Ratio	1000 : 1
LCD Color	16.7M
Pixel Pitch (mm)	0.294 (H) x 0.294 (V)
Viewing Angle (H-V)	170º / 160º
Backlight MTBF	50000 hrs (LED backlighting)
SBC Model	AFLMB2-HM55-R10
CPU	Intel® Core™ i7/i5/i3/Celeron® Processor
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port
Storage	1 x 2.5" SATA HDD bay
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11b/g/n Module (internal PCIe Mini card interface) Telec certified
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	OSD Keypad below the Front Panel (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	470 x 383 x 72
Operation Temperature (°C)	0°C~50°C
Storage Temperature (°C)	-20°C ~60°C
N/G Weight	6.2Kg
IP Level	Front Frame IP64
Touch Screen	Resistive Type 5-Wire (Touch controller IC is on board)
Power Adapter	P/N: 63040-010096-100-RS 96W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50 / 60 Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	88W (Intel® T7500, 2GB memory, 80G HDD)

Ordering Information

Part Number	Description
AFL-19i-HM55-P45/R/1G-R21	19" 350cd/m² SXGA LED backlighting panel PC with Intel® Celeron® P4500 1.86G CPU, 1GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R21
AFL-19i-HM55i3-35/R/2G-R21	19" 350cd/m² SXGA LED backlighting panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R21
AFL-19i-HM55i5-52/R/2G-R21	19" 350cd/m² SXGA LED backlighting panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R21
AFL-19i-HM55i7-62/R/2G-R21	19" 350cd/m² SXGA LED backlighting panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11b/g/n wireless module, touch screen, R21

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-19i-HM55	V	V	V	V	V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63040-010096-100-RS	1	90~264V AC; 12V DC; 96W (Meet PSE)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

Options

Model	AFL-19i-HM55
Panel Mounting Kit	AFLPK-19B
Wall Mounting Kit	AFLWK-19B
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A19-RS / STAND-A21-R10 / STAND-210-R11
OS: Win XPE	AFLSD-15-HM55-2G-XPE-R21 (without storage)
OS: Win 7 Embedded	AFL-15i-HM55-WES7E-R21
Magnetic Stripe Reader	AFLP-19MSR-U
DC 12V Input UPS	AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)
DC 9~36V Input UPS	AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)

Fully Integrated I/O

- VESA 100 x 100
- 2 x RJ-45 Giga LAN
- 4 x USB 2.0
- 1 x Line-out
- 1 x VGA
- 1 x HDMI
- AT/ATX switch
- Reset Button
- 1 x RS-232
- 1 x RS-232/422/485
- 12 V DC Input
- Power Switch

Membrane Keypad
- LCD on/off   • Brightness up
- Volume up   • Brightness down   • Volume down
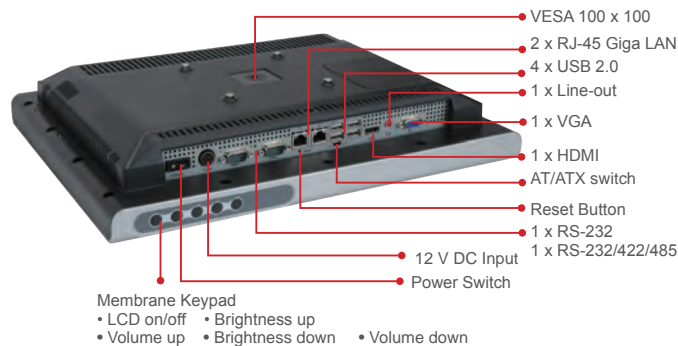
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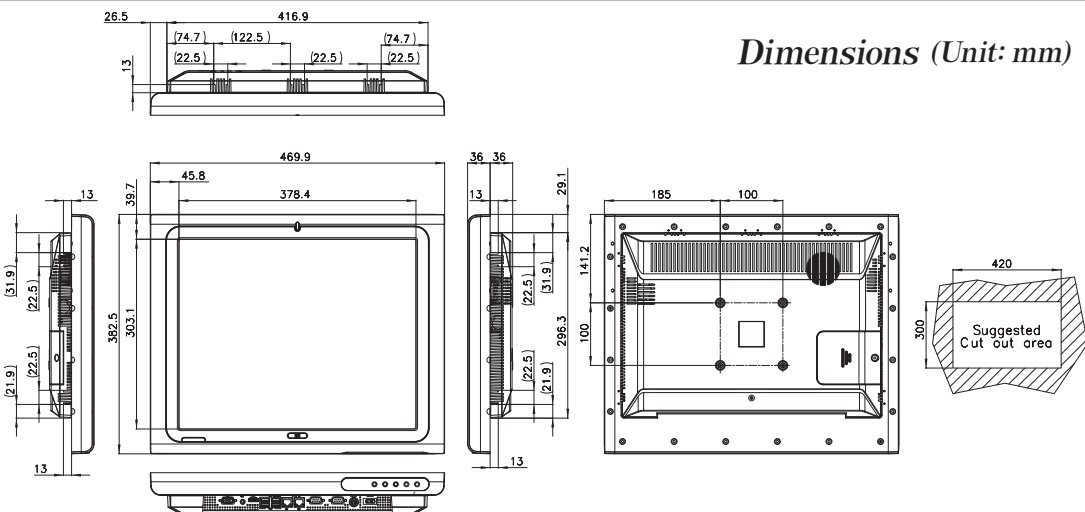
Heavy Industrial Panel PC Solution

The Next Era IoT Panel PC Solution

IEI offers complete robust panel solutions for harsh industrial environments. The product portfolio varies from sizes and performance. To catch the wave of cloud computing and intelligent solutions, IEI introduces the iRIS remote management solution to enhance efficiency for system integration. With all these benefits, IEI is your solid solution for industrial computing.

Heavy Industrial Panel PC Product Line

General Purpose Panel PC

PPC Series Front IP66 PPC
- Flexible PCI/PCIe Card Expansion
- IP66 Front Protection
- Wide Operating Temperature from -10°C to 50°C
- Versatile Mounting Methods

PPC-F Series Full Flat PPC
- Flat Bezel Design
- iRIS Remote Management Soultion
- 6H PCAP Multi-touch or Resistive Touch Window
- Flexible PCIe Mini Card Expansion
- AC/DC Power Input
- IP65 Front Protection

Size	Intel® Atom™ N2600	Intel® Bay Trail	Intel® H61	Intel® H81
5.7"		PPC-F06B-BT		
8.4"	PPC-3708A-N26	PPC-F08B-BT		
10.4"		PPC-F10B-BT		
12"	PPC-3712A-N26	PPC-F12B-BT		
15"		PPC-F15B-BT	PPC-5150A(D)-H61	PPC-F15A(D)-H81
17"		PPC-F17B-BT	PPC-5170A(D)-H61	PPC-F17A(D)-H81
19"		PPC-F19B-BT	PPC-5190A(D)-H61	
22"				PPC-F22A(D)-H81
24"				PPC-F24A(D)-H81

Verticak Market Panel PC

Marine Series DNV Certified PPC
- Isolative Protection Ports
- 3 Independent Display Ports
- Full Range Dimming
- Remote OSD Control

UPC Series Full IP65 PPC *New*
- Rugged Aluminum Die-casting Body
- Redundant Dual DC Power Input
- Wireless Function
- Full IP65 Dust/Water Proof

INOX Series IP69K Stainless Steel PPC *New*
- SUS304 stainless steel Housing
- Fanless system with Intel skylake ULT Processor
- IP69K rated with M12 connectors

Solutions	Marine Series			UPC Series			INOX Series
Size	Intel® QM87 (PPC)	Monitor	Embedded Box	Intel® Atom™ D525	Intel® QM77	Intel® Skylake ULT	Intel® Skylake ULT
12"				UPC-V312-D525		UPC-F12A-ULT3	
15"			SBOX-100-QM87		UPC-V315-QM77		INOX-F15C-ULT3
19"	S19A-QM87	S19M-AD					
24"	S24A-QM87	S24M-AD					

PPC-F Series
New Generation Industrial Panel Solution

IEI is dedicated to developing impeccable industrial panel PC products.The PPC and PPC-F series industrial panel PCs not only keep rugged design of IP65 protection but also enrich aesthetic experience by implementing the seamless mounting method. The projected capacitive touch option is added to these new series of products to provide up to 2 points multi-touch solution! Additionally, we also provide high performance H81 series and low power consumption Bay Trail series to meet customers' requests.

■ PPC-F Industrial Panel PC Series

The PPC-F series aims at slim and compact design. Therefore, this new series makes a huge improvement in mechanical design to achieve the goal.

PPC-F15A-H81
262.2 x 322.2 mm

PPC-5150A-H61
309 x 410 mm

PPC-F15A-H81 vs.PPC-5150A-H61

5.8 KG 17% lighter 7 KG
41% thinner on depth 65.5mm 110.5mm

■ 8mm Ultra Thin Bezel Design

To enhance aesthetic experience in industrial automation applications, the depth of the front bezel of the PPC-F is only 8mm to minimize the gap between the wall and the system in wall/panel mounting, which is neat and simple during integration.

8mm

■ 2-Point Multi Touch

The PPC series supports 2-point projected capacitive touch, enhancing smooth operations! IEI also provides 12" to 24" resistive single type and projected capacitive type touchscreen options to enrich simple and intuitive user experience.

■ FHD Industrial Panel PC Available

Going big is the market trend on industrial panel PC and monitor products. Thus, IEI launches new PPC-F series industrial panel PC. Users can enjoy high quality graphics and enriched data display at the same time from FHD panels.

FHD

■ Impeccable Front Panel

6H Anti-scratch Touch

The PPC-F series equipped with projected capacitive touchscreen uses 6H hardness vandal proof strengthened glass to prevent damages from physical impact.

Front Bezel IP65 Protection

Designed for harsh environments, the PPC-F series provides front bezel IP65 protection to resist dust and water jet.

■ IEI Remote Intelligent Management System

The PPC-F supports iEi iRIS remote management, which helps users to manage multiple devices through single management interface and elevates work efficiency. iRIS solution only requires a module and Internet connection! (For PPC-F H81 & PPC-F 12B/15B/17B only)

iRIS™
IPMI 2.0 Compliant

iRIS Solution + **Internet** + **QNAP NAS** → **Complete IoT Solution!**

Remote Power Management

Users can remotely power on/off all the iRIS devices and set up power cycle to simplify power control process.

ON **OFF** **Unify industrial automation process through a simple setting!**

ON **OFF**

24H Active Recovery

With remote troubleshooting everywhere, there is no need to send out maintenance staff anymore!

Save labor cost & improve efficiency!

Automatic Error Alert
System sends alert by email/ SMS to designated members when error happens

Video Streaming and Record
Real-time record main screen video for trouble diagnosis

Remote Troubleshooting
Maintainers can troubleshoot the error through remote KVM

24

■ Built-in 80-Plus Silver Power Supply

The 80-plus silver power supply is implemented into the PPC-F H81 series, which reduces power loss and increases efficiency during power transition. With the certified power supply, the power transition between AC source and DC source couldmaintain up to 85% efficiency, and the power loss is only 15% or less. For customers, the high efficiency of power transition could reduce not only cost but also heat loss.. Furthermore, it could make a friendly environment. (For PPC-F H81 series only)

Parameters	Loading	Gold	Silver	Bronze	80 Plus
		80 PLUS GOLD	80 PLUS SILVER	80 PLUS BRONZE	80 PLUS
Efficiency	20%	87%	85%	82%	80%
	50%	90%	88%	85%	80%
	100%	87%	85%	82%	80%
Power Factor	50%	90% (across the full range)			90% (@100% Load)

■ PCIe Mini Card Expansion

Two full-size PCIe Mini card expansion slots are reserved in the PPC-F series (Depends on models). With a wide variety of IEI PCIe Mini card solutions, it is flexible and easy to add extra functions in the system.

WiFi Module

LAN Module

3G Module

USB3.0 Module

Capture Card Module

Two PCIe Mini Cards

WIFI-RT3593-DB-R10

MPCIE-LAN-R10

MPCIE-3G-R10

MPCIE-USB3-R10

IVCME-C604
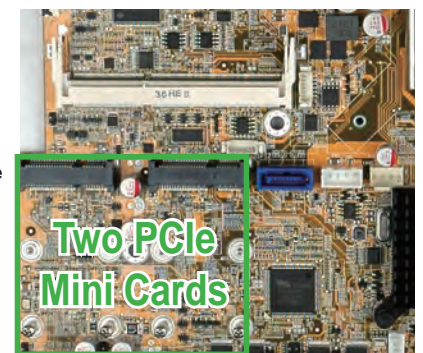
PPC-F Series Selection Guide

LCD Size	5.7"	8"	10.4"	12"	15"	
Model	**PPC-F06B-BT**	**PPC-F08B-BT**	**PPC-F10B-BT**	**PPC-F12B-BT**	**PPC-F15A-H81**	**PPC-F15B-BT**
Display — LCD Size	5.7" (4:3)	8" (4:3)	10.4"	12" (4:3)	15'' (4:3)	15'' (4:3)
Max. Resolution	640 (W) x 480 (H)	800 (W) x 600 (H)	800 (W) x 600 (H)	1024 (W) x 768 (H)	1024 (W) x 768 (H)	1024 (W) x 768 (H)
Brightness (cd/m²)	550	500	400	600	450	450
Contrast Ratio	800 : 1	500 : 1	700 : 1	700 : 1	800 : 1	800 : 1
LCD Color	262K	16.2M	16.2M	16.2M	16.2M	16.2M
Pixel Pitch (mm) (HxV)	0.18 x 0.18	0.2025 x 0.0675	0.264 x 0.264	0.24 x 0.24	0.297 x 0.297	0.297 x 0.297
Viewing Angle (V/H)	160° / 140°	140° / 120°	160° / 140°	160° / 140°	160° / 150°	160° / 150°
Backlight MTBF (hrs)	50000	50000	30000	50000	70000	70000
Touch — TouchScreen	4-wire resistive type flat touch window, 3H	5-wire resistive type flat touchscreen, 3H	5-wire resistive type flat touchscreen, 3H	5-wire resistive single-touch type flat touchscreen, 3H / 2-point projected capacitive type touchscreen, 6H		
Touch Controller	PenMount DMC9000	PenMount DMC9000	PenMount DMC9000	Penmount DMC 9000 EETI EXC7200	Penmount 6000 EETI EXC7200	Penmount DMC 9000 EETI EXC7200
Motherboard — CPU	Intel® Celeron® processor N2807, dual-core, 1.58GHz	Intel® Celeron® J1900 on-board SoC, quad-core, 2GHz	Intel® Celeron® J1900 on-board SoC, quad-core, 2GHz	Intel® Celeron® quad-core J1900 SoC, 2GHz	4th generation Intel® Core™ i7/ i5/i3, Pentium® and Celeron® processor, up to TDP 65W CPU	Intel® Celeron® quad-core J1900 SoC, 2GHz
Chipset	N/A	N/A	N/A	N/A	N/A	Intel® H81
RAM	2GB DDR3L 1600MHz on-board RAM (system max. 4GB by MOQ=300pcs)	1 x 204-pin DDR3L SO-DIMM slot (max. 8GB)	1 x 204-pin DDR3L SO-DIMM slot (max. 8GB)	2 x 204-pin 1066/1333 MHz DDR3L SO-DIMM supported (max. 8GB)	2 x 204-pin DDR3 SO-DIMM slots (max. 16GB)	2 x 204-pin 1066/1333 MHz DDR3L SO-DIMM supported (max. 8GB)
Ethernet	2 x RTL 8111E	2 x RTL 8111E	2 x RTL 8111E	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller
Audio Codec	Realtek ALC662 HD codec	Realtek ALC892 HD codec	Realtek ALC892 HD codec	Realtek ALC662 HD codec	Realtek ALC662 HD codec	Realtek ALC662 HD codec
I/O Ports and Switches	1 x RJ-45 LAN port 1 x RS-232 COM port (DB-9 connector) (RI/5V/12V) 1 x RS-422/485 2 x USB 3.0 2 x USB 2.0 1 x 9 V~36 V DC lockable jack (2-pin) 1 x Audio port (line-out) 1 x Power switch 1 x Reset button 1 x AT/ATX switch	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9 V~30 V lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 2.0 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9 V~30 V lockable power jack	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x 9 V~36 V DC jack (4-pin) 1 x 9 V~36 V DC terminal block 1 x Power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI output 4 x RS-232 1 x RS-422/485 1 x MIC-in 1 x Line-out 1 x VGA output 1 x AC/DC power plug (DC model is by build to order manufacturing) 1 x AT/ATX switch 1 x Clear CMOS 1 x Reset button 1 x Power switch	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x 9 V~36 V DC jack (4-pin) 1 x 9 V~36 V DC terminal block 1 x Line-out 1 x Power switch
Drive Bay — HDD Driver Bay	N/A	N/A	1 x 2.5" HDD bay	1 x 2.5" HDD bay	1 x 2.5" HDD bay	1 x 2.5" HDD bay
SSD	mSATA					
Expansion Slot	1 Full Size PCIe Mini Slot (with mSATA, PCIe/USB Signal)	1 x Full-size PCIe Mini slot (with mSATA/PCIe/USB signal) 1 x Half-size PCIe Mini slot for Wi-Fi modules		1 x Full-size PCIe Mini card slot 1 x Full-size PCIe Mini card slot colay mSATA		
System Cooling	Fanless	Fanless	Fanless	Fanless	Active fan	Fanless
Environment — Operating Temperature	-10°C~50°C (14°F~122°F)					
Storage Temperature	-20°C~60°C (-4°F~140°F)					

PPC-F Series Selection Guide

New

LCD Size	17"		19"	22"	23.8"
Model	**PPC-F17A-H81**	**PPC-F17B-BT**	**PPC-F19B-BT**	**PPC-F22A-H81**	**PPC-F24A-H81**

		17"	17"	19"	22"	23.8"
Display	LCD Size	17"	17"	19"	22"	23.8"
	Max. Resolution	1280 (W) x 1024 (H)	1280 (W) x 1024 (H)	1280 (W) x 1024 (H)	1920 (W) x 1080 (H)	1920 (W) x 1080 (H)
	Brightness (cd/m²)	350	350	350	250	250
	Contrast Ratio	1000 : 1	1000 : 1	1000 : 1	1000 : 1	3000 : 1
	LCD Color	16.7M	16.7M	16.7M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.26 x 0.26	0.26 x 0.26	0.294 x 0.294	0.25 x 0.25	0.28 x 0.28
	Viewing Angle (V/H)	170° / 160°	170° / 160°	170° / 160°	165° / 165°	178° / 178°
	Backlight MTBF (hrs)	50000			30000	30000
Touch	Touchscreen	5-wire resistive type single touch window, 3H 2-point projected capacitive touch window, 6H			2-point projected capacitive touch window, 6H	2-point projected capacitive touch window, 6H
	Touch Controller	Penmount 6000 EETI EXC7200	Penmount DMC 9000 EETI EXC7200		EETI EXC7200	EETI EXC7200
Motherboard	CPU	4th generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU	Intel® Celeron® quad-core J1900 SoC, 2GHz	Intel® Celeron® processor J1900 (2M cache, up to 2.42 GHz)	4th generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU	4th generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU
	Chipset	Intel® H81	N/A		Intel® H81	Intel® H81
	RAM	2 x 204-pin DDR3 SO-DIMM slots (max. 16GB)	2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (max. 8GB)	2 x 204-pin DDR3L SO-DIMM slot (max. 8GB), pre-installed with 2GB	2 x 204-pin DDR3 SO-DIMM slots (max. 16GB)	2 x 204-pin DDR3 SO-DIMM slots (max. 16GB)
	Ethernet	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller				
	Audio Codec	Realtek ALC662 HD codec				
I/O Ports and Switches		2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI output 4 x RS-232 1 x RS-422/485 1 x MIC-in 1 x Line-out 1 x VGA output 1 x AC/DC power plug (DC model is by build to order manufacturing) 1 x AT/ATX switch 1 x Clear CMOS 1 x Reset button 1 x Power switch	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC jack (4-pin) 1 x Terminal block 1 x Microphone & speaker 1 x power switch	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x 9 V~36 V DC jack (4-pin) 1 x 9 V~36 V DC terminal block 1 x Line-out (PPC-F15B & PPC-F17B & PPC-F19B only) 1 x Power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI output 4 x RS-232 1 x RS-422/485 1 x MIC-in 1 x Line-out 1 x VGA output 1 x AC/DC power plug (DC model is by build to order manufacturing) 1 x AT/ATX switch 1 x Clear CMOS 1 x Reset button 1 x Power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI output 4 x RS-232 1 x RS-422/485 1 x MIC-in 1 x Line-out 1 x VGA output 1 x AC/DC power plug (DC model is by build to order manufacturing) 1 x AT/ATX switch 1 x Clear CMOS 1 x Reset button 1 x Power switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook			1 x 2.5" SATA HDD bay with anti-shook or 1 x 3.5" SATA HDD bay with anti-shook	
	SSD	mSATA				
Expansion Slot		1 x Full-size PCIe Mini card 1 x Full-size PCIe Mini card co-lay mSATA				
System Cooling		Active fan	Fanless	Fanless	Active fan	Active fan
Environment	Operating Temperature	-10°C~50°C (14°F~122°F)				
	Storage Temperature	-20°C~60°C (-4°F~140°F)				

PPC-F H81 Series

Intelligent Industrial Panel PC

- Support IEI iRIS-2400 IEI remote intelligent solution
- Scalable Intel® H81 chipset supports LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor with up to 65W TDP
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch
- Dual full-size PCIe Mini card expansion
- AC/DC power input options (DC model by build to order manufacturing)

5 YEARS 5-YEAR SUPPLY GUARANTEE

iRIS™ IPMI 2.0 Compliant | FHD | Multi-touch | IP65 | PCIe Mini | USB 3.0 | MOUNT

Specifications

	Model	PPC-F15A	PPC-F17A	PPC-F22A	PPC-F24A
LCD	LCD Display	15" (4:3)	17" (5:4)	21.5" (16:9)	23.8" (16:9)
	Max. Resolution	1024(W) x 768(H)	1280(W) x 1024(H)	1920(W) x 1080(H)	1920(W) x 1080(H)
	Brightness (cd/m²)	450	350	250	250
	Contrast Ratio	800 : 1	800 : 1	1000 : 1	3000 : 1
	LCD Color	16.2M	16.7M	16.7M	16.7M
	Pixel Pitch (mm)	0.297 x 0.297	0.26 x 0.26	0.25 x 0.25	0.28 x 0.28
	Viewing Angle (H-V)	160° / 150°	170° / 160°	170° / 160°	178° / 178°
	Backlight MTBF (hrs)	70000	50000	30000	30000
Motherboard	SBC Model	FPPCMB-H81-R10			
	CPU	LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor with up to 65W TDP			
	Chipset	Intel® H81			
	RAM	Support 2 x 204-pin 1066/1333/1600 MHz dual-channel DDR3 SO-DIMM slots (max. 16GB)			
Touch	Touchscreen & Controller	5-wire resistive type single touch window (Penmount 9000), 3H 2-point projected capacitive touch window (EETI EXC7200), 6H		2-point projected capacitive touch window (EETI EXC7200), 6H	2-point projected capacitive touch window (EETI EXC7200), 6H
Input Interfaces	I/O Ports & Switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI output 4 x RS-232 1 x RS-422/485 1 x MIC-in 1 x Line-out		1 x VGA output 1 x AC/DC power plug (DC model is by build to order manufacturing) 1 x AT/ATX switch 1 x Clear CMOS 1 x Reset button 1 x Power switch	
	Expansion	1 x Full-size/half-size PCIe Mini card (PCIe and USB signal) 1 x Full-size/half-size PCIe Mini card (PCIe , USB and mSATA signal)			
Wireless LAN		802.11 b/g/n (optional)			
Storage		1 x 2.5" HDD/SSD drive bay 1 x mSATA		1 x 2.5" HDD/SSD drive bay or 1 x 3.5" HDD/SSD drive bay 1 x mSATA	
iRIS Remote Management Solution		iRIS-2400 (optional)			
Physical	Construction Material	Aluminum front cover and sheet metal rear cover			
	Mounting	Panel mount, rack mount, 100x100 VESA mount		Panel mount, 100x100 VESA mount	
	Enclosure Color	Black C			
	Dimensions (mm)	303 x 378.5 x 65.7	341.4 x 408.4 x 73.8	350.4 x 550.4 x 71.7	382 x 600 x 71.7
	Cutout Dimensions (mm)	285.6 x 361.1	323 x 390	341 x 536	359.6 x 577.6
	Net/ Gross Weight (kg)	5.6/ 8.3	7.5/10.7	10.1/14.4	10.5/14.8
Environment	Operating Temperature (with air flow)	-10°C ~ 50°C			
	Storage Temperature	-20°C ~ 60°C			
	Humidity	10% to 95% (non-condensing)			
	IP Level	Front IP 65			
	Safety and EMC	CE & FCC certified			
Power Supply	AC Input	AC input ATX power supply - P/N: 63030-010220-100-RS - 220W power supply - Input: 90VAC-264VAC, 50/60Hz - Output (max.): 3.3V@10A, 5V@14A, 12V@14A, -12V@0.3A			
	DC Input (produced by order)	DC input ATX power supply - P/N: XACE-4520C-RS - 200W power supply - Input: 24VDC, 15A (max) - Output (max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A			
Power Consumption		80W	100W	110W	120W

Ordering Information

Part Number		Description
15"	PPC-F15AA-H81i-P/4G/R-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R21
	PPC-F15AA-H81i-i3/4G/R-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R21
	PPC-F15AA-H81i-i5/4G/R-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R21
	PPC-F15AA-H81i-P/4G/PC-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R21
	PPC-F15AA-H81i-i3/4G/PC-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R21
	PPC-F15AA-H81i-i5/4G/PC-R21	15" 450 cd/m² XGA Panel PC with Intel® H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R21
17"	PPC-F17AA-H81i-P/4G/R-R11	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R11
	PPC-F17AA-H81i-i3/4G/R-R11	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R11
	PPC-F17AA-H81i-i5/4G/R-R11	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, resistive touch window, R11
	PPC-F17AA-H81i-P/4G/PC-R12	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
	PPC-F17AA-H81i-i3/4G/PC-R12	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
	PPC-F17AA-H81i-i5/4G/PC-R12	17" 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
21.5"	PPC-F22AA-H81i-P/4G/PC-R12	21.5" 250 cd/m² FHD Panel PC with Intel H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
	PPC-F22AA-H81i-i3/4G/PC-R12	21.5" 250 cd/m² FHD Panel PC with Intel H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
	PPC-F22AA-H81i-i5/4G/PC-R12	21.5" 250 cd/m² FHD Panel PC with Intel H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R12
24"	PPC-F24AA-H81i-P/4G/PC-R20	23.8" 250 cd/m² FHD Panel PC with Intel H81 chipset, Intel® Pentium® Processor G3220 (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R20
	PPC-F24AA-H81i-i3/4G/PC-R20	23.8" 250 cd/m² FHD Panel PC with Intel H81 chipset, Core i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R20
	PPC-F24AA-H81i-i5/4G/PC-R20	23.8" 250 cd/m² FHD Panel PC with Intel H81 chipset, Core i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, 90VAC-264VAC, projective capacitive touch window, R20

* DC power supply SKU is available with particular purchase, please contact sales team.

Options

Item	PPC-F15A	PPC-F17A	PPC-F22A	PPC-F24A
Arm	ARM-31-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS
Stand	STAND-A21 STAND-A19-RS STAND-C19-R10	STAND-C19-R10 STAND-A21-R10	STAND-C19-R10 STAND-A21-R10	STAND-C19-R10 STAND-A21-R10
Wall Mount Kit	WK-190MS-R10			
Panel Mount Kit	FPK-04-R10		FPK-05-R10	FPK-06-R10
Rack Mount Kit	FRK15-R10	FRK17-R10	N/A	
Wi-Fi Kit	EMB-WIFI-KIT11-R20			
iRIS (IEI Remote Intelligent System) Kit	iRIS-2400-R10			

Packing List

Item	Q'ty	Remark
Driver CD	1	
One Key Recovery CD	1	
Power Cord	1	Depends on shipping region
Screw Kit	1	
Touch Pen	1	Resistive touch only

PPC−F15A
Fully Integrated I/O

GbE LAN | USB 3.0 | RS-422/485 | Power Switch | Line-out

AC Input | USB 2.0 | Reset | AT/ATX | RS-232 | VGA | HDMI | USB 2.0 | Mic
Clear CMOS

PPC−F17A
Fully Integrated I/O

GbE LAN | USB 3.0 | RS-422/485 | Power Switch | Line-out

AC Input | USB 2.0 | Reset | AT/ATX | RS-232 | VGA | HDMI | USB 2.0 | Mic
Clear CMOS

PPC−F22A
Fully Integrated I/O

GbE LAN | USB 3.0 | RS-422/485 | Power Switch | Line-out

AC Input | USB 2.0 | Reset | AT/ATX | RS-232 | HDMI | USB 2.0 | Mic
Clear CMOS | VGA

PPC−F24A
Fully Integrated I/O

GbE LAN | USB 3.0 | RS-422/485 | Power Switch | Line-out

AC Input | USB 2.0 | Reset | AT/ATX | RS-232 | HDMI | USB 2.0 | Mic
Clear CMOS | VGA

PPC−F15A Dimensions
(Unit: mm)

358.10 ±0.50
194.20 | 81.95

Suggested cut out size
285.6
361.1

378.50 ±0.50
306 ±0.30

100 | 139.25
94.50

230 ±0.30
303 ±0.50

83.30
116 | 236.80 ±0.20 | 282.60 ±0.50

100
B-M4-5L-a

8
46.20 ±0.20
65.66 ±0.50

20.90 | 173.30 | 20.90
81.70

PPC–F17A Dimensions
(Unit: mm)

Suggested
Cut out Size

PPC–F22A Dimensions
(Unit: mm)

Suggested
Cut out Size
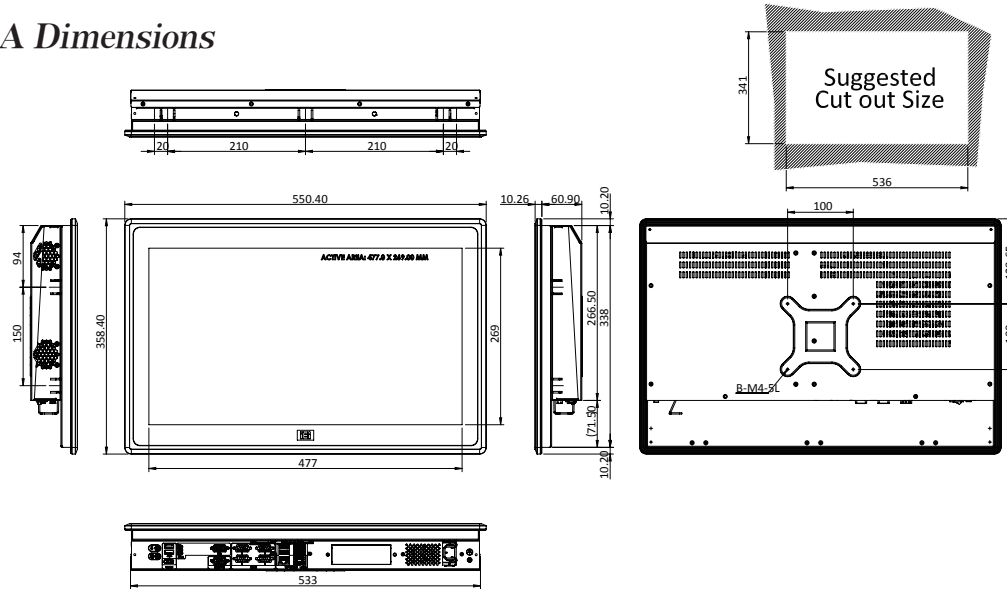
PPC–F24A Dimensions
(Unit: mm)

Suggested
Cut out Size
1:4
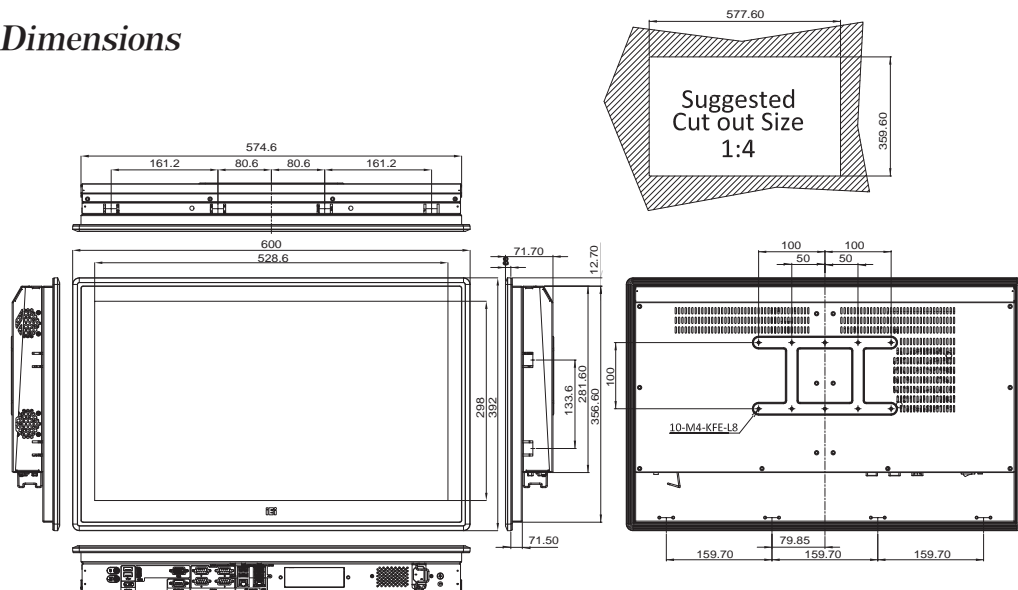
PPC-F Bay Trail Fanless Series

5.7''/8''/10.4'' Fanless Intel® Bay Trail Solution

Features

- 5.7", 8" and 10.4" fanless industrial panel PC
- 2.0 GHz Intel® Celeron® J1900 quad-core processor or 1.58 GHz Intel® Celeron® N2807 dual-core processor
- Low power consumption DDR3L memory supported
- IP 65 compliant front panel
- 9 V~30 V wide DC input
- mSATA SSD suppoted
- Dual GbE for backup
- -10°C~50°C extended operating temperature

Fanless | **Multi-touch** | **IP65** | **USB 3.0** | **MOUNT**

Specifications

	Model	PPC-F06B-BT	PPC-F08B-BT	PPC-F10B-BT
LCD	LCD Display	5.7" (4:3)	8" (4:3)	10.4"
	Max. Resolution	640 (W) x 480 (H)	800 (W) x 600 (H)	800 (W) x 600 (H)
	Brightness (cd/m²)	550	500	400
	Contrast Ratio	800:1	500:1	700:1
	LCD Color	262K	16.2M	16.2M
	Pixel Pitch (mm)	0.18 (H) x 0.18 (V)	0.2025 (H) x 0.0675 (V)	0.264 (H) x 0.264 (V)
	Viewing Angle (H-V)	160° / 140°	140° / 120°	160° / 140°
	Backlight MTBF (hrs)	50000	50000	30000
Motherboard	CPU	Intel® Celeron® N2807 dual-core processor, 1.58GHz	Intel® Celeron® J1900 quad-core on-board SoC, 2GHz	
	RAM	2GB DDR3L 1600MHz on-board RAM (system max. 4GB, by MOQ=300pcs)	1 x 204-pin DDR3L SO-DIMM slots (max. 8GB)	
Touch	Touchscreen & Controller	4-wire resistive type flat touch window, PenMount DMC9000	5-wire resistive type flat touchscreen, PenMount DMC9000	
	Surface Hardness	3H	3H	3H
Input Interfaces	I/O Ports & Switches	2 x RJ-45 LAN port 1 x RS-232 COM port (DB-9 connector) (RI/5V/12V) 1 x RS-422/485 2 x USB 3.0 2 x USB 2.0 1 x 9 V~30 V DC lockable DC jack (2-pin) 1 x Audio port (line-out) 1 x Power switch 1 x Reset button 1 x AT/ATX switch	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9 V~30 V lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB9 connector) (RI/5V/12V) 2 x USB 2.0 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9 V~30 V lockable power jack
Expansion		1 x Full-size PCIe Mini slot (mSATA/PCIe/USB signal)	1 x Full-size PCIe Mini slot (mSATA/PCIe/USB signal) 1 x Full-size/half-size PCIe Mini slot (PCIe/USB signal)	
Wireless LAN		802.11 b/g/n (optional)		
Storage	SSD	mSATA	mSATA	mSATA
	HDD	N/A	N/A	1 x 2.5" HDD bay
Physical	Construction Material	Aluminum front bezel		
	Mounting	Stand, panel mount, rack mount, VESA 75x75	Stand, panel mount, rack mount, VESA 75x75	Stand, panel mount, rack mount, VESA 75x75/100x100
	Enclosure Color	Black C		
	Dimensions (mm)	136.4 x 178.5 x 56.3	182.2 x 222.2 x 44	232.4 x 285.2 x 44
	Net Weight	0.89 kg	1.17 kg	1.77 kg
	Cut-out Dimensions (mm)	157.5 x 115.4	207 x 154	267.2 x 214.4
Environment	Operating Temperature (with air flow)	-10°C~50°C (14°F~122°F)		
	Storage Temperature	-20°C~60°C (-4°F~140°F)		
	Humidity	10% to 95% (non-condensing)		
	IP Level	IP 65 compliant front panel		
	Safety and EMC	CE & FCC Class A certified		
Power	Power Adapter	P/N: 63040-010036-121-RS 36W Power Adapter Input: 90 - 264V AC, 50/60Hz Output: 12V DC		
	Power Requirement	9 ~ 30V DC		
	Power Consumption	24W	28W	34W

Ordering Information

Part Number	Description
PPC-F06B-BT-N1/2G/R-R10	5.7" 450 cd/m² VGA panel PC with Intel® Celeron® processor N2807, TDP 4.3W, 2GB on-board DDR3L RAM, black color, 9-30V DC input, resistive touch window, R10
PPC-F08B-BT-J1/2G/R-R10	8" 500 cd/m² SVGA panel PC with Intel® Celeron® processor J1900, TDP 10W, 2GB DDR3L RAM, black color, 9-30V DC input, resistive touch window, R10
PPC-F10B-BT-J1/2G/R-R10	10.4" 400 cd/m² SVGA panel PC with Intel® Celeron® processor J1900, TDP 10W, 2GB DDR3L RAM, black color, 9-30V DC input, resistive touch window, R10

Options

Item	PPC-F06B	PPC-F08B	PPC-F10B
Arm	ARM-11-RS	ARM-11-RS	ARM-11-RS
Stand	STAND-100-RS STAND-B08	STAND-100-RS STAND-B08 STAND-C12-R10	STAND-100-RS STAND-B08 STAND-C12-R10
Wall Mount Kit	AFLWK-12	AFLWK-12	AFLWK-12
Panel Mount Kit	FPK-07-R10	FPK-07-R10	FPK-09-R10
Wi-Fi Kit	EMB-WIFI-KIT01-R20		

Packing List

Item	Q'ty	Remark
PPC-FxxB-BTi Panel PC	1	
User Manual & Driver CD	1	
One Key Recovery CD	1	
Touch Pen	1	Resistive type models only P/N: 43125-0002C0-00-RS
Power Cord	1	Part numbers vary by regions
Screw Pack	1	Including necessary screws
Power Adapter	1	9V~30V DC P/N: 63040-010036-121-RS

PPC−F06B
Fully Integrated I/O
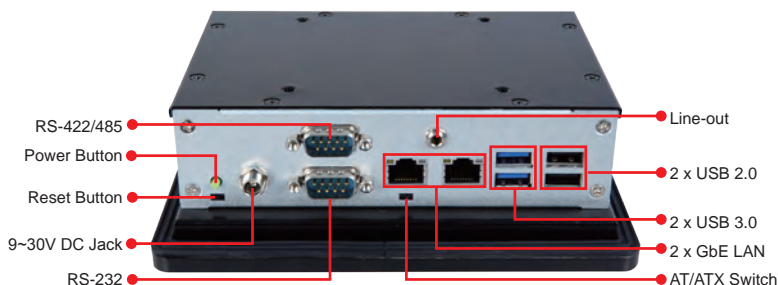
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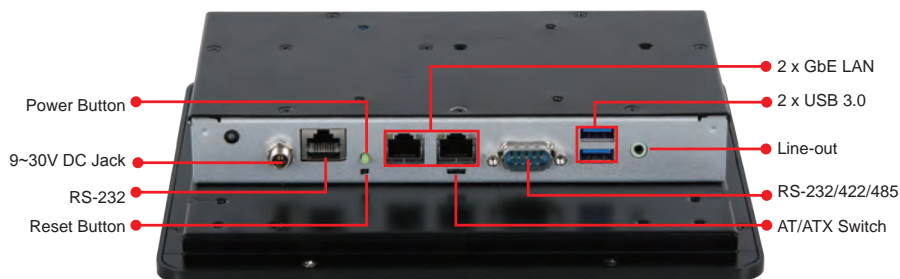
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Fully Integrated I/O
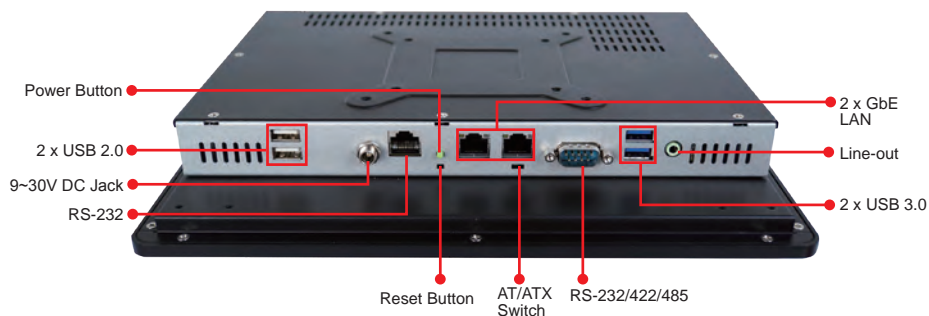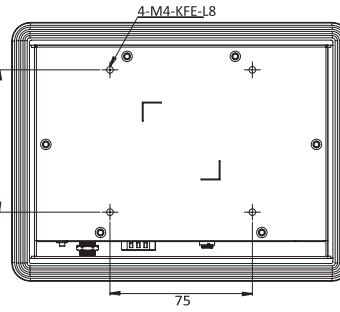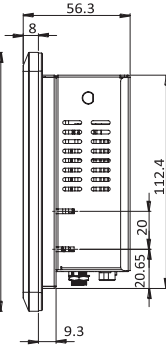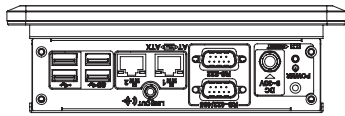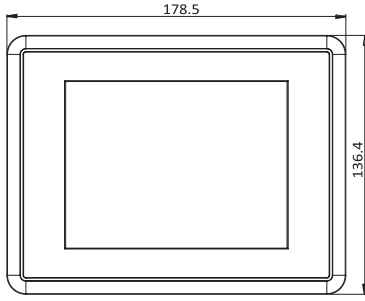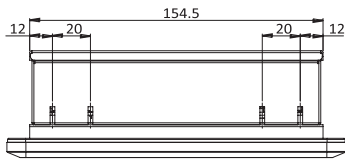
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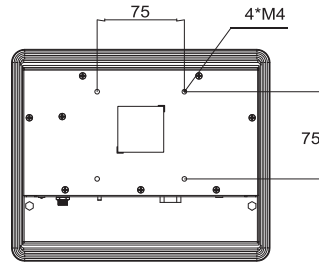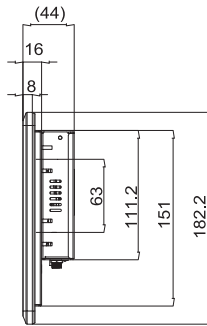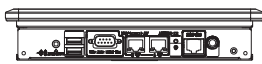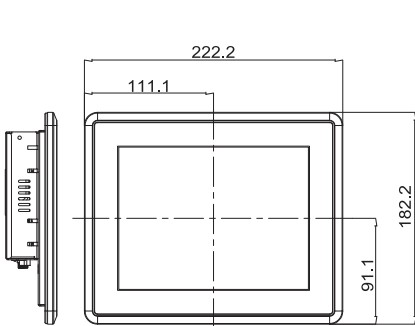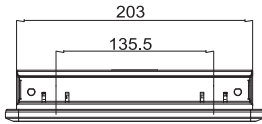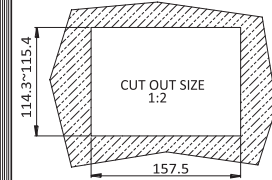
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Dimensions (Unit: mm)
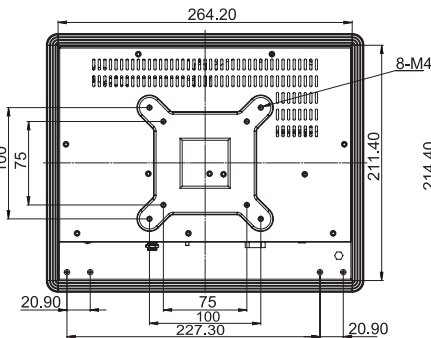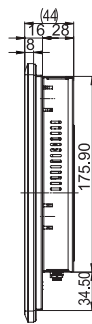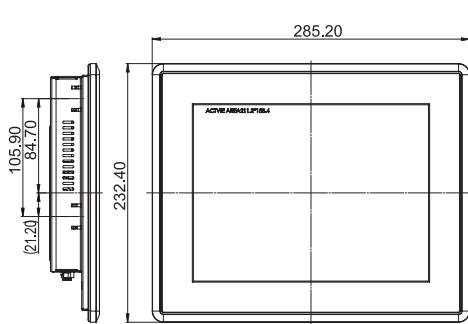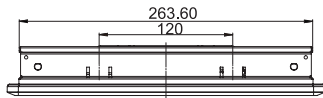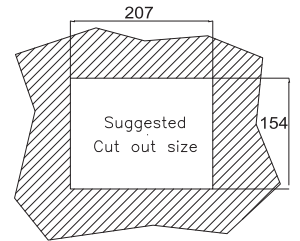
PPC-F10B-BT
Dimensions (Unit: mm)
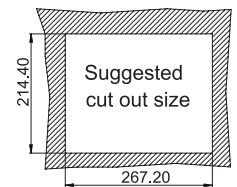
PPC-F Bay Trail Fanless Series

12"/15"/17"/19" Fanless Intel® Bay Trail Solution

Features

- Support IEI iRIS-2400 remote intelligent solution
- Intel® Celeron® J1900 quad-core SoC
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch and resistive single touch options
- Dual full-size PCIe Mini card expansion
- 9V~36V DC wide range DC input

QTS-Gateway · iRIS IPMI 2.0 Compliant · Fanless · Multi-touch · IP65 · PCIe Mini · USB 3.0 · MOUNT

New

Specifications

Model		PPC-F12B-BT	PPC-F15B-BT	PPC-F17B-BT	PPC-F19B-BT
LCD	LCD Display	12.1" (4:3)	15" (4:3)	17" (5:4)	19" (5:4)
	Max. Resolution	1024 (W) x 768 (H)	1024 (W) x 768 (H)	1280 (W) x 1024 (H)	1280 (W) x 1024 (H)
	Brightness (cd/m²)	600	450	350	350
	Contrast Ratio	700 : 1	800 : 1	800 : 1	1000 : 1
	LCD Color	16.2M	16.2M	16.7M	16.7M
	Pixel Pitch (mm)	0.24 x 0.24	0.297 x 0.297	0.26 x 0.26	0.294 x 0.294
	Viewing Angle (H-V)	160° / 140°	160° / 150°	170° / 160°	170° / 160°
	Backlight MTBF (hrs)	50000	70000	50000	50000
Motherboard	CPU	Intel® Celeron® processor J1900 (2M cache, up to 2.42 GHz)			
	RAM	2 x 204-pin DDR3L SO-DIMM slot (max. 8GB), pre-installed with 2GB			
Touch	Touchscreen & Controller	5-wire resistive type single touch window (Penmount 9000), 3H 2-point projected capacitive touch window (EETI EXC7200), 6H			
Input Interfaces	I/O Ports & Switches	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x 9 V~36 V DC jack (4-pin) 1 x 9 V~36 V DC terminal block 1 x Line-out (PPC-F15B & PPC-F17B & PPC-F19B only) 1 x Power switch			
	Expansion	1 x Full-size PCIe Mini slot (mSATA/PCIe/USB signal) 1 x Full-size/half-size PCIe Mini slot (PCIe/USB signal)			
Wireless LAN		802.11 b/g/n (optional)			
Drive Bay		1 x 2.5" HDD/SSD drive bay			
Remote Management Solution		iRIS-2400, QTS-Gateway			
Physical	Construction Material	Aluminum front panel and sheet metal rear cover			
	Mounting	Panel mount, rack mount, VESA 100x100			
	Enclosure Color	Black C			
	Dimensions (mm) (W x L x D)	262.2 x 322.2 x 47.2	303 x 378.5 x 46.2	341.4 x 408.4 x 51.8	372.4 x 447.4 x 52.87
	Weight (Net)	3.2 kg	4.1 kg	5 kg	6.5 kg
	Cutout Dimensions (mm)	244.8 x 304.8	285.6 x 361	323 x 390	355 x 430
Environment	Operating Temperature (with air flow)	-10°C~50°C (14°F~122°F)			
	Storage Temperature	-20°C~60°C (-4°F~140°F)			
	Humidity	10% to 95% (non-condensing)			
	IP Level	IP 65 compliant front panel			
	Safety and EMC	CE & FCC Class A certified			
Power	Power Adapter	P/N: 63040-010060-110-RS 60W Power Adapter Input: 90 - 264V AC, 50/60Hz Output: 12V DC			
	Power Requirement	9 V~36 V DC			
	Power Consumption	40W	41W	42W	33W

Ordering Information

Part Number	Description
PPC-F12B-BTi-J1/2G/R-R10	12" 600 cd/m² XGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, resistive touch window, R10
PPC-F12B-BTi-J1/2G/PC-R11	12" 600 cd/m² XGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R11
PPC-F15B-BTi-J1/2G/R-R20	15" 450 cd/m² XGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, resistive touch window, R20
PPC-F15B-BTi-J1/2G/PC-R21	15" 450 cd/m² XGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R21
PPC-F17B-BTi-J1/2G/R-R10	17" 350 cd/m² SXGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, resistive touch window, R10
PPC-F17B-BTi-J1/2G/PC-R11	17" 350 cd/m² SXGA panel PC with Intel® Celeron® processor J1900, TDP 10W, one 2 GB RAM, supports iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R11
PPC-F19B-BTi-J1/2G/R-R11	19" 350 cd/m² SXGA panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2GB RAM, support iRIS-2400, black color, 9-36V DC input, resistive touch window, R11
PPC-F19B-BTi-J1/2G/PC-R11	19" 350 cd/m² SXGA panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2GB RAM, support iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R11

QTS-Gateway

Part Number	Description
PPC-F12B-BT-QGW-J1/4G/PC-R11	12" 600 cd/m² XGA Panel PC with IntelR CeleronR Processor J1900, TDP 10W, 2GB RAM*2,black color, with QTS-Gateway, 9-36V DC input, projected capacitive touch window, R11
PPC-F15B-BT-QGW-J1/4G/PC-R11	15" 450 cd/m² XGA Panel PC with IntelR CeleronR Processor J1900, TDP 10W, 2GB RAM*2, black color, with QTS-Gateway, 9-36V DC input, projected capacitive touch window, R11
PPC-F17B-BT-QGW-J1/4G/PC-R11	17" 350 cd/m² SXGA Panel PC with IntelR CeleronR Processor J1900, TDP 10W, 2GB RAM*2, black color, with QTS-Gateway, 9-36V DC input, projected capacitive touch window, R11
PPC-F19B-BT-QGW-J1/4G/PC-R11	19" 350 cd/m² SXGA Panel PC with IntelR CeleronR Processor J1900, TDP 10W, 2GB RAM*2, black color, with QTS-Gateway, 9-36V DC input, projected capacitive touch window, R11

Packing List

Item	Q'ty	Remark
PPC-FxxB-BTi Panel PC	1	
User Manual & Driver CD	1	
One Key Recovery CD	1	
Touch Pen	1	Resistive type models only P/N: 43125-0002C0-00-RS
Power Cord	1	Part numbers vary by regions
Screw Pack	1	Including necessary screws
Power Adapter	1	9V~36V DC P/N: 63040-010060-110-RS

Options

Item	PPC-F12B	PPC-F15B	PPC-F17B	PPC-F19B
Arm	ARM-31-RS			
Stand	STAND-C12-R10 STAND-A12-RS	STAND-C19-R10 STAND-A19-RS	STAND-C19-R10 STAND-A19-RS	STAND-C19-R10 STAND-A19-RS
Wall Mount Kit	WK-190MS-R10			
Panel Mount Kit	FPK-09-R10	FPK-10-R10	FPK-10-R10	FPK-11-R10
Rack Mount Kit	FRK12-R10	FRK15-R10	FRK17-R10	FRK-19P-R10
Wi-Fi Kit	EMB-WIFI-KIT01-R20	EMB-WIFI-KIT11-R20	EMB-WIFI-KIT11-R20	EMB-WIFI-KIT11-R20
iRIS (IEI Remote Intelligent System) Kit	iRIS-2400-RS			

PPC-F12B
Fully Integrated I/O

2 x RJ-45 LAN Port
2 x USB 2.0
2 x USB 3.0
Power Switch

VGA HDMI AT/ATX Reset Clear CMOS 2 x RS-232 1 x RS-232/422/485 9 V~36V DC DC Jack
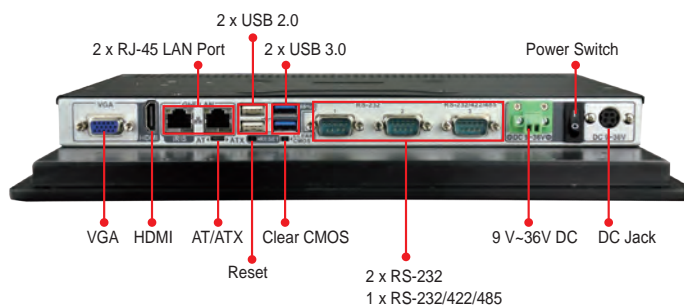
PPC−F15B
Fully Integrated I/O

2 x USB 2.0
2 x RJ-45 LAN Port   2 x USB 3.0   Line-out   9 V~36V DC

VGA   HDMI   AT/ATX   Clear CMOS   2 x RS-232,   DC Jack   Power Switch
Reset   1 x RS-232/422/485
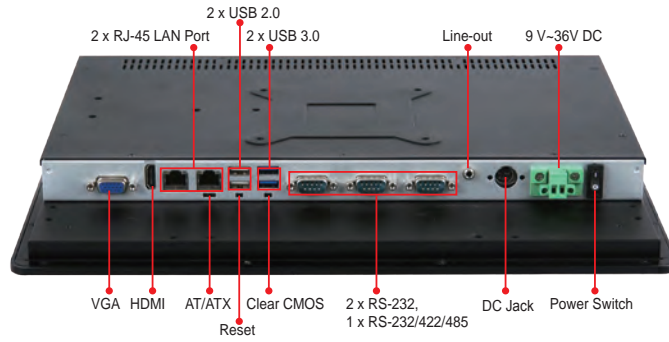
PPC−F17B
Fully Integrated I/O

2 x USB 2.0
2 x RJ-45 LAN Port   2 x USB 3.0   Line-out   9 V~36V DC

VGA   HDMI   AT/ATX   Clear CMOS   2 x RS-232,   DC Jack   Power Switch
Reset   1 x RS-232/422/485
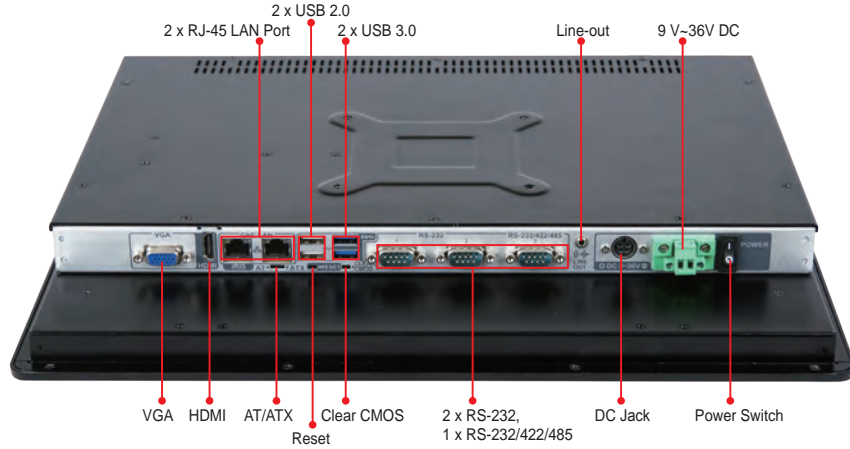
PPC−F19B
Fully Integrated I/O

2 x USB 2.0   9 V~36V DC
2 x RJ-45 LAN Port   2 x USB 3.0   Line-out   DC Jack

VGA   HDMI   AT/ATX   Clear CMOS   2 x RS-232,   Power Switch
Reset   1 x RS-232/422/485
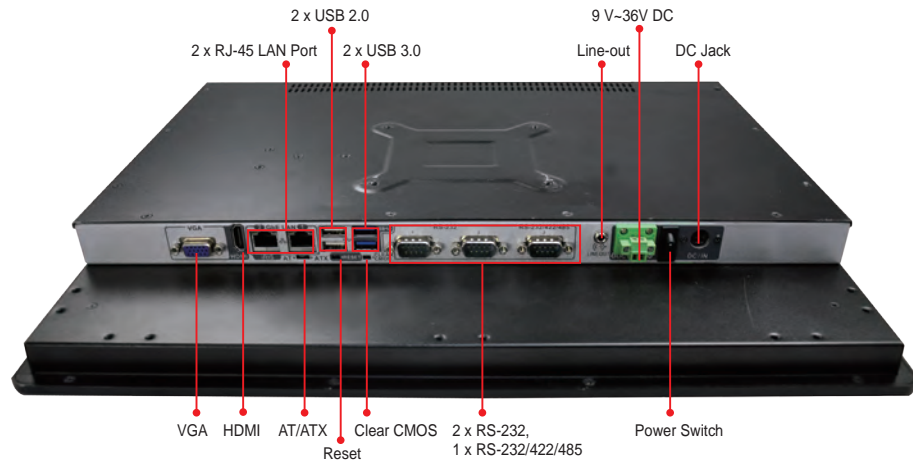
PPC−F12B
Dimensions *(Unit: mm)*

304.8

244.8   Suggested cut
out size

Scale 1:2

322.20
295.80
248

262.20
235.80
186.40

131.10

5

135   161.10

47.20
46.50
10.30

19.80

301.80

241.80

4-M4 深5

100

100

55

PPC-F15B
Dimensions *(Unit: mm)*

PPC-F17B
Dimensions *(Unit: mm)*

PPC-F19B
Dimensions *(Unit: mm)*

Suggested cut out size

Suggested cut out size

Suggested cut out size
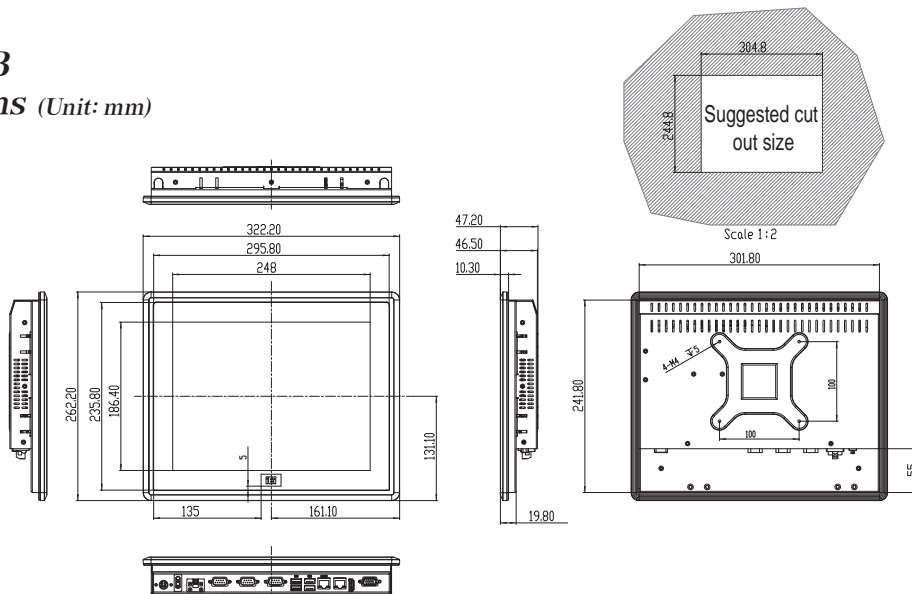
PPC Series

■ Robust Product Design

IP Protection Improvement

The PPC series is equipped with robust front panel for water protection and tightly front assembly against the intrusion from any direction.

IP Code Table

The IP Code (International Protection Rating) consists of the letters IP followed by two digits.

Solids				Liquids	
First Numeral			Second Numeral		
No Protection	0	0	No Protection		
Objects Greater than 50mm	1	1	Vertically Dripping Water		
Objects Greater than 12mm	2	2	75º-90º Sprayed Water		
Objects Greater than 2.5mm	3	3	30º-90º Sprayed Water		
Objects Greater than 1.0mm	4	4	Water sprayed-low Pressure		
Dust-Protected	5	5	Water jets-low Pressure		
Dust-Tight	6	6	Water Jets-high Pressure		
IP 66 Compliant!		7	Temporary Immersion		
		8	Indefinite Immersion		

IP66 Dust and Water Resistant

PPC Series

■ Wide Temperature Range (-20°C~60°C)

The PPC-5150A-H61/ PPC-5170A-H61 and UPC-V315 supports wide operating temperature, surviving from any kinds of harsh environment.

-20°C
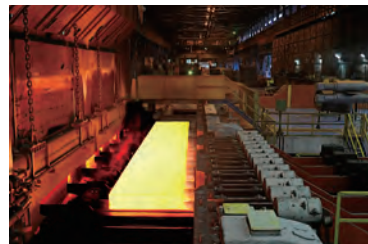
60°C

■ High Efficiency Transmission

SFP Fiber LAN

The small form-factor pluggable transceiver (SFP) is a compact, hot-pluggable transceiver used for both telecommunication and data communication applications.

- Immunity to electromagnetic interference
- High electrical resistance
- No sparks
- Long transmission distance – up to 2 km (multi-mode)/120 km (single-mode)

Transmission Distance

Type	Core Diameter	Wavelength (nm)	Cost	Max. Distance (km)
Single-Mode	8 to 10	1310 or 1550	More expensive	120 ★
Multi-Mode	50 or 62.5	850 or 1300	Medium	2
RJ-45	N/A	N/A	Cheaper	0.1

Multiple choices

We provide two transmission LAN types for choice, either 2 × Fiber LAN or 2 × RJ-45.

Fiber LAN

RJ-45
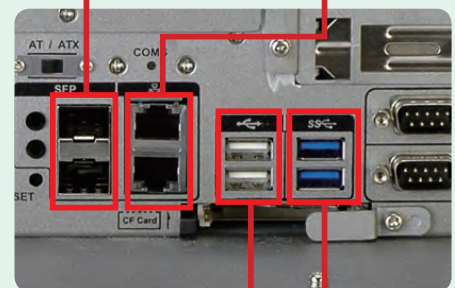
Transmission distance up to 120 km

USB 2.0   USB 3.0

USB 3.0 – Faster Data Transmission

USB 3.0 has higher transmission speed and wider data bandwidth, supporting faster transferring for the user.

USB Version	USB 1.0	USB 2.0	USB 3.0
Data Transfer Rate)	12Mbps	480Mbps	5Gbps ★
Media (Data Size)	Transfer Time		
Song / Pic (4 MB)	5.3 sec	0.1 sec	0.01 sec
HD-Movie (25GB)	9.3 hr	13.9 min	70 sec

PPC Series Selection Guide

LCD Size		8.4"	12.1"	15"	17"	19"
Model		PPC-3708A-N26	PPC-3712A-N26	PPC-5150A-H61	PPC-5170A-H61	PPC-5190A-H61
Display	LCD Size	8.4"	12.1"	15 "	17 "	19 "
	Max Resolution	800(W) x 600(H)	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	450	500	450	350	350
	Contrast Ratio	600:1	700:1	800:1	800 : 1	1000 : 1
	LCD Color	262K	262K	16.2M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.213 x 0.213	0.3075 x 0.3075	0.297 x 0.297	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
	Viewing Angle (V/H)	140°/ 160°	160°/ 160°	150° / 160°	160° / 160°	160° / 170°
	Backlight MTBF (hrs)	50000 (LED backlight)		50000		
Touch	Touchscreen	4-wire resistive type with RS-232 interface	5-wire resistive type with RS-232 interface	5-wire resistive type with RS-232 interface		
	Touch Controller	EETI MBMER4040CPBG	EETI MBMER4050CMBG	DMC 9000		
Motherboard	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N2600 dual-core processor 1.6GHz	2nd/3rd generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU		
	Chipset	Intel® NM10	Intel® NM10	Intel® H61		
	RAM	One 204-pin SO-DIMM socket, supporting DDR3 800MHz module for up to 2GB	One 204-pin SO-DIMM socket, supporting DDR3 800MHz module for up to 2GB	Two 204-pin DDR3 SO-DIMM slots (max. 16GB)	Two 204-pin DDR3 SO-DIMM slots (max. 16GB)	Two 204-pin DDR3 SO-DIMM slots (max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0				
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC662 HD audio codec	Realtek ALC662 audio codec		
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA port 1 x Line-in, Line-out, Mic-in 1 x DC power input jack 1 x Power pwitch	2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA port 1 x Line-in, Line-out, Mic-in 1 x DC power input jack 1 x Power switch	4 x RS-232 COM port 1 x RS-232/422/485 port 2 x RJ-45 for LAN port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA port 1 x Audio (Line-out, MIC-in) 2 x SFP fiber LAN 1 x Power switch 1 x AT/ATX switch 1 x PCI/PCIe slot	1 x RS-232/422/485 2 x RJ-45 for LAN port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA port 1 x Audio (Line-in, MIC-in) 2 x SFP fiber LAN 1 x Power switch 1 x AT/ATX switch 1 x PCI/PCIe slot	4 x RS-232COM port 1 x RS-232/422/485 port 2 x RJ-45 for LAN port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA port 1 x Audio (Line-out, MIC-in) 2 x SFP fiber LAN 1 x Power switch 1 x AT/ATX switch 1 x PCI/PCIe slot
Drive Bay	HDD Drive Bay	1 x 2.5 SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay with anti-shook		
	SSD	1 x mSATA (SATA2)	1 x mSATA (SATA2)	CF Type II, mSATA (SATA2)		
	CD-ROM Drive Bay	-	Slim type CD-ROM bay	Slim type CD-ROM bay		
Expansion Slot		1 x PCIe Mini card		Either 1 x PCI slot or 1 x PCIe slot, 1 x PCIe Mini card		
System Cooling		Fanless		Active with fan		
Environment	Operating Temperature	-10°C~50°C		-20°C ~ 60°C	-20°C ~ 60°C	-10°C ~ 50°C
	Storage Temperature	-20°C~60°C		-30°C ~ 70°C	-30°C ~ 70°C	-20°C ~ 60°C

8.4" Industrial Panel PC

PPC-3708A-N26

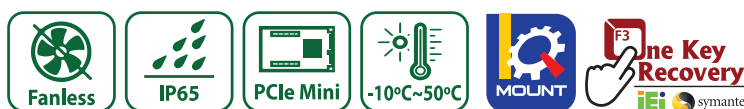## Intel® Atom™ N2600 Dual-Core Processor

Features

- 8.4" 450 nits high brightness TFT LCD with LED backlight
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity suggested)

Fanless | Touchscreen | IP66 | High Brightness | PCIe Mini | -10°C~50°C | MOUNT | One Key Recovery IEI symantec

Specifications

Model		PPC-3708A-N26
Display	LCD Size	8.4"
	Max Resolution	800(W) x 600(H)
	Brightness (cd/m²)	450
	Contrast Ratio	600:1
	LCD Color	262K
	Pixel Pitch (mm) (HxV)	0.213(H) x 0.213(V)
	Viewing Angle (V/H)	140°/160°
	Backlight MTBF (hrs)	50000 (LED backlight)
Touch	Touchscreen	4-wire resistive type with RS-232 interface
	Touch Controller	EETI MBMER4040CPBG
Motherboard	SBC	NANO-CV-N26001
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz
	Chipset	Intel® NM10
	RAM	One 204-pin SO-DIMM socket, supporting DDR3 800MHz module for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA port 1 x Line-in, Line-out, Mic-in 1 x DC power input jack 1 x Power switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay
	SSD	1 x mSATA (SATA2 signal)
Expansion Slot		1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum die-casting
	Chassis Construction	Heavy-duty steel (SECC)
	Mounting	Panel, wall, rack, stand and arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	244 x 175 x 86.5
	Cut Out Dimensions (WxH) (mm)	233 x 167
	Net/Gross Weight	2.2 kg / 4.4 kg
System Cooling		Fanless
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	IP Rating	IP66 compliant front panel
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
Power Supply	Power Input	9-28V DC Input
	Power Adapter	P/N: 63040-010060-110-RS 60W power adapter (Meets PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

Versatile Mounting Methods

Wall Mount	Stand	Panel Mount	Rack Mount

Ordering Information

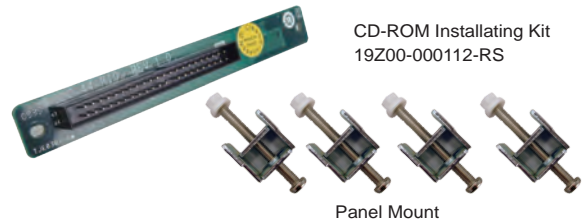| Part No.	Description
PPC-3708A-N26/R/2G-R12*	8.4" 450 cd/m² SVGA panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, touchscreen, 9 V~28 V DC input, RoHS

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product inculdes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

Item	Part No.	Description
Screw Kit	19600-000205-RS	
Power Cord	63040-010060-040-RS	European standard, 1830 mm, plug (16A, 250V), connector (10A, 250V)
Power Adapter	63040-010060-110-RS	60W, 90VAC~264VAC for PPC-3708A-N26
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6-pin male; 2 x MINI DIN 6-pin female
Panel Mounting Kit	19Z00-000026-RS	19Z00-000026-RS x8
Wall Mounting Kit	41014-057602-00-RS 41020-016102-00-RS	Ultra set plate Wall mount bracket
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touchscreen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Arm	ARM-11-RS
Stand	STAND-100-RS

Options

Item	Part No.	Description
RS-422/485 Cable	32205-004900-100-RS	(A) D-sub 9-pin male (B) DU PONT 2*7P, P=2.0, female
HDD IDE Cable	32221-000200-100-RS	100 mm, IDE 44-pin
Wi-Fi Module	EMB-WIFI-KIT01-R20	1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 x Antenna, RoHS

1 x RS-232   1 x RS-422/ 485   1 x Line-out   1 x Line-in   1 x Mic   DC Input

VGA   HDMI   2 x USB 2.0   2 x LAN   2 x USB 3.0   Power Switch
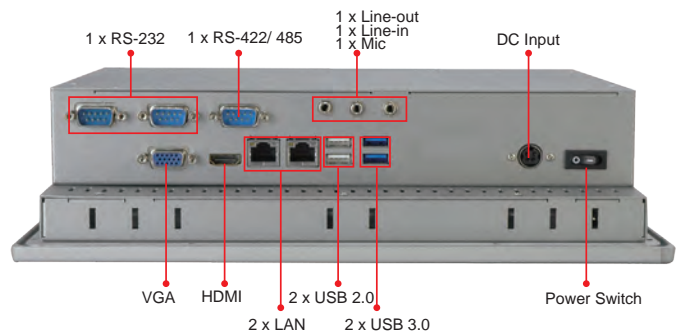
PPC-3708A-N26 Dimensions
(Unit: mm)

23.50 20

244

175

20 20.50

23.50 20

35.30

86.50

100

100
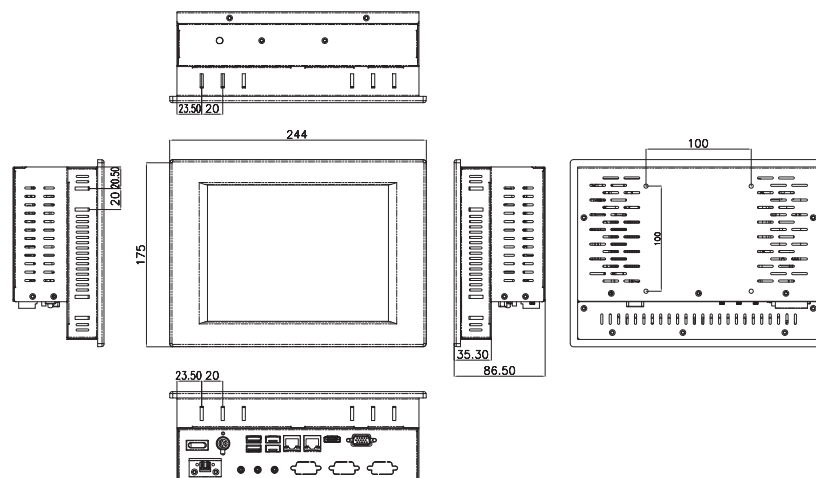
12.1" Industrial Panel PC

PPC-3712A-N26

Intel® Atom™ N2600 Dual-Core Processor

Features

- 12.1" 500 nits high brightness TFT LCD with LED backlight
- Dual Gigabit Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional 802.11b/g/n wireless kit
- One slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 65 compliant front panel

Fanless | IP65 | PCIe Mini | -10°C~50°C | MOUNT | One Key Recovery iEi symantec

Specifications

Model		PPC-3712A-N26
Display	LCD Size	12.1"
	Max. Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	500
	Contrast Ratio	700:1
	LCD Color	262K
	Pixel Pitch (mm) (HxV)	0.3075(H) x 0.3075(V)
	Viewing Angle (V/H)	160°/160°
	Backlight MTBF (hrs)	50000 (LED backlight)
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	EETI MBMER4050CMBG
Motherboard	SBC	NANO-CV-N26001
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz
	Chipset	Intel® NM10
	RAM	One 200-pin SO-DIMM socket, supporting DDR3 800MHz module for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA port 1 x Line-in, Line-out, Mic-in 1 x DC power input jack 1 x Power switch
Drive Bay	HDD Drive Bay	1 x 2.5" SATA HDD Bay
	SSD	1 x mSATA (SATA2 signal)
	CD-ROM Drive Bay	Slim type CD ROM bay
Expansion Slot		1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum die-casting
	Chassis Construction	Heavy-duty steel (SECC)
	Mounting	Panel, wall, rack, stand and arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	340 x 260 x 74.8
	Cut Out Dimensions (WxH) (mm)	313 x 233
	Net/Gross Weight	6 kg / 8 kg
System Cooling		Fanless
Environment	Operating Temperature	-10°C~50°C
	Storage Temperature	-20°C~60°C
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
Power Supply	Power Input	9-28V DC Input
	Power Adapter	P/N: 63040-010060-110-RS 60W power adapter (Meets PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

Ordering Information

Part No.	Description
PPC-3712A-N26/R/2G-R12*	12.1" 500 cd/m² XGA panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 9 V~28 V DC RAM, and touchscreen, 9 V~28 V DC input, RoHS

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product inculdes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

Item	Part No.	Description
Screw Kit	19600-000207-RS	
SATA CD-ROM Cable	32801-006300-100-RS	SATA 7+6P female 180°, SATA 7P female 90°+lock, DU PONT 2x4P, P=2.54, female
Power Cord	32702-000200-100-RS	European standard, 1830 mm, plug (16A, 250V), connector (10A, 250V)
Power Adapter	63040-010060-110-RS	60W, 90VAC~264VAC for PPC-3712A
PS/2 Cable	32006-000300-100-RS	1 x mini-DIN 6-pin male; 2 x mini-DIN 6-pin female
Panel Mounting Kit	19Z00-000024-RS	19Z00-000024-RS x8
Wall Mounting Kit	41014-057602-00-RS	Ultra set plate
	41020-016102-00-RS	Wall mount bracket
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touchscreen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Arm	ARM-11-RS
Stand	STAND-100-RS

CD-ROM Installating Kit
19Z00-000112-RS

Panel Mount

Options

Item	Part No.	Description
RS-422/485 Cable	32205-004900-100-RS	(A) D-sub 9-pin male (B) DU PONT 2*7P, P=2.0 female
IDE CD-ROM Installation Kit	19Z00-000112-RS	50-pin CD-ROM connector to 44-pin IDE connector transfer board
HDD IDE Cable	32200-000037-RS	250 mm, IDE 44-pin
Wi-Fi Module	EMB-WIFI-KIT01-R20	1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 x Antenna, RoHS

Fully Integrated I/O

1 x Line-out
1 x Line-in
1 x Mic

1 x RS-232   1 x RS-422/485   DC Input

VGA   HDMI   2 x USB 2.0   Power Switch

2 x LAN   2 x USB 3.0
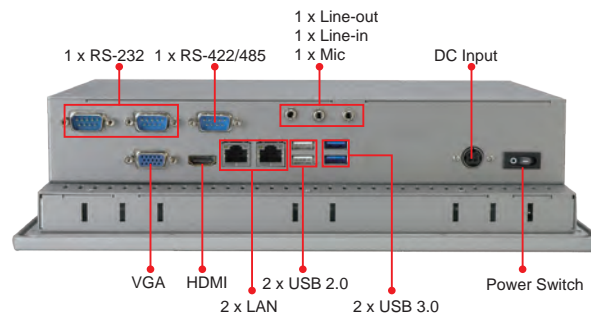
PPC-3712A-N26 Dimensions (Unit: mm)
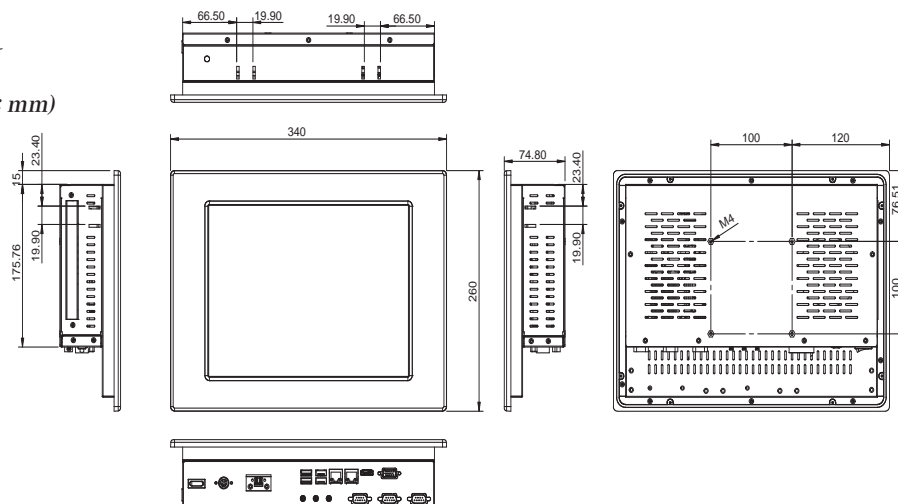
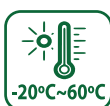## 15" Industrial Panel PC

PPC-5150A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x 1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity)

Specifications
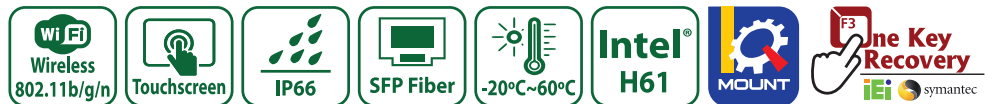
Model		PPC-5150A-H61
Display	LCD Size	15 "
	Max. Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	450
	Contrast Ratio	800 : 1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	150°/160°
	Backlight MTBF (hrs)	50000
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM port 1 x Audio (Line-out, MIC-in) 1 x RS-232/422/485 port 2 x SFP fiber LAN 2 x RJ-45 for LAN port 1 x Power switch 4 x USB 2.0, 2 x USB 3.0 on rear 1 x AT / ATX switch 1 x VGA port 1 x PCI/PCIe slot
Drive Bay	HDD Drive Bay	1 x 2.5" SATA/IDE HDD bay with anti-shock
	SSD	CF Type II, mSATA (SATA2 signal)
	CD-ROM Driver Bay	SATA slim type CD-ROM bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot,
		1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty steel
	Mounting	Panel, wall, rack, stand and arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	410 x 309 x 110.5
	Cut Out Dimensions (WxH) (mm)	387 x 286
	Net/Gross Weight	7 kg / 11 kg
Environment	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C
	System Cooling	Active with fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
	IP Rating	Front IP66 Compliant
Power Supply	AC Input	AC input ATX power supply - P/N: 63030-010220-100-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3V@10A, 5V@14A, 12V@14A, -12V@0.3A
	DC Input	DC input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC (18~36 VDC) - Output (max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Wireless 802.11b/g/n | Touchscreen | IP66 | SFP Fiber | -20ºC~60ºC | Intel® H61 | MOUNT | F3 One Key Recovery iEi symantec

Ordering Information

Part No.	Description
PPC-5150A-H61-P/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Pentium® G6xxT dual-core CPU (above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, AC input PSU, touch screen, R20
PPC-5150AD-H61-P/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Pentium® G6xxT dual-core CPU (above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, R20
PPC-5150A-H61-i3/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Core™ i3 2xxxT dual-core CPU (above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, AC input PSU, touch screen, R20
PPC-5150AD-H61-i3/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Core™ i3 2xxxT dual-core CPU (above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, R20
PPC-5150A-H61-i5/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Core™ i5 2xxxT dual-core CPU (above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, AC input PSU, touch screen, R20
PPC-5150AD-H61-i5/R-R20	15" 450 cd/m² XGA panel PC with POS-H61, Intel® Core™ i5 2xxxT dual-core CPU (above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C , touch screen, R20
PCIR-01H-R10	One PCI slot riser card
PCIER-101H-R10	One PCIe x1 slot riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	Slim-line SATA 7+6P to SATA 7P/4P power, L=200/150 mm
Power Cord	32000-000002-RS	European standard, 1830 mm, plug (16A, 250V), connector (10A, 250V)
Panel Mount Kit	19Z00-000024-RS	19Z00-000024-RS x8
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-150MS-R10
Arm	ARM-31-RS
Stand	STAND-210-R11

Options

Part Number	Description
EMB-WIFI-KIT01-R20	Wi-Fi module with RF cable and antenna, 1T1R, 802.11b/g/n
73400-AD7760H01-RS	Slim type SATA DVD-ROM

Fully Integrated I/O

PPC-5150A-H61 Dimensions (Unit: mm)

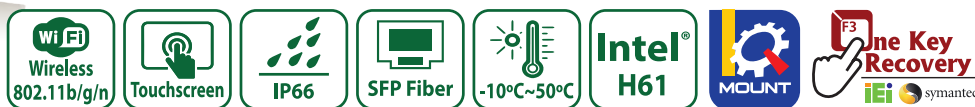## 17" Industrial Panel PC

PPC-5170A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5170A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity)

WiFi Wireless 802.11b/g/n | Touchscreen | IP66 | SFP Fiber | -20ºC~60ºC | Intel® H61 | MOUNT | F3 One Key Recovery | iEi symantec

Specifications

| Model		PPC-5170A-H61
Display	LCD Size	17"
	Max. Resolution	1280(W) x 1024(H)
	Brightness (cd/m²)	350
	Contrast Ratio	800 : 1
	LCD Color	16.7M
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)
	Viewing Angle (V/H)	170°/ 160°
	Backlight MTBF (hrs)	50000
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM port 1 x Audio (Line-out, MIC-in) 1 x RS-232/422/485 port 2 x SFP fiber LAN 2 x RJ-45 for LAN port 1 x Power switch 4 x USB 2.0, 2 x USB 3.0 on rear 1 x AT/ATX switch 1 x VGA port 1 x PCI/PCIe slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shock
	SSD	CF Type II, mSATA (SATA2 signal)
	CD-ROM Driver Bay	SATA slim type CD-ROM bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot
		1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty steel
	Mounting	Panel, wall, rack, stand and arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	452 x 356 x 115
	Cut Out Dimensions (WxH) (mm)	426 x 331
	Net/Gross Weight	8 kg / 12 kg
	IP Rating	Front IP66 compliant
Environment	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C
	System Cooling	Active with fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
Power Supply	AC Input	AC input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC (18~36 VDC) - Output (max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Ordering Information

Part No.	Description
PPC-5170A-H61-P/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61, Intel® Pentium® G6xxT dual-core CPU (above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5170AD-H61-P/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61, Intel® Pentium® G6xxT dual-core CPU (above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PPC-5170A-H61-i3/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61,Intel® Core™ i3 2xxxT dual-core CPU (above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5170AD-H61-i3/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61, Intel® Core™ i3 2xxxT dual-core CPU (above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PPC-5170A-H61-i5/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61, Intel® Core™ i5 2xxxT dual-core CPU (above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5170AD-H61-i5/R-R10	17" 350 cd/m² SXGA panel PC with POS-H61, Intel® Core™ i5 2xxxT dual-core CPU (above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PCIR-01H-R10	One PCI slot riser card
PCIER-101H-R10	One PCIe x1 slot riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	Slim-line SATA 7+6P to SATA 7P/4P power, L=200/150 m
Power Cord	32000-000002-RS	European standard, 1830 mm, plug (16A, 250V), connector (10A, 250V)
Panel Mount Kit	19Z00-000024-RS	19Z00-000024-RS x10
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-170MS-R10
Arm	ARM-31-RS
Stand	STAND-210-R11

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM installation kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD bracket
32200-000037-RS	25cm HDD IDE cable
EMB-WIFI-KIT01-R20	Wi-Fi module with RF cable and antenna
73400-AD7760H01-RS	Slim type SATA DVD-ROM

Fully Integrated I/O
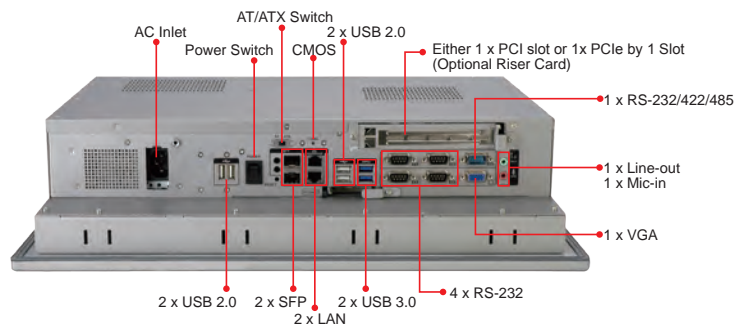
PPC-5170A-H61 Dimensions (Unit: mm)
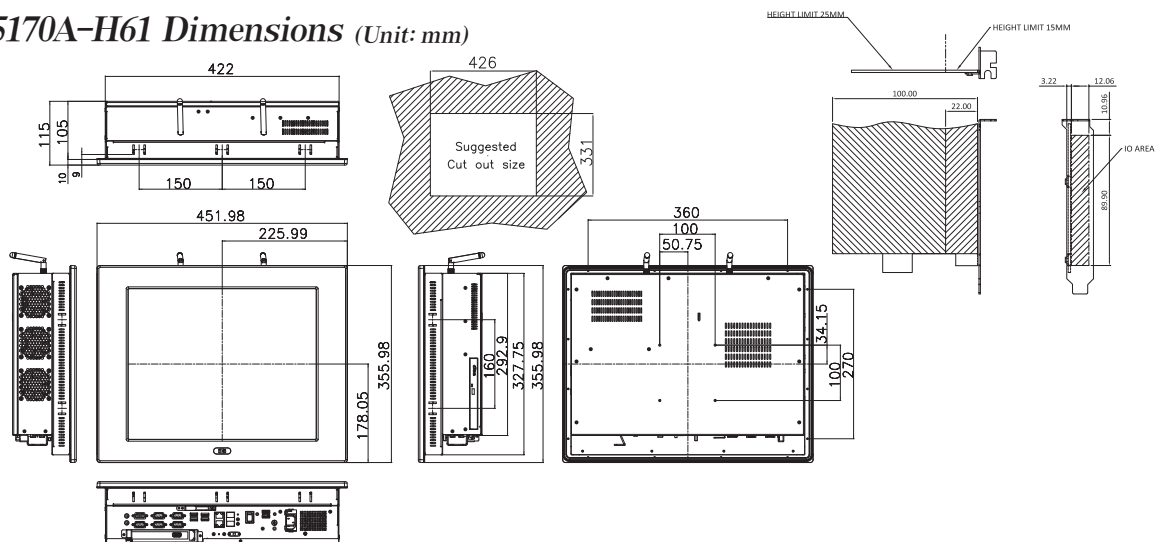
19" Industrial Panel PC

PPC-5190A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5190A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Wireless 802.11b/g/n | **Touchscreen** | **IP66** | **SFP Fiber** | **-10ºC~50ºC** | **Intel® H61** | **MOUNT** | **One Key Recovery** iEi symantec

Specifications

Model		PPC-5190A-H61
Display	LCD Size	19"
	Max. Resolution	1280(W) x 1024(H)
	Brightness (cd/m²)	350
	Contrast Ratio	1000 : 1
	LCD Color	16.7M
	Pixel Pitch (mm) (HxV)	0.294(H) x 0.294(V)
	Viewing Angle (V/H)	160°/ 170°
	Backlight MTBF (hrs)	50,000
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor, up to TDP 65W CPU
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM port 1 x Audio (Line-out, MIC-in) 1 x RS-232/422/485 port 2 x SFP fiber LAN 2 x RJ-45 for LAN port 1 x Power switch 4 x USB 2.0, 2 x USB 3.0 on rear 1 x AT / ATX switch 1 x VGA port 1 x PCI/PCIe slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA (SATA2 signal)
	CD-ROM Driver Bay	Slim type CD-ROM bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot
		1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty steel
	Mounting	Panel, wall, rack, stand and arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	482 x 399 x 115
	Cut Out Dimensions (WxH) (mm)	450 x 363
	Net/Gross Weight	12.6 kg / 18.2 kg
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	System Cooling	Active with Fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
	IP Rating	Front IP66 compliant
Power Supply	AC Input	AC input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC (18~36 VDC) - Output (max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Ordering Information

Part No.	Description
PPC-5190A-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual CoreG6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5190AD-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PPC-5190A-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM* 2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5190AD-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PPC-5190A-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
PPC-5190AD-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
PCIR-01H-R10	1-Slot PCI riser card
PCIER-101H-R10	1-Slot PCIe x 1 riser card

Packing List

Item	Part No.	Description
User's Manual CD-ROM		
SATA CD-ROM Cable	32803-000300-100-RS	Slim-line SATA 7+6P to SATA 7P/4P power, L=200/150 m
Power Cord	32000-000002-RS	European standard, 1830 mm, plug (16A, 250V), connector (10A, 250V)
Panel Mount Kit	19Z00-000024-RS	19Z00-000024-RS x10
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		

PCIER-101H-R10
PCIe x4 slot with PCIe x1 signal riser card
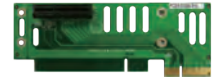
PCIR-01H-R10
One-slot PCI riser card

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-190MS-R10
Arm	ARM-31-RS
Stand	STAND-210-R11

Options

Part Number	Description
EMB-WIFI-KIT11-R20	Wi-Fi module with RF cable and antenna, 1T1R, 802.11b/g/n
73400-AD7760H01-RS	1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 350mm RF cable, 2 x Antenna, RoHS

PPC-5190A-H61
Fully Integrated I/O

AC Inlet
Power Switch
AT/ATX Switch
CMOS
2 x USB 2.0
Either 1 x PCI slot or 1x PCIe x1 Slot (Optional Riser Card)
1 x RS-232/422/485
1 x Line-out
1 x Mic-in
1 x VGA
2 x USB 2.0
2 x SFP
2 x LAN
2 x USB 3.0
4 x RS-232
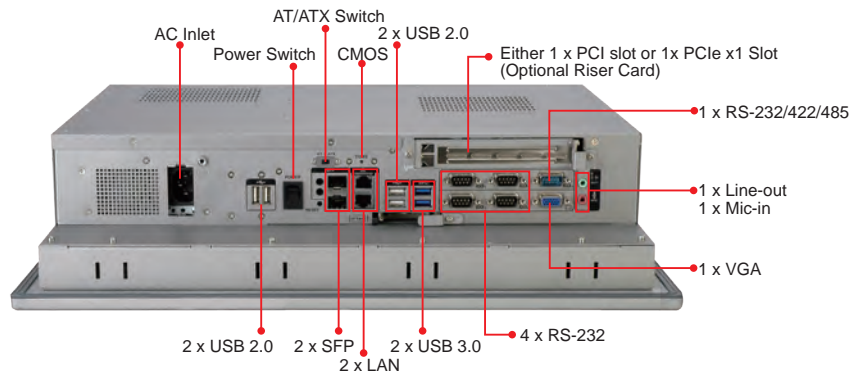
PPC-5190A-H61
Dimensions (Unit: mm)

Suggested cut out size

HEIGHT LIMIT 25MM
HEIGHT LIMIT 15MM
IO AREA
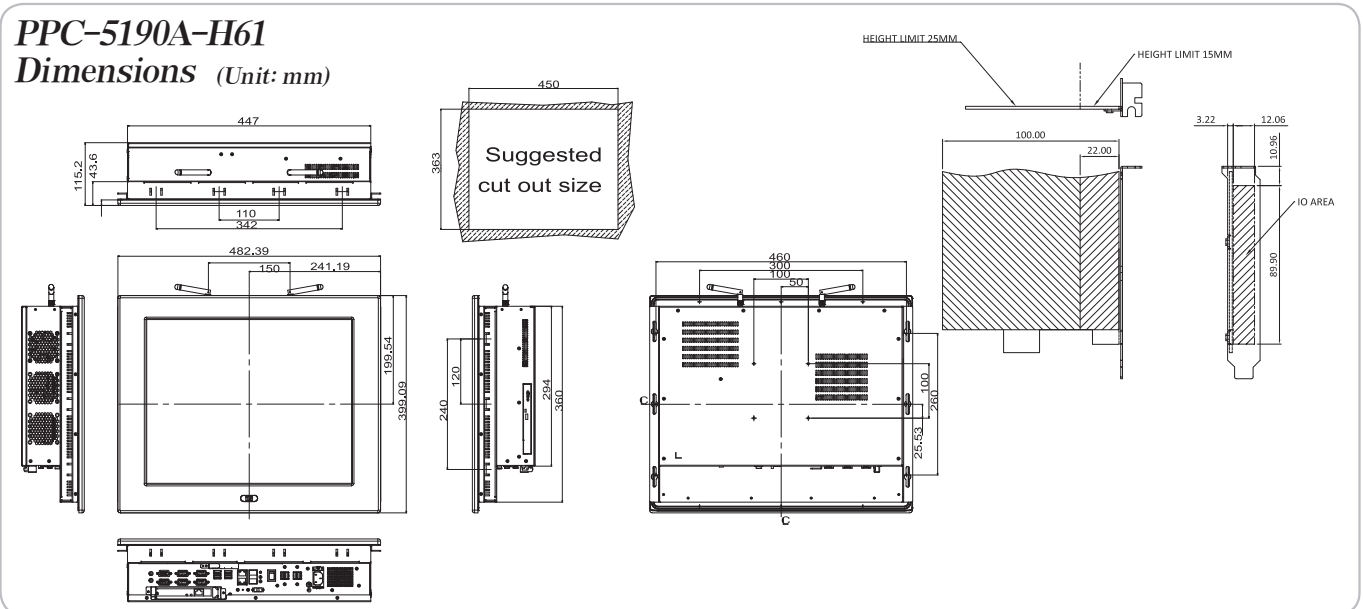
Vertical Market PPC Selection Guide

Marine Series

Model		S19A-QM87	S24A-QM87	S19M	S24M
Display	LCD Size	19"	24"	19"	24"
	Max. Resolution	1280 x 1024	1920 x 1080	1280 x 1024	1920 x 1080
	Brightness (cd/m²)	300	300	300	300
	Contrast Ratio	2000:1	5000:1	2000:1	5000:1
	LCD Color	16.7M	16.7M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.294 x 0.294	276.75 x 276.75	0.294 x 0.294	276.75 x 276.75
	Viewing Angle (V/H)	178° / 178°	178° / 178°	178° / 178°	178° / 178°
	Backlight MTBF (hrs)	50000	50000	50000	50000
Touch	Touchscreen	Projected capacitive touch with USB interface, 6H			
Motherboard	CPU	Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor		-	-
	Chipset	Intel® QM87	Intel® QM87	-	-
	RAM	Two 204-pin 1600/1333 MHz dual-channel DDR3 SDRAM support up to 16GB		-	-
	Ethernet	GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller		-	-
	Audio Codec	N/A	N/A	-	-
I/O Ports and Switches		3 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x PS/2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5KV isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection) 1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved) 1 x Isolated 9V ~ 36V DC 3-pin terminal block 1 x Power button		• DVI-D Signal Input: 2 x DVI (24-pin, female) • VGA Signal Input: 2 x D-sub (15-pin, female) • VGA Signal Output: 1 x D-sub (15-pin, female) - Clone of VGA IN* • Composite Video Input: 1 x BNC connector (female) Composite Video Output: 1 x BNC connector (female) • RS-232/422/485 for remote control (Non-isolated) • Touchscreen: 1 x USB Type A connector (female) • Ethernet: 1 x RJ-45 connector for remote control • Isolated AC Power Inlet: 100V~240V AC • Isolated DC Terminal Block: 18V~36V DC • 1 x Buzzer	
Drive Bay	HDD Driver Bay	-	-	-	-
	SSD	2 x SSD Bay & 1 x CFast	2 x SSD Bay & 1 x CFast	-	-
Expansion Slot		2 x PCIe Mini card	2 x PCIe Mini card	-	-
System Cooling		Fanless	Fanless	Fanless	Fanless
Environment	Operating Temperature	-15°C to 55°C (5% to 95% RH)			
	Storage Temperature	-20°C to 60°C			
IP Rating		Front IP 66 / Rear IP 22			

Vertical Market PPC Selection Guide

UPC and IP69K Series

Model		UPC-F12C-ULT3	UPC-V312-D525	UPC-V315-QM77	INOX-F15C-ULT3
Display	LCD Size	12.1"	12.1"	15"	15"
	Max. Resolution	1024 x 768	1024 x 768	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	600	600	400	450
	Contrast Ratio	700 : 1	700 : 1	700 : 1	800 : 1
	LCD Color	16.2M	16.2M	16.2M	16.2M
	Pixel Pitch (mm) (HxV)	0.240 (H) x 0.240 (V)	0.240 (H) x 0.240 (V)	0.297 (H) x 0.297 (V)	0.297 (H) x 0.297 (V)
	Viewing Angle (V/H)	160° / 140°	150° / 130°	160°/ 140°	160°/ 150°
	Backlight MTBF (hrs)	50000	50000	50000	70000
Touch		P-CAP / Resistive Touc	5-wire resistive type with RS-232 interface, 3H	5-wire resistive type with RS-232 interface, 3H	P-CAP / Resistive Touch
Motherboard	CPU	6th Generation Intel® Core™ i5 and Celeron® ULT Processor	Intel® Atom™ D525 1.8GHz dual-core processor	Intel® Celeron® 1047UE processor Intel® Core™ i3-3217UE processor Intel® Core™ i5-3517UE processor	6th Generation Intel® Core™ i5 and Celeron® ULT Processor
	Chipset		Intel® ICH8M	Mobile Intel® QM77 Express Chipset	
	RAM	1 x 260-pin 2133/1867 MHz single-channel DDR4 SO-DIMMs (system max. 32GB)	On-board 1GB DDR3 SO-DIMM (system max. 1GB)	Built-in one 2 GB DDR3 memory (system max. 8GB: on board max. 4GB, socket max. 4GB)	2 x 260-pin 2133/1867 MHz Dual-channel DDR4 SO-DIMMs (system max. 32GB)
	Ethernet	LAN1: PCIe GbE by Intel I210 controller LAN2: PCIe GbE by Intel I211 controller	Realtek RTL8111CP PCIe GbE controller	Intel® WG82579LM GbE PHY	2 x PCIe GbE by Intel I210 controller
	Audio Codec	Realtek ALC892 audio codec	Realtek ALC888 audio codec	Realtek ALC892 HD audio codec	Realtek ALC892 audio codec
I/O Ports and Switches		M12 Type: 1 x 8-pin M12 connector for RS-232 1 x 8-pin M12 connector for RS-232/422/485 1 x 8-pin M12 connector for GbE LAN 2 x 8-pin M12 connector for USB2.0 x2 1 x 5-pin M12 connector for DC Jack (12~36V DC) Standard Type: 1 x DC Jack (12V-36V DC) 1 x DC in Terminal Block (12V-36V DC) 1 x HDMI 1 x VGA 1 x RS-232 (COM1 RJ-45) 1 x RS-232/422/485 (COM2 RJ-45) 2 x LAN 2 x USB 2.0 2 x USB 3.0	RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line out, Mic) VGA port (DB-15 connector) DC-IN 1 (terminal block) / DC-IN 2 (DC jack) Reset button AT/ATX switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT/ATX mode switch	2 x 8-pin M12 connector for RS-232/422/485 2 x 8-pin M12 X-Code connector for GbE LAN 2 x 8-pin M12 connector for 2*USB2.0 1 x 5-pin M12 connector for DC Jack (9-36V DC) 1 x Power switch with power led indicator 1 x Pressure relief valve
Drive Bay	HDD Driver Bay	1 x 2.5" SATA SSD bay	N/A	1 x 2.5" SATA SSD bay	SATA SSD
	SSD	1 x M.2 (B key 2242 with USB 2.0 and SATA signal)	CF Type II	mSATA (SATA 2)	1 x mSATA / 1 x M.2 B-key (2242/2260/2280)
Expansion Slot		1 x Full-size/half-size mini PCIe card slot (PCIe x1 and USB 2.0 signal)	PCIe Mini slot for Wi-Fi	1 x PCIe Mini slot	1 x Full size mini PCIe card slot (SATA 6G/s) 1 x Full-size/half-size (PCIex1 and USB 2.0 signal) 1 x B key M.2 slot (2242/2260/2280 with USB 3.0, PCIe x2 ,SATA signal)
System Cooling		Fanless	Fanless	Fanless	Fanless
Environment	Operating Temperature	-20°C ~ 60°C (without heater solution) -40°C ~ 60°C (with heater solution)	-20°C~60°C	-20°C ~60°C	-20°C ~ 50°C
	Storage Temperature	-40°C ~ 70°C	-40°C~85°C	-30°C ~70°C	-30°C ~ 60°C
IP Rating		Full IP65 or Full IP66 (with M12 connectors)	Full IP 65	Full IP 65	Front IP69K/ Others IP66

Marine Series

The maritime field faces critical environmental challenges, making reliable and rugged systems essential. IEI provides maritime professionals and marine-grade panel PCs and monitors and embedded box that use leading technologies and reliable designs which are perfect for applications on the dock, on the open deck, or in the control room or bridge.

ECDIS Implementation Schedule
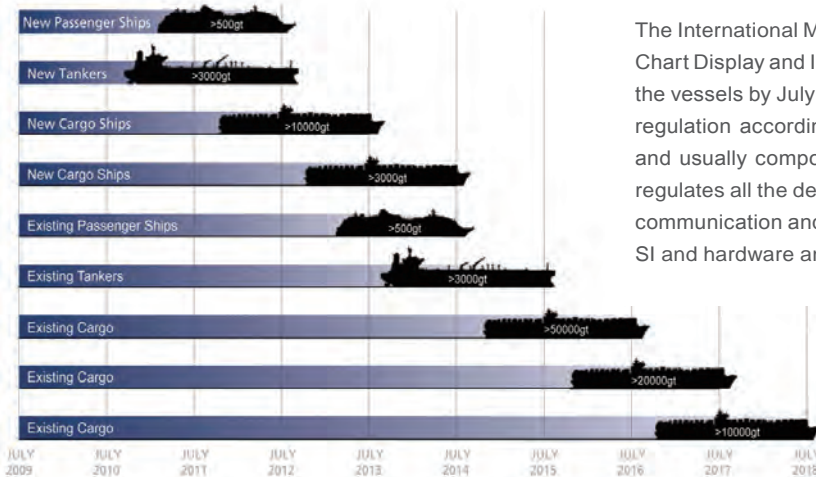
The International Maritime Organization (IMO) has announced that Electronic Chart Display and Information System (ECDIS) should be implemented into all the vessels by July 2018. Both new ships and existing ships should follow this regulation according to the timetable. The bridge systems are complicated and usually composed of multiple sub-systems. ECDIS clearly defines and regulates all the devices and connections, which include data collection, data communication and color calibration. Therefore, this is a huge opportunity for SI and hardware anufacturers.

Dynamic Position System (DPS)

Dynamic Positioning System (DPS) is a closed-loop control system. It is driven by the control system of the ship to counteract the environmental forces to the ship, such as wind, waves and ocean currents. This mechanism could make ship remain in the position on the sea. DPS precisely calculates the propellant force by continuously monitoring the ship position deviation and analyzing the natural forces which could affect ship's navigation direction. This process could make the ship remain in the correct position and maintain the right direction.

DPS is commonly used at various marine applications, such as subsea engineering work, underwater salvage, marine resources survey, marine engineering lifting, marine engineering umbilical laying, deep diving support, underwater engineering operations and marine engineering comprehensive test. DPS consists of measurement systems, control systems, power systems and propulsion systems, and other components. DPS possesses many functions which include maintaining the specified location, targeting, automatic searching for the best bow position, turning point tracking, ROV automatic tracking, changing the center of rotation, automatic navigation, parallel movement and other functions.
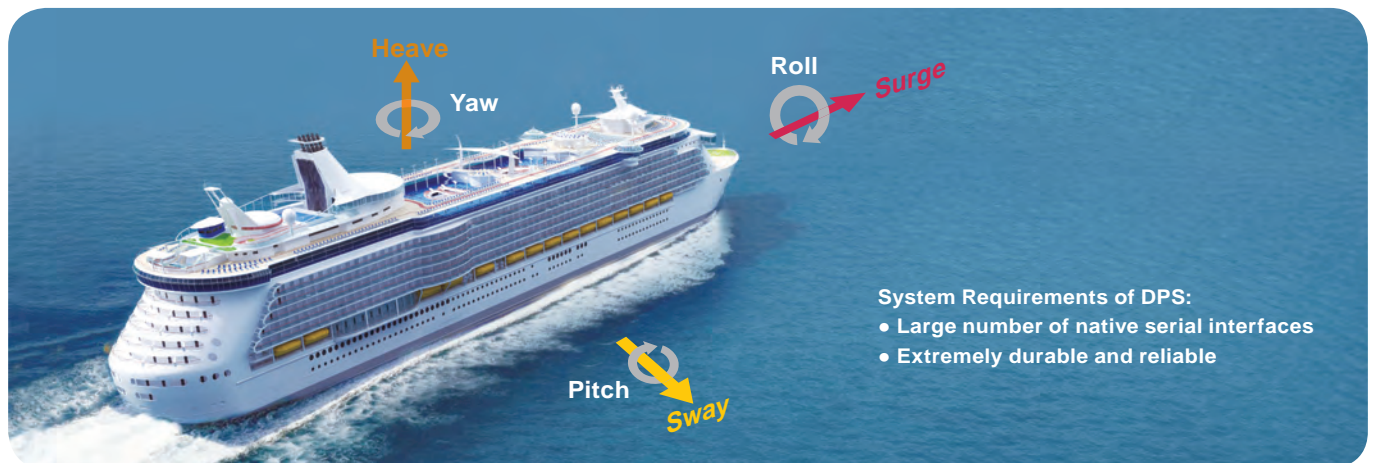
System Requirements of DPS:
● **Large number of native serial interfaces**
● **Extremely durable and reliable**

Signal Input
Signal Output

Since the composition of DPS contains many subsystems, a powerful and reliable computer system is needed for handling and analyzing the large number of data. Additionally, it must be able to communicate with multiple detectors, as receiving, analyzing and processing purposes. The SBOX series and the SxxA series marine systems equip up to six COM ports and two LAN ports which can be used to achieve the targets.

Electronic Chart Display and Information System (ECDIS)

The bridge system usually needs to collect and analyze many observation data, including anemometer stations, speed logs, weather stations and GPS signal. In order to precisely observe the changing walruses, the sensors are usually located at the top of ship or in the open deck. Therefore, with the long distance communication, these signals and communication paths should all follow specific regulation such as NEMA 0813. There are large amounts of data received at bridge, and they should be carefully processed and precisely analyzed. A powerful and reliable embedded box or panel PC is necessary for this task. IEI marine embedded box, the SBOX series, equips up to six COM ports which can be used to synchronously handle a large amount of data. The system of ship bridge consists of many sub-systems, which includes navigation system, path control system, radar system, etc. Most of them usually have dual system in order to prevent the failure of primary system. Additionally, dual system could also appear the identical information such as sea chart to the captain and pilot simultaneously. In practical application, dual or more LAN ports are necessary for connecting and controlling multiple monitors. The SBOX series and the S24A/S19A series contain six ports and two LAN ports to fulfill the requirements mentioned above.
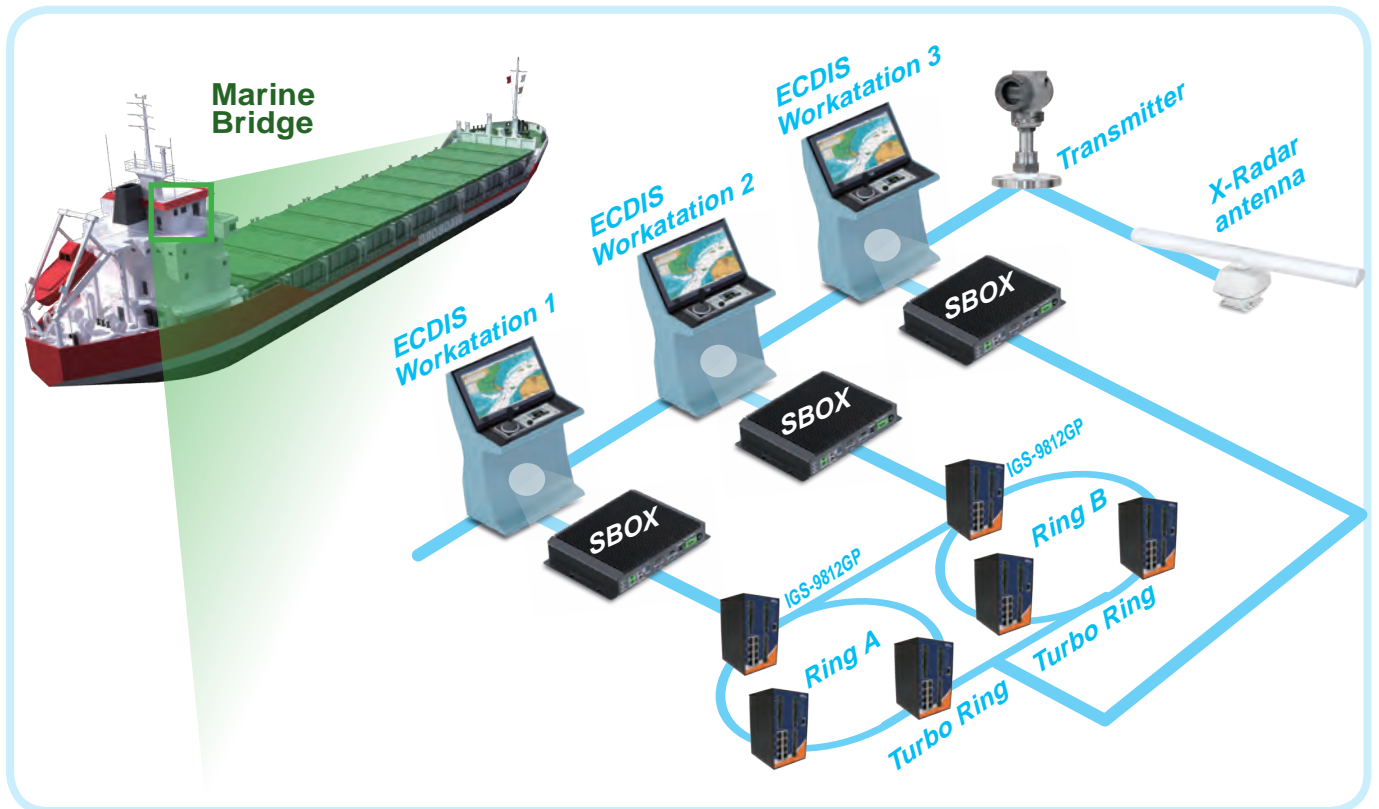
Marine Panel PC Series

S19A-QM87	Intel® Core™ i5 Dual-core Processor
S24A-QM87	Intel® Core™ i5 Dual-core Processor
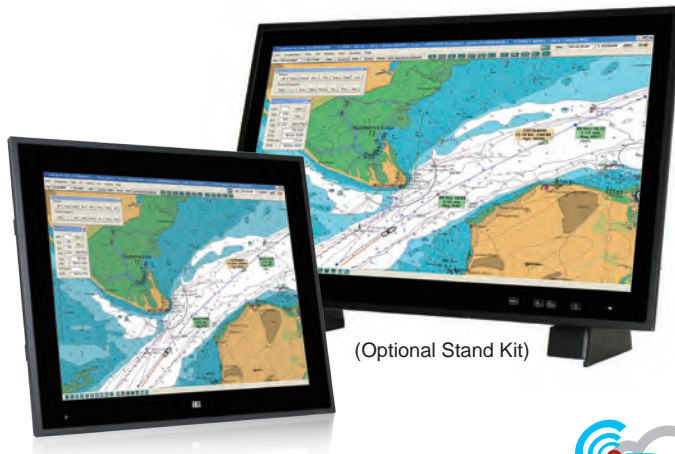
- **19" and 24" Fanless Panel PC with 4th Generation Intel® Core™ i5 Dual-core Processor**
- **-15°C ~ +55°C Wide Temperature and IP66 Protection with Flat-bezel Projected Capacitive Touchscreen**
- **Excellent Visual Performance**
  - Three independent displays
  - Full OSD function configuration
  - 0%~100% full range dimming
  - 178°/178° wide viewing angles
  - Optical bonding improves visibility under bright light (optional)
- **Isolation Protection**
  - RS-232/422/485 isolated serial ports
  - Isolated 18V ~ 36V DC input
  - 2 x Isolated CAN-bus 2.0B
- **iRIS Remote Management Module**

(Optional Stand Kit)

iRIS™
IPMI 2.0 Compliant DNV IEC 60945 IACS -E10 Fanless Triple Display Dual GbE
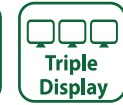
Specifications

Model		S19A-QM87	S24A-QM87
LCD	LCD Size	19"	24"
	Panel Type	PMVA	AMVA
	Max. Resolution	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000 : 1	5000 : 1
	Brightness (cd/m²)	300	300
	LCD Color	16.7M	16.7M
	Pixel Pitch (um)	294 x 294	276.75 x 276.75
	Viewing Angles (H-V)	178° / 178°	178° / 178°
	Backlight MTBF (HRs)	50000	50000
Touchscreen & Controller		EXC7920 (10-point), 6H	EXC7200 (2-point), 6H
System	SBC Model	SMB-QM87-R10	
	Chipset	Intel® QM87	
	CPU	Intel® 22nm 4th generation Mobile Core™ i5-4400E 2.7GHz processor	
	RAM	4GB 1600MHz DDR3 SDRAM (2GB*2) Two 204-pin 1600/1333 MHz dual-channel DDR3 SDRAM support up to 16GB	
Input Interfaces	I/O Ports & Switch	2 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved)	1 x Isolated 18V ~ 36V DC 3-pin terminal block 1 x Power button 1 x PS2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5 kv isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5 kv isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection)
	Expansion	2 x Full-size PCIe Mini slot, 1 x iRIS-2400 slot (iRIS remote management module)	
Ethernet Controller		GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller	
Sensor		Ambient light sensor (0% ~ 100%)	
OSD		Menu, brightness down, brightness up, LCD on/off by cap-sensor (graphics engine: Genesis STDP6038)	
Storage		2 x 2.5" SSD bay with RAID 0/1 function 1 x Accessible CFast socket	
LED Indicator		Power (power on: green; power off: orange)/storage (red, blinking)/IPMI (blue)	
Power Requirement		Isolated 24V DC (18~31.2 V DC), screw-type 3-pin terminal block	
Operating Temperature		-15°C ~ 55°C (5°F ~ 131°F)	
Storage Temperature		-20°C ~ 60°C (-4°F ~ 140°F)	
Humidity		5% to 95% RH	
Thermal Design		Fanless	
Watchdog Timer		Supports 1~255 sec. system reset	
Certifications		EMC: CE, FCC Safety: DNV, IEC 60945 4th, IACS-E10, IEC 61174 IP rating: IP66 compliant front panel and IP22 compliant rear cover	
Housing		Front aluminum sheet metal (Black C)	
Cut-out Dimensions (L x W)		442 mm x 373 mm	576 mm x 358 mm
Dimensions (L x W x H)		463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm
Net Weight (kg)		9.91	13.03
Gross Weight (kg)		13.38	17.19
Vibration and Shock		IEC 60945 / DNV 2.4 compliant / IACS-E10	
Power Supply (DC Input)		DC Input ATX Power Supply - P/N: 041D710-00-101-RS - 150W power supply - Input: 24V DC, 8-4A (max.) - Output (max.): 12V @13A	
Power Consumption		112W	117W

IEI Marine System

Packing List

Item	Q'ty	Remark
S19A-QM87 or S24A-QM87	1	
User Manual & Driver CD	1	Drivers and user manual
One Key Recovery CD	1	
Screw Pack	1	Including necessary screws
PS/2 Cable	1	Round cable; PS/2 cable
Wire Strain Band	3	Wire strain band

Ordering Information

P/N	Description
S19A-QM87i-i5/PC/4G-R10	19" 300cd/m² SXGA marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM, projected capacitive touchscreen, isolated 18-36V DC, iRIS-2400 supported, R10
S24A-QM87i-i5/PC/4G-R10	24" 300cd/m² FHD marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM, projected capacitive touchscreen, isolated 18-36V DC, iRIS-2400 supported, R10

Options

Item	Part No.	Description
Panel Mount Kit	PK-S19A-R10	For S19A
	PK-S24A-R10	For S24A
Desktop Stand	STAND-S24A-R10	For S19A & S24A
Ceiling Mount Kit	CEILMT-S24-R10	For S19A/S24A
HDMI Lockable Kit	HDMI-LK-R10	Universal HDMI Locking Adapter
iRIS Module	iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface

STAND-S24A-R10

CEILMT-S24-R10

Power Switch
2 x USB 2.0
HDMI
CFast Slot
DVI-D
GbE LAN 1
2 x CAN-bus 2.0B
Line-in
Line-out
Mic-in

24V DC
1 x PS/2
COM 1: RS-232
VGA
2 x USB 3.0
Combo RJ-45: GbE LAN 2 /IPMI
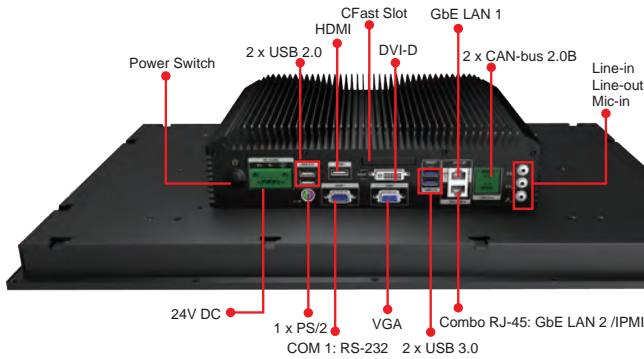
Four OSD Keys by Cap-sensor
(Menu, Brightness down, Brightness up, LCD on/off)
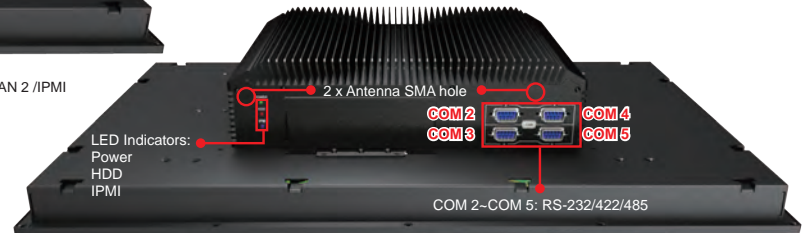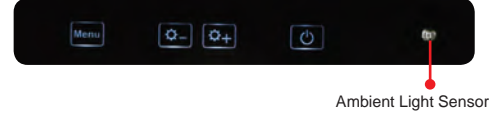
Menu

Ambient Light Sensor

2 x Antenna SMA hole
COM 2
COM 3
COM 4
COM 5

LED Indicators:
Power
HDD
IPMI

COM 2~COM 5: RS-232/422/485

S19A-QM87 Dimensions
(Unit: mm)

438.8
290
360
113
8
38
75
463
394
369.8
196.45
360
328
372.80
Suggested Cut Out Size
441.8

S24A-QM87 Dimensions
(Unit: mm)

571
140.50
592
113
38.80
65.25
76.50
13.50
30.50
170
170
170
374
353.80
200
13.50
575.60
Suggested Cut out Size 1:4
357.60

SBOX-100-QM87

Intel® Core™ i5 Dual-core Processor

Features

- Fanless marine computer with 4th Generation Intel® Core™ i5 dual-core processor
- -15°C ~ +55°C wide temperature
- Isolation protection
  » 4 x RS-232/422/485 isolated serial ports
  » Isolated 18 V~24 V DC input
  » 2 x Isolated CAN-bus 2.0B
- 2 x 2.5" SSD bay with RAID 0/1 function
- Supports IEI iRIS-2400 (IPMI 2.0 compliant)

QTS-Gateway | iRIS IPMI 2.0 Compliant | DNV | Fanless | CAN-Bus | Triple Display | Dual HDD

■ Intel® Core™ i5 High Performance Computing Power in a Fanless Design

IEI's high performance marine solutions are built with the powerful Intel® Core™ i5 CPU within a fanless system architecture. No matter your applications are general marine system management, monitoring or conning systems, radar systems, or ECDIS navigation, IEI's marine computers will give you the most stability than ever.

- Improved CPU performance with Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7 GHz processor
- Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16 GB

Next Generation Intel® HD Graphics with DX 11.1, OpenGL 4.x, OpenCL 1.2

Fully Integrated VR

3 Independent Displays High Resolution DP v1.2, HDMI 1.4a

X16 PCIe Gen3 | 3x4 DDI 1x4 eDP | Built-in 22 nm Processor

PCIe I/O | DMI | Display Ports | High Bandwidth Cache Memory | System Agent | IMC | 2ch DDR3 | Display | Core LLC | Core LLC | Core LLC | Core LLC | Processor Graphics GT2/GT1

Intel® Turbo Boost Technology

2 Ch DDR3L 1600 MHz 1/2 DIMM per Channel

Up to 4C and 8MB of Intel® Smart Cache

Intel® AVX 2.0 + Intel® AES New Instructions and Improvements

-15°C ~ 55°C FANLESS!

With IEI's fanless solutions, your vessels can avoid the bothersome of replacement of fan, increasing safety and efficiency for the crew and the entire ship.

Three independent aluminum heat sinks help the heat dissipate averagely, and help the system efficiently achieve wide operating temperature range between -15°C~55°C.

■ 3 independent displays: HDMI, DVI, and VGA

The three simultaneously independent displays are supported via the on-board video output combinations of VGA, DVI and HDMI. This versatile combination of display output options make the marine system ideal for multi-monitor required applications in the bridge room.

Display 1 — HDMI
Display 2 — VGA
DVI — Display 3
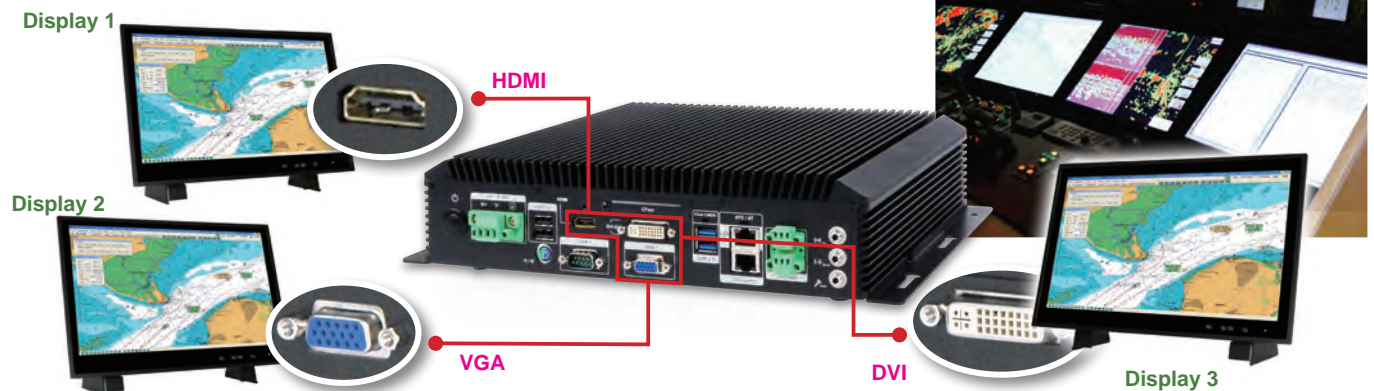
■ Multiple Isolated Ports for Comprehensive Protection against Electrical Surges

Ground loop and electric surges are common in the marine applications of electronic products due to the dense placement of devices. These stray electrical signals can cause equipment damage or malfunction.

■ 2.5 kV isolation protection on the RS-232/422/485

IEI marine computer is protected from any stray electrical signals from other devices on the ship. Electric surges that were generated from other electronic devices which often passed through serial lines to the marine computer can cause severe damage and malfunction to the computers.

■ Isolated 18 V~24 V DC power 2250 V DC Input to Output Basic Insulation

■ Two independent CAN 2.0B channels with 2.5 kV isolation protection

CAN 2.0B is a kind of marine electronic data network for communication between marine electronic devices such as chart plotters, navigation instruments, GPS receivers, etc.

Echo Sounder

AIS Receiver

Radar

Gyro

Multiple serial ports for connecting devices and sensors

Serial

Serial

S24A-QM87 Marine Panel PC

VGA/DVI/HDMI

Marine Display
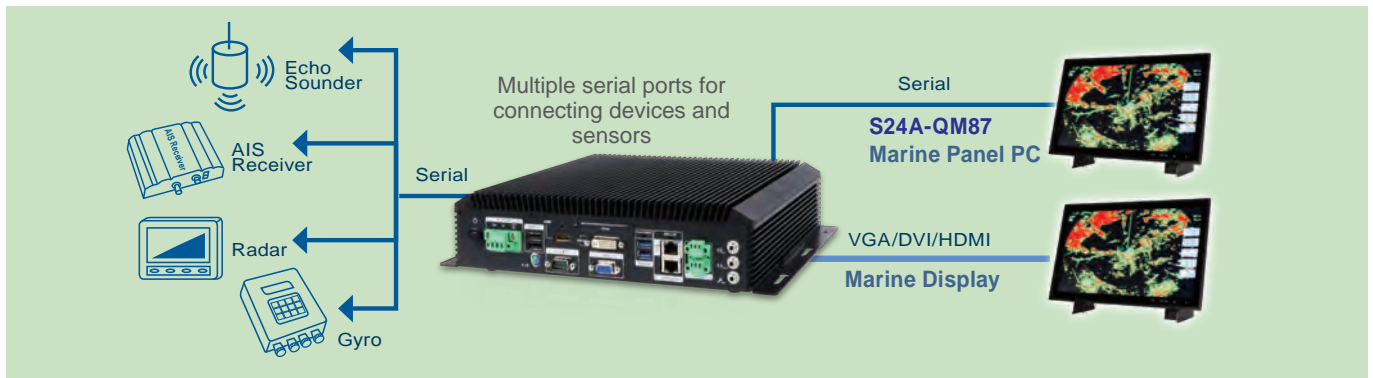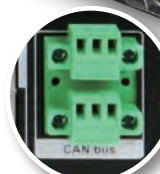
■ IEI Remote Intelligent Management System

The marine computer supports IEI iRIS remote management solution which helps users to manage multiple devices through single management interface and elevates work efficiency. The iRIS solution only requires a module and Internet connection!

iRIS™ IPMI 2.0 Compliant

iRIS So

Network

QNAP° NAS

Complete IoT Solution!
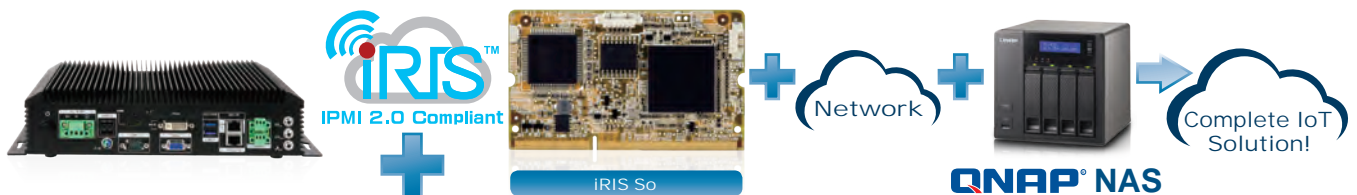
iRIS Key Feature	Detailed Functions	iRIS Key Feature	Detailed Functions
System health monitor	● Hardware monitor ● Health log ● Event log	Screen record	● Remote video streaming record ● Event Trigger Setting & video record
Remote system maintenance	● Remote BIOS update ● Remote OS recovery ● Remote KVM + One Key Recovery ● Remote out-off-band backup	Remote power control	● Reset Power ● Power Off Server — Immediately ● Power Off Server — Orderly ● Power On Server ● Power Cycle Server
Active alert & notice	● Send instant system alerts via e-mail ● Send instant system alerts via SMS ● Send instant system alerts to management server	Remote troubleshooting	● Remote software update ● Remote OS installation & recovery ● Remote KVM ● Post code display
Remote device control	● Fan control ● Remote KVM ● Remote setting BIOS	Diagnose before dispatch	● Health log analysis ● Event log analysis
		Group control	● Group control

Front view

LED Indicators:
Power, HDD, IPMI

COM 2~COM 5:
RS-232/422/485

COM 2 COM 3 COM 5 COM 4

Rear view

2 x USB 2.0   DVI   Reset

Power
Switch

HDMI   CFast   LAN 1

ATX/AT Mode

Line-in,
Line-out,
Mic-in

18 V~24 V DC   COM 1   2 x USB 3.0   2 x CAN-bus 2.0B

K/M   VGA   iRIS LAN 2
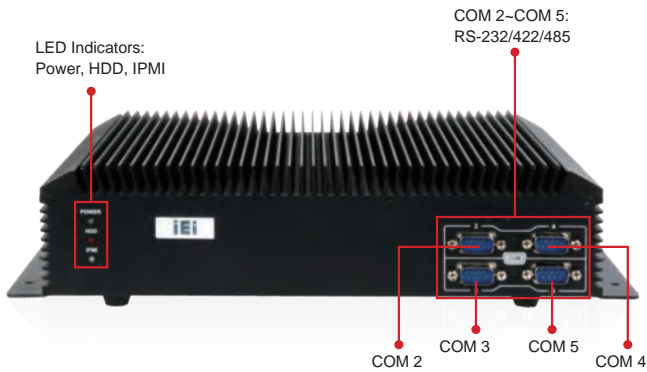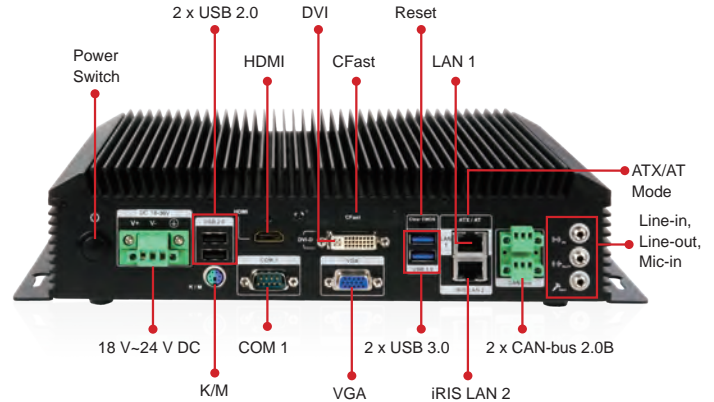
Specifications

Model Name		SBOX-100-QM87
Chassis	Color	Black
	Dimensions (WxHxD) (mm)	290 x 75 x 225
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloy
Motherboard	CPU	Intel® mobile Core™ i5-4400E (2.7 GHz, 37W)
	Chipset	Intel® QM87
	System Memory	2 x 204-pin DDR3 SO-DIMM slot (system max. 16 GB) Pre-installed 4 GB DDR3 SO-DIMM
IPMI	iRIS Solution	iRIS-2400
Storage	Hard Drive	2 x 2.5" SATA 6Gb/s SSD bay with RAID 0/1 function
	CF Card/CFast	1 x CFast
I/O Interfaces	PS2 (KB/MS)	1
	USB 3.0	2
	USB 2.0	2
	Ethernet	2 x RJ-45 with teaming support 1 x PCIe GbE by Intel® I217LM 1 x PCIe GbE by Intel® I210-AT (2 with 2 kV isolation)
	COM Port	1 x DB-9 (non-isolated) 4 x RS-232/422/485 (with 2.5 kV isolation)
	CAN-bus/OBD-II	2 x CAN-bus (with 2.5 kV isolation)
	Display	1 x VGA, 1 x DVI-D, 1 x HDMI
	Resolution	VGA: Up to 1920 x 1200 @ 60 Hz HDMI: Up to 2500 x 1600 @ 60 Hz DVI-D: Up to 2500 x 1600 @ 60 Hz
	Audio	1 x Line-out, 1 x Line-in, 1 x Mic-in
	Wireless	2 x Antenna SMA hole (reserved)
Expansions	PCIe Mini	2 x Full size*
LED Indicator & Button	Indicator	Power (power on: green, power off: orange), storage (red, blinking), IPMI (blue)
Power	Power Input	Terminal block: Isolated 24V DC (18~31.2 V DC)
	Consumption	100 W (Intel® mobile Core™ i5-4400E with 4 GB DDR3 memory)
Reliability	Mounting	Wall mount
	Operating Temperature	-15°C ~ 55°C (5°F ~131°F) with air flow (SSD)
	Storage Temperature	-20°C ~ 60°C (-4°F ~140°F)
	Humidity	5% ~ 95%, non-condensing
	Operating Shock	IEC 60945 and DNV 2.4 IASC-E10 compliant
	Operating Vibration	
	Weight (Net/Gross)	4.08 kg / 6.03 kg
	Safety/EMC	EMC/CE/FCC/DNV, IEC 60945 4th, IACS-E10, IEC 61174 compliant IP rating: IP22 compliant rear cover
OS	Supported OS	Microsoft® Windows® Embedded 8, Microsoft® Windows® Embedded Standard 7 E

*SBOX-100-QM87i-QGW-R10 has only one Half-size PCIe Mini slot

Dimensions (Unit: mm)
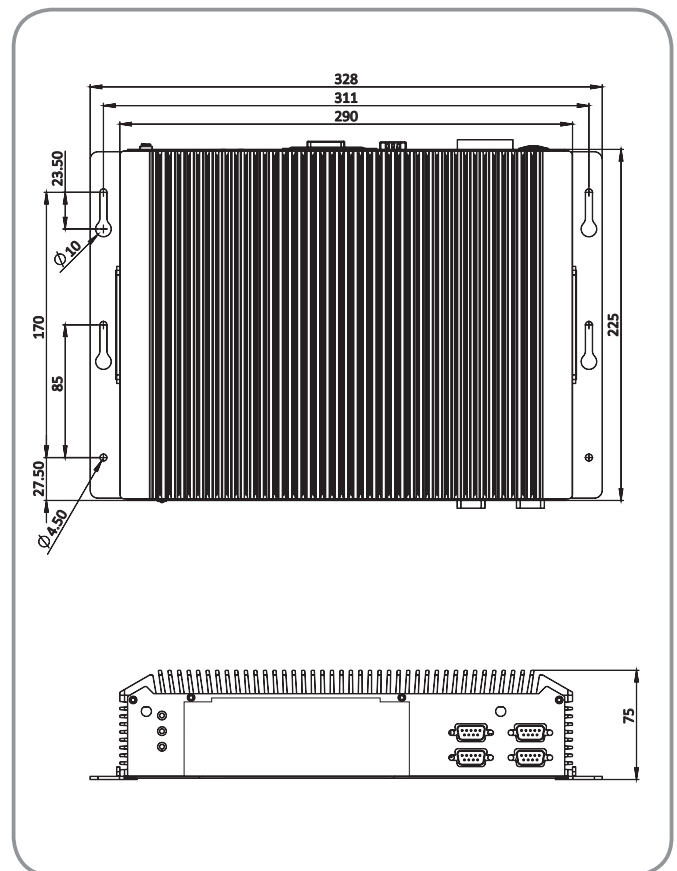
Ordering Information

Part No.	Description
SBOX-100-QM87i-i5/4G-R10	Fanless marine computer with Intel® Mobile Core™ i5-4400E 2.7 GHz processor, 4 GB DDR3 memory, iRIS-2400 supported, isolated 18 V~36 V DC, R10
SBOX-100-QM87i-QGW-R10	Fanless marine computer with Intel® Mobile Core™ i5-4400E 2.7GHz Processor, DDR3 8GB, iRIS-2400 supported, with QTS-Gateway, isolated 18~36V DC, RoHs

Packing List

Item	P/N	Qty	Description
User manual & driver CD		1	Drivers and user manual
PS/2 cable	32006-000300-100-RS	1	PS/2 cable
Rubber pad & screw pack		1	Rubber pad & screw pack

Marine Monitor Series

The marine monitor series possesses many sophisticated features that fit with practical marine environment, including front panel IP 66 dust- and water-proof level, wide-rang operating temperatures, multi-point capacitive touch, wide viewing angles and OSD control. Especially, optical bonding is a good choice for the use of high brightness environments. Versatile mounting ways offer customers flexible methods in accordance with different operating environments.

DNV **IEC 60945** **IACS -E10**

■ Optical Bonding Enhance Visibility (optional)

The lightness is a crucial factor to sailing safety. IEI provides an option for optical bonding between touchscreen and LCD panel. The light transmitting between various medias could produce reflection. Traditionally, there is an air gap between touchscreen and LCD panel, which could reflect light seriously. It could affect the sailing security tremendously. Adding optical bonding material between touchscreen and LCD panel can improve reflection effectively and increase brightness by 10%. Furthermore, it not only increases hardness of touchscreen but also reduces power consumption.

Improving the viewing experience
● Increase contrast ratio by 400% in sunlight
● Increase brightness by 10%
Increasing the display ruggedness
● Increase the falling ball impact resistance by up to 3 times
Reduced power consumption
● By reducing the light loss due to reflection

4%

Protective Overlay

4%
4%

	Air Gap	Optical Bonding Material

Display
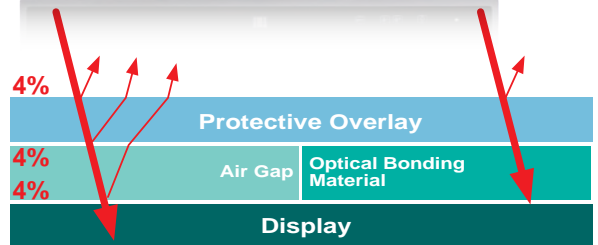
■ ECDIS (optional)

For industrial and commercial applications, color rendering accuracy and consistency are absolutely essential. The human eye is generally likely to be impacted by environment and misled presentation of colors in the brain. The maritime environment is much more ruggedized compared with general industrial environment. The requirements for the degree of light and dark and color of accuracy are more stringent. Color calibration technology ensures that monitor would effectively show the largest accuracy and minimum deviation of artificial color. IEI marine monitors and panel PCs follow the IEC 61174 ECDIS regulation. It is performed by monitoring up to N checkpoints and measuring the color and brightness of the display. After precisely calculating and highly reliable calibrating, the profile matrix will be stored in the firmware of monitor. The monitors (PPCs) compliant with ECDIS specifications will provide a more safe and secure maritime environment.

ECDIS

IEC.
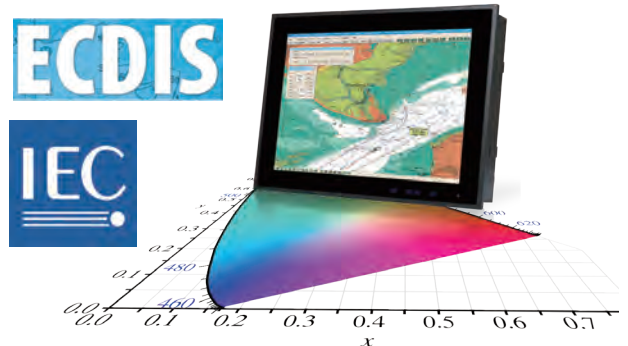
■ Adjustable LCD Brightness and Auto-Dimming Available

The auto-dimming function could slightly modify LCD brightness according to ambient light. To consider the safety of navigation and operators' eye comfort, both LCD brightness and OSD brightness are designed to be programmable.

■ OSD Control on Front Panel

On Screen Display (OSD) offers customers a quick way to modify the LCD brightness. In contrary to traditional tuner, the full flat OSD design not only features beautiful outward appearance but also improves the shortcoming of dust accumulation in physical button.

■ Lockable HDMI Cable Support (optional)

The lockable HDMI cable design not only increase reliability but also reduces the possibilities of accidental human errors. Therefore, important information could be displayed continuously.

■ 6H Multiple Projected Capacitive Touchscreen

The IEI marine products provide capacitive multi-touch up to 10 points (2-point on 24" model). In practical applications, 10-point touch can simulate engine button and pump switch so that there will be less real buttons. This can enhance the reliability of marine infrastructure.

MOH's Hardness Rating

Typical Panel	Fingernail	Knife	Steel	Quartz	Beryl	Diamond
2H	3H	5H	6H	7H	8H	10H
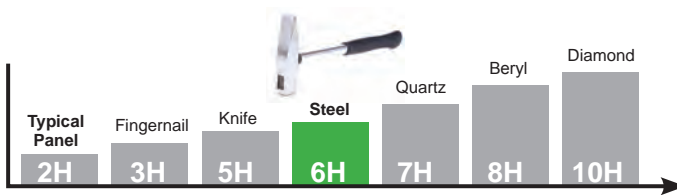
6H 10-point Touch for S19M　　**6H 2-point Touch for S24M**

■ Picture-in-Picture (PIP) Function & Surveillance Application

Picture-in-Picture function offers high efficiency to surveillance. You can monitor the radar information and observe surveillance video simultaneously. Simply connect BNC camera to BNC input port and link DVR to BNC output port. Therefore, you can monitor and record at the same time, and the record can be saved for further use.

Bridge Control

BNC Camera

PIP Matching Table

		Main Channel				
		VGA1	VGA2	DVI1	DVI2	CVBS1
Sub Channel	VGA1	X		X	X	X
	VGA2		X	X	X	X
	DVI1	X	X	X		X
	DVI2	X	X		X	X
	CVBS1	X	X	X	X	X

■ Reliable Power System

There are usually two systems - one master for use, and one slave for backup. IEI provides isolated redundant power, which means you will have separate power inputs, including AC source and DC source. When AC source is terminated, the DC source will continue to supply power to the device.

Isolated Redundant Power
AC power for main source
18 V~36 V DC for UPS power

AC Power Input

External Lead-acid Battery
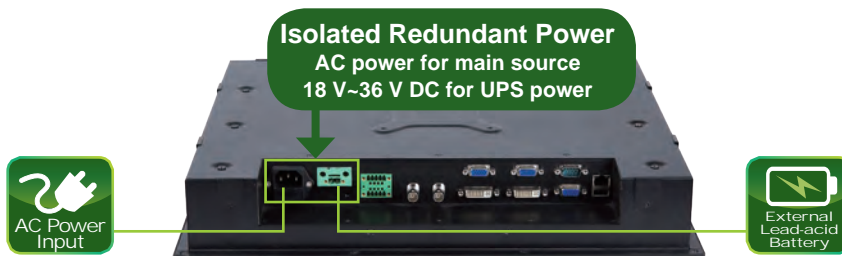
■ Dual Video Input Support

The IEI marine products equips with two VGA inputs and two DVI inputs. VGA is designed for the old ships while DVI is designed for the new ones. Additionally, in order to prevent failure of the main system, dual video input design is provided for much more reliability. Hence, operation will not be terminated due to switching between systems

VGA/DVI Input
● VGA for Old Boats
● DVI for New Boats

Dual Video Input Support
Redundant VGA & DVI

A System

B System (Backup)

■ Independent Video Output Support

VGA output port features display cascade function, providing a convenient way to duplicate display signal. This function helps customers to connect devices quickly and easily.

■ Daisy Chain OSD Remote Control

It is essential to show the same displays to captains and pilots through the monitors which are usually cascaded at the ship bridge. The marine monitor equips both VGA input and VGA output. By connecting the VGA-out of the first monitor to the VGA-in of the second monitor, the IEI marine monitors feature group display with maximum up to 16 screens in the group. To comply with the ECDIS regulation, adjusting the brightness and contrast on all monitors at the same time is necessary, and this can be achieved through the Ethernet or serial COM ports. LAN is used to communicate in long distance in the group; as for short distance, COM port is the best choice. The LAN port can also be used for updating firmware and maintaining service.

LAN   **Up to 16 Units**

Access Point

SBOX

SxxM   **SxxM**   **SxxM**

VGA to deliver image ➡   **RS-422/485** ➡   **RS-232** ➡   **LAN** ➡
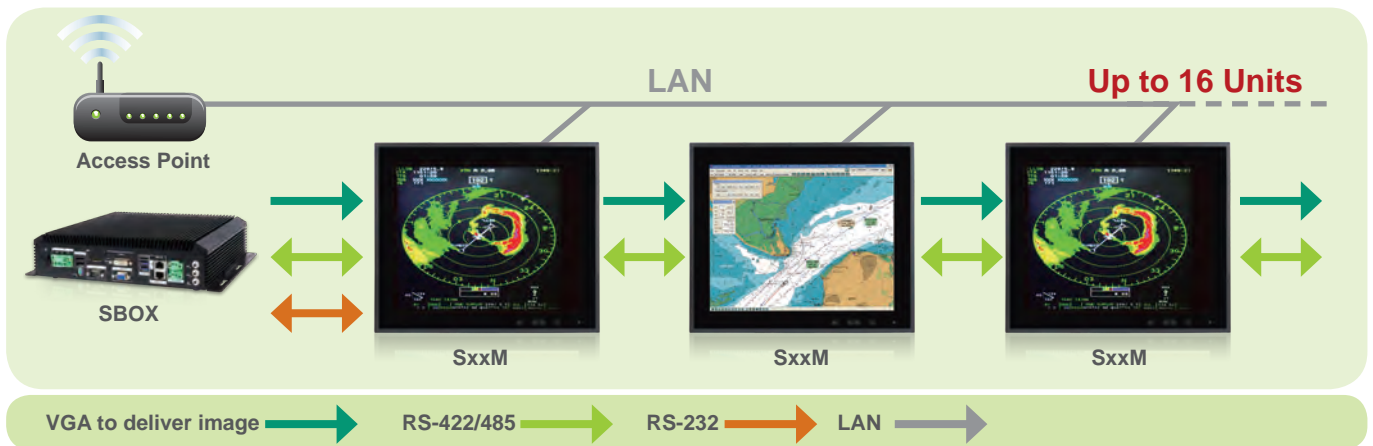
■ Versatile Mounting Methods (optional)

Versatile mounting methods provide customers a secure way to settle the instrument. We provide three different mounting kits for customers, which include stand, ceiling mount kit and panel mount kit.

Stand Alone   **Ceiling Mount**   **Panel Mount**

IMS
IEI Marine System

Marine Monitor Series

S19M	19" IP66 Marine Monitors
S24M	24" IP66 Marine Monitors

Features

- **IP66 Front / IP22 Rear**
- **-15°C ~ +55°C Wide Temperature and Flat-bezel Projected Capacitive Touchscreen**
- **Excellent Visual Performance**
  - Full OSD function configuration
  - 0%~100% full range dimming
  - 178°/178° wide viewing angles
- **Multiple Video Input**
  - Two VGA, two DVI, and one BNC
- **Multiple Video Output**
  - One VGA and one BNC
- **Dual Isolated AC/DC Input with Redundant Power Protection**
- **Remote OSD Settings through LAN, RS-232, RS-422 and RS-485**

DNV   IEC 60945   IACS -E10   Fanless

Specifications

Model		S19M	S24M
LCD	LCD Size	19"	24"
	Panel Type	PMVA	AMVA
	Max. Resolution	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000 : 1	5000 : 1
	Brightness (cd/m²)	300	300
	LCD Color	16.7M	16.7M
	Pixel Pitch (um)	294 x 294	276.75 x 276.75
	Viewing Angles (H-V)	178° / 178°	178° / 178°
	Backlight MTBF (HRs)	50000	50000
Touchscreen & Controller		EXC7920 (10-point), 6H	EXC7200 (2-point), 6H
Scalar Chip		STDP8028	
I/O Ports		• DVI-D Signal Input: 2 x DVI (24-pin, female) • VGA Signal Input: 2 x D-sub (15-pin, female) • VGA Signal Output: 1 x D-sub (15-pin, female) - Clone of VGA IN* • Composite Video Input: 1 x BNC connector (female) Composite Video Output: 1 x BNC connector (female) • RS-232/422/485 for Remote control (non-isolated) • Touchscreen: 1 x USB Type A connector (female) • Ethernet: 1 x RJ-45 connector for remote control • Isolated AC Power Inlet: 100V~240V AC • Isolated DC Terminal Block: 18V~36V DC • 1 x Buzzer	
PIP		Yes	
OSD Button		P-CAP button (LCD on/off, Menu, Auto, Up, Down, Left, Right)	
LED/Sensor		Ambient light sensor (0%~100%)	
Power Requirement		Multi-power Supply: Isolated AC Power: 100-240V, 2-1A, 50-60Hz Isolated DC Power: 18-36V, 8-4A	
Operating Temperature		-15°C ~ 55°C	
Storage Temperature		-20°C ~ 60°C	
Humidity		5% to 95% RH	
Thermal Design		Fanless	
Housing		Aluminum front , sheet metal back (Black C)	
Cut-out Dimensions (W x L)		442 mm x 373 mm	576 mm x 358 mm
Dimensions (W x L x D)		463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm
Mounting		VESA 100mm x 100mm	VESA 100mm x 100mm
Net Weight (kg)		7.74	11.48
Gross Weight (kg)		11.54	15.97
Approvals		EMC: CE, FCC	
		Safety: DNV, IEC 60945 4th, IACS-E10	
		IP Rating: IP66 front, IP22 rear	

Ordering Information

PN	Description
S19M-AD/PC-R10	19" SXGA 300cd/m² marine display with AC and DC redundant power, PCAP touchscreen, R10
S24M-AD/PC-R10	24" FHD 300cd/m² marine display with AC and DC redundant power, PCAP touchscreen, R10

Options

Item	Part No.	Description
Panel Mount Kit	PK-S19M-R10	For S19M
	PK-S24M-R10	For S24M
Desktop Stand	STAND-A21-R10	For S19M & S24M

Packing List

Item	Q'ty	Remark
User Manual & Driver CD	1	Drivers and user manual
VGA	1	VGA signal cable
DVI	1	DVI signal cable
USB	1	USB touchscreen cable
Power Cord	1	Power cord
S19M or S24M	1	

S19M
Fully Integrated I/O

18V~36V DC Input · Buzzer · BNC Out · 2 x VGA · RS-232 · RJ-45 Network

100V~240V AC Input · RS-422/485 · Grounding Screw · BNC In · 2 x DVI In · VGA Out · USB Touch

S24M
Fully Integrated I/O

18V~36V DC Input · Buzzer · BNC Out · 2 x VGA · RS-232 · RJ-45 Network

100V~240V AC Input · RS-422/485 · Grounding Screw · BNC In · 2 x DVI In · VGA Out · USB Touch

S19M Dimensions
(Unit: mm)

Suggested Cut Out Size

S24M Dimensions
(Unit: mm)

Suggested Cut out Size

1:4

UPC Series

UPC-F12C-ULT3

Intel® Core™ i5 and Celeron® ULT Processor

NEW

5 YEARS
5-YEAR SUPPLY GUARANTEE

Features

- 12.1" fanless panel PC with Intel® Skylake ULT processor
- IP66 6-side protection with M12 connector I/O cover
- IP65 6-side protection with standard cable I/O cover
- Built-in wireless 802.11 a/b/g/n/ac and Bluetooth V4.0
- Operating temperature : -20°C ~ 60°C
- Flat glass PCAP touch with 6H hardness, resistive touch window

Fanless | Wireless 802.11b/g/n | Touchscreen | IP66 | -40°C~60°C | Redundant Dual DC

Specifications

Model		UPC-F12CM-ULT3	UPC-F12C-ULT3
Display	LCD Display	12.1"	
	Max Resolution	1024(W) x 768(H)	
	Brightness (cd/m²)	600	
	Contrast Ratio	700:1	
	LCD Color	16.2M	
	Pixel Pitch (mm)	0.24(H) x 0.24(V)	
	Viewing Angle (H-V)	160º / 140º	
	Backlight MTBF (Hrs)	50,000	
Motherboard	CPU	6th generation Intel® Core™ i5 and Celeron® ULT processor	
	RAM	1 x 260-pin 2133/1867 MHz single-channel DDR4 SO-DIMMs (system max. 32GB)	
	Audio Codec	Realtek ALC892 HD Audio codec	
	Ethernet	LAN1: PCIe GbE by Intel® I210 controller LAN2: PCIe GbE by Intel® I211 controller	
Touchscreen		P-CAP / Resistive Touch	
Input Interfaces	I/O Ports & Switch	M12 Type: 1 x 8-pin M12 connector for RS-232 1 x 8-pin M12 connector for RS-232/422/485 1 x 8-pin M12 connector for GbE LAN 2 x 8-pin M12 connector for two USB 2.0 1 x 5-pin M12 connector for DC jack (12V~36V DC)	Standard Type: 1 x DC jack (12V-36V DC) 1 x DC-in terminal block (12V-36V DC) 1 x HDMI 1 x VGA 1 x RS-232 (COM1 RJ-45) 1 x RS-232/422/485 (COM2 RJ-45) 2 x LAN 2 x USB 2.0 2 x USB 3.0
Expansion		1 x Full-size/half-size PCIe Mini card slot (PCIe x1 and USB 2.0 signals)	
Connectivity	Wi-Fi & BT	802.11 a/b/g/n/ac + Bluetooth v4.0	
	RFID	Reserved RFID antenna area (optional)	
Storage		1 x 2.5" HDD bay	
		1 x M.2 (B key 2242 with USB 2.0 and SATA signal)	
Physical	Construction	Aluminum die-casting	
	Mounting	VESA 100mm x 100mm	
	Dimensions (W x L x D) (mm)	316 x 279 x 67	
Environment	Operating Temperature (with air flow)	-20°C ~ 60°C (without heater solution) -40°C ~ 60°C by project base	
	Storage Temperature	-20°C ~ 70°C	
	IP Level	Full IP65 or Full IP66 (with M12 connectors)	
	Safety	CE / FCC	
Power	Power Adapater	P/N : 63000-CLG6012IC-RS; 60W, 90VAC~264VAC input, 12V DC output (optional)	P/N: 63040-010060-110-RS ; 60W, 90VAC~264VAC input, 12V DC output ,Waterproof Connector(IP67)
	Power Requirement	Power 1: 12V ~ 36V (terminal block)	
		Power 2: 12V ~ 36V (DC jack)	

Ordering Information

M12 Type

Part No.	Description
UPC-F12CM-ULT3-C/R/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, M12 I/O, R10
UPC-F12CM-ULT3-C/PC/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, M12 I/O, R10
UPC-F12CM-ULT3-i5/R/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, R10
UPC-F12CM-ULT3-i5/PC/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, R10

Standard Type

Part No.	Description
UPC-F12C-ULT3-C/R/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, R10
UPC-F12C-ULT3-C/PC/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, R10
UPC-F12C-ULT3-i5/R/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, R10
UPC-F12C-ULT3-i5/PC/4G-R10	12.1" 600cd/m² XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, R10

Packing List

Item	P/N
Power Cable	32000-127500-RS (for M12 Type) 63040-010060-110-RS (for standard Type)
Touch Pen	Resistive type only
Utility CD	
One Key Recovery CD	

Options

Item	P/N
Arm	ARM-11-RS
Stand	STAND-A12-RS STAND-C12-R10
MIFARE RFID Kit	UPC-F-MF-RFID-KIT01-R10 (ATO only)

Optional Cables and Adapter

Item	P/N
USB Cable	CB-M12USB02-R10
RJ-45 LAN Cable	CB-M12RJ45-R10
DB-9 COM Port Cable	CB-M12COM-R20
Water-proof Power Adapter	63000-CLG6012IC-RS

USB cable
(CB-M12USB02-R10)

RJ-45 LAN cable
(CB-M12RJ45-R10)

DB-9 CAN-bus and
AUDIO line-out cable
(CB-M12ACAN-R10)

Water-proof Power Adapter
(63000-CLG6012IC-RS)

I/O Interface

Power 2 (Terminal Block 12V~36V)   HDMI   2 x USB 2.0

Power 1 (DC Jack 12V~36V)   COM 1, COM 2   VGA   LAN 1, LAN 2   2 x USB 3.0
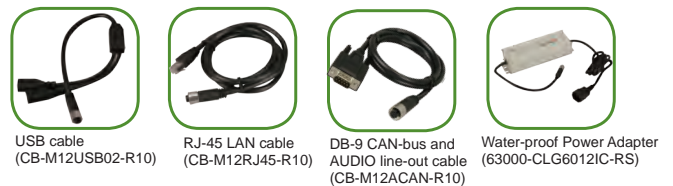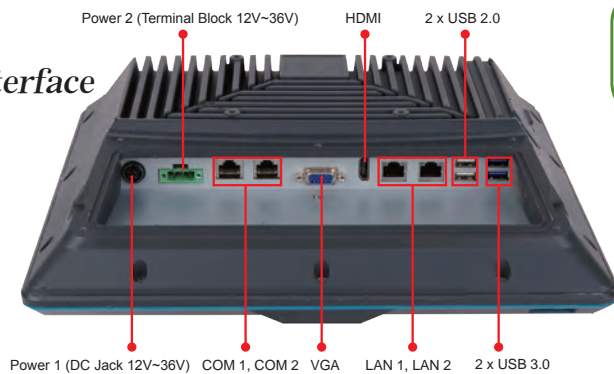
UPC-F12C Dimensions (Unit: mm)

315.64
245.76
184.32
278.64
66.50
100
100
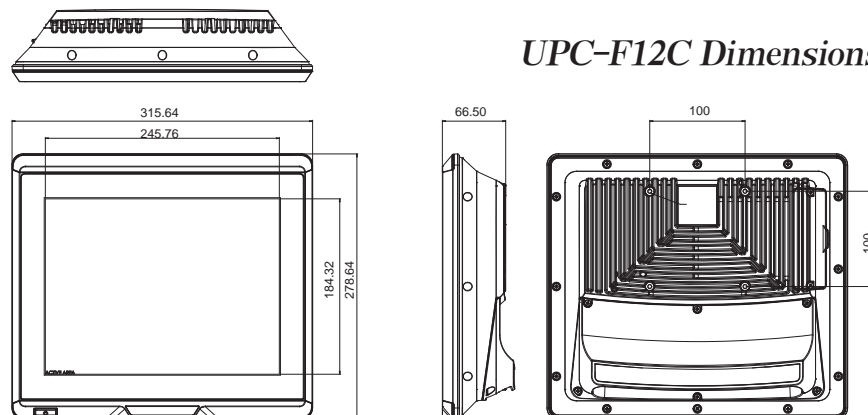
UPC Series

UPC-V315-QM77

Intel® Mobile QM77 Express Chipset

Features

- Intel® Ivy Bridge mobile chipset
- 15" 400 nits 1024 x 768 LCD with LED backlight
- Full IP 65 compliant die-casting aluminum chassis
- PCIe Mini card expasion
- Dual-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- ACC power support
- Dual-band 2.4/5 GHz Wi-Fi 802.11a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G HSUPA USB dongle
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-megapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- F1 ~ F10 function keys with customization options

| Fanless | Wi-Fi Wireless 802.11b/g/n | Touchscreen | Camera | Speakers | IP65 | -20ºC~60ºC | Redundant Dual DC |

Various Connection Options

The UPC-V315 provides different kinds of communication interfaces, such as LAN/ WLAN/3G/GPS/Bluetooth/RFID, which maximize flexibility of system integration and ensure seamless workflow.

GPS Antenna ● — — — — ● 3G USB Dongle

Bluetooth Antenna ● — — — — ● Wi-Fi Antenna

— — — — ● RFID Antenna

RFID

F1-F10 Function Keys ● — — — —
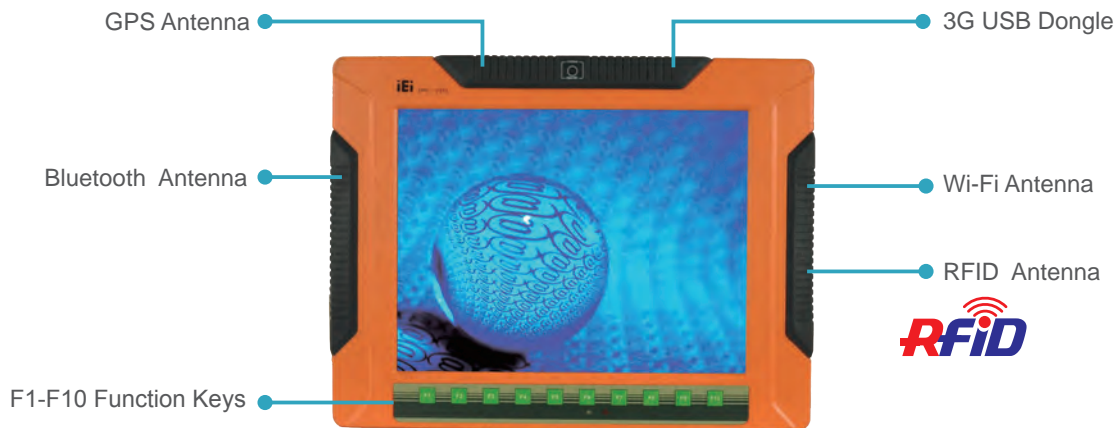
Connection Feasibility

Dual-Band 2.4/5 GHZ Wi-Fi

Dual-band 2.4/5 GHz 802.11a/b/g/n 3T3R MIMO design with up to 450 Mbps speed

3.75G HSUPA (optional)

Comparing to wireless network, 3.75G HSUPA has higher mobility with long-range mobile communication and no hotspot limitation. It is also able to connect to the Internet in real time.

Bluetooth V2.1+EDR (optional)

Connect peripheral devices with Bluetooth, such as earphone, scanner, etc.

GPS (optional)

Travel navigation, real-time locating and path tracking

Robust Mechanical Design

The UPC-V315 is fully IP65 protected with aluminum chassis and water proof rubber gaskets. It also supports wide operating temperature from -20°C to 60°C.

-20°C ▬▬▬▬▬ **60°C**

Note: Power adapter supports operating temperature 0°C to 40°C.

PCIe Mini Card Expansion

A. 3T3R Wi-Fi Module

UPC-V315 supports IEEE 802.11a/b/g/n 3T3R Wi-Fi module, enhancing the transmission speed and coverage.

T: Transmitter
The number T is absolutely relative with speed, 1T up to 150Mbps, 2T up to 300Mbps, 3T up to 450Mbps.

R: Receiver
The number R is relative with receiving dead angle and distance. The higher R is, the wider the receiving range.

450 Mbps
300 Mbps
3T3R
150 Mbps
2T2R
8x
6x
1T1R
4x
54 Mbps   1x
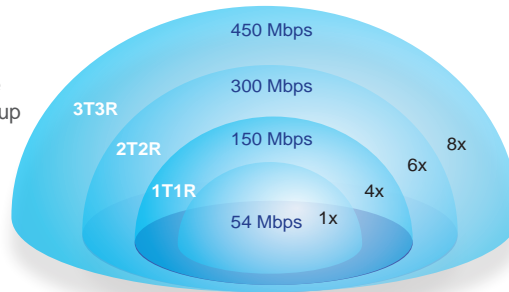
B. Solid State Disk mSATA

mSATA is compact, rugged, and much faster than traditional HDD, which is suitable for harsh environment.

C. 4-Channel Capture Card

The UPC-V315-QM77 supports 4-channel video capture solution via PCIe Mini card, which can easily integrate IP camera for surveillance and real-time video streaming.

QM77 Only

IVCME-C604

+

Forklift Management   **Slaughter House Factory**   **Flower Market Management**

CAN-bus Interface with Isolation

The Control Area Network (CAN) is a serial bus system. The UPC-V312 on-board CAN controllers provide bus arbitration and error detection with automatic transmission repeat function. This drastically reduces the chance of data loss, ensures system reliability, and is suitable for network intelligent I/O devices such as sensors or actuators of machines or plants.

Motor   **Motormeter**

CAN-bus

ABS
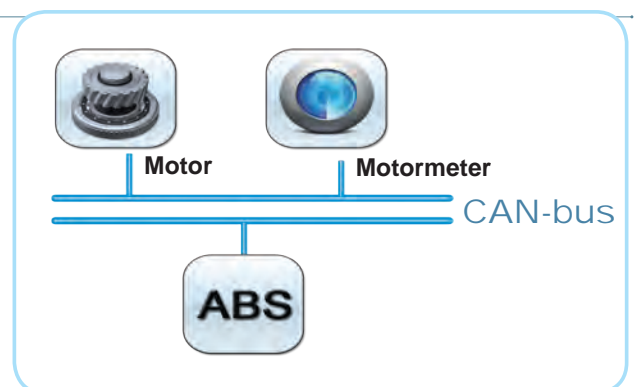
1. **Isolated protection voltage 2500V/min DC protection**
2. **Typical transient immunity 50 kV/ms ESD protection**

Smart UPS Backup Power

The UPC series products support IEI AUPS products to ensure stable power input.

● **Network Remote Management Anywhere**

AUPS IP address

● **Network Remote Management Software**

Battery Capacity Status

Power On/OFF

Email Status Report

IEIUPS!

UPS Status Monitoring

Remote control DC output ON/OFF via web interface.

● **Intelligent Software Utility**

The remote management software utility and application program allows users to easily get the status of the AUPS and to control the AUPS power functions from anywhere with Internet connection.

Click ALARM to get each AUPS status via internet

Network Remote Management Software

• STATUS
• Send E-mail
• Board configuration

AUPS Local USB Utility Tool

Battery Monitoring Utility

Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility allows AUPS status monitoring and configuration ability. Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event

Battery Monitoring Utility
Networking Remote Management

• Battery detection
• Battery capacity status
• Battery charge
• DC Input Indicator
• Battery Indicator
• Temperature warning
• Low battery alarm
• Connection port status

DC Input only

Charging 50%

Charging 100%

Normal Icon

Capacity 50%

Capacity 100%

BATTERY STATUS
• BAT.A shows Battery status real time monitoring
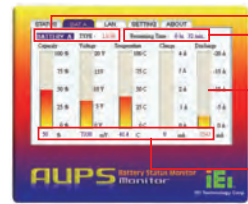
Battery type
Battery usage remaining time

Battery capacity bar

Real time information updating

AUPS STATUS
• STATUS shows DC / Battery power input

DC Input Detection
Battery Status Detection
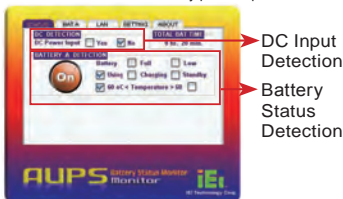
LAN CONFIGURATION
• LAN shows system IP Address information

ABOUT
• shows AUPS Utility information

SETTING
• SETTING shows Connection Detection port

Auto Shutdown

Auto-Scan Connection port

System shuts down condition by battery capacity setting
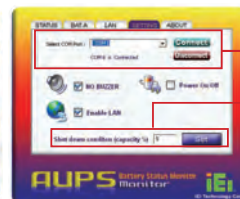
Meanwhile, IEI also provides AUPS API SDK and command list for customer programming under DOS or Linux system.

AUPS API Content

Inti()
AUPS Close()
WriteCommand()
ReadCommand()
Error Code Definition()

AUPS API SDK

AUPS API.pdf
AUPSAPI.dll
AUPSAPI.h
AUPSAPI.lib

Linux

Specifications

Model		UPC-V315-QM77
Display	LCD Size	15 "
	Max. Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	400
	Contrast Ratio	700:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	125°/ 140°
	Backlight MTBF (hrs)	50000
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	CPU	Intel® Celeron® 1047UE processor Intel™ Core™ i7-3517UE processor Intel® Core™ i3-3217UE processor
	Chipset	Mobile Intel® QM77 Express Chipset
	RAM	Buitl-in one 2 GB DDR3 memory (system max. 8GB: on board max. 4GB, socket max. 4GB)
	Ethernet	Intel® WG82579LM GbE PHY
	Audio Codec	Realtek ALC892 HD audio codec
I/O Ports and Switches		3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out, MIC) 1 x DC jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT/ATX mode switch
System	Audio	AMP 3W + 3W (internal speaker)
	Camera	2-megapixel
Connectivity	Wireless	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified
	Bluetooth	Bluetooth V2.0+EDR with USB interface (optional)
	3G	Reserved USB connector (optional)
	GPS	FV-W9U (optional, internal USB header)
Drive Bay	HDD Driver Bay	1 x 2.5" SATA SSD bay
	SSD	mSATA (SATA2 signal)
	CD-ROM Driver Bay	N/A
Expansion Slot		1 x PCIe Mini card
System Cooling		Fanless
Physical	Construction Material	Aluminium alloy
	Mounting	VESA 100mm x100mm or 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Pantone 15C)
	Dimensions (WxHxD) (mm)	427.19 x 330.63 x 77.06
	Net Weight	7.97 kg
Environment	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C
	Operating Humidity	5% ~90%, non-condensing
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	Vibration	MIL-STD-810F 514.5C-1 (with SSD)
	IP Rating	Full IP 65
Power	Adapter	90 W ; 63040-010090-101-RS
	Requirement	Power 1: 9V~36V(+/-0.3V) Power 2: 10.5V~36V(+/-0.3V)

Ordering Information

P/N	Description
UPC-V315-QM77-C/R/2G-R20	15" 400cd/m² XGA fanless full IP65 panel PC with mobile Intel® QM77 Express Chipset and Intel® Celeron® dual-core 1047UE processor (2M cache, 1.40 GHz), TDP 17W, 802.11a/b/g/n wireless module, resistive touchscreen, 2M camera, microphone, 2GB DDR3 RAM, R20
UPC-V315-QM77-i3/R/2G-R20	15" 400cd/m² XGA fanless full IP65 panel PC with mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE processor, 802.11a/b/g/n wireless module, resistive touchscreen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R20
UPC-V315-QM77-i7/R/2G-R20	15" 400cd/m² XGA fanless full IP65 panel PC with mobile Intel® QM77 Express Chipset and Intel® Core™ i7-3517UE processor, 802.11a/b/g/n wireless module, resistive touchscreen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R20

Packing List

Item	P/N	Q'ty
Utility CD		1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	4
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket	41003-0433C2-00-RS	2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010090-101-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

Options

Item	P/N
Arm	ARM-31-RS
Wall Mounting Kit	AFLWK-19B
Stand	STAND-C19-R10/STAND-100/STAND-210
EM RFID Kit	UPC-EM-RFID-KIT01-R10
Mifare RFID Kit	UPC-MF-RFID-KIT01-R11
OS: Win XPE (CD-ROM)	UPC-V315-XPE-R10
OS: Win 7 Embedded (DVD-ROM)	UPC-V315-W7E-R10

IO and Human Machine Interface
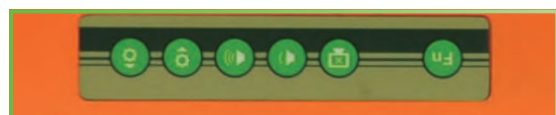
Fn — Fn

Backlight On/Off

Audio -

Audio +

Brightness -

Brightness +

Fn + — RFID enable / disable

Fn + — Audio mute

Fn + — Camera enable / disable

Fn + — Right side USB enable / disable

Fn + — Power on / off

GbE LAN
Line Out
MIC
USB 3.0 (UPC-V315-QM77 Only)
USB 2.0
AT/ATX
CLR CMOS
ACC
DC Jack
Terminal Block
HDMI
VGA
CAN-bus
RS-422 / RS-485
RS-232

Dimensions (Unit: mm)

M5*8

427.19
424.53
329.53
330.63
77.06
10
168.8
100
75
75
100
M8*8
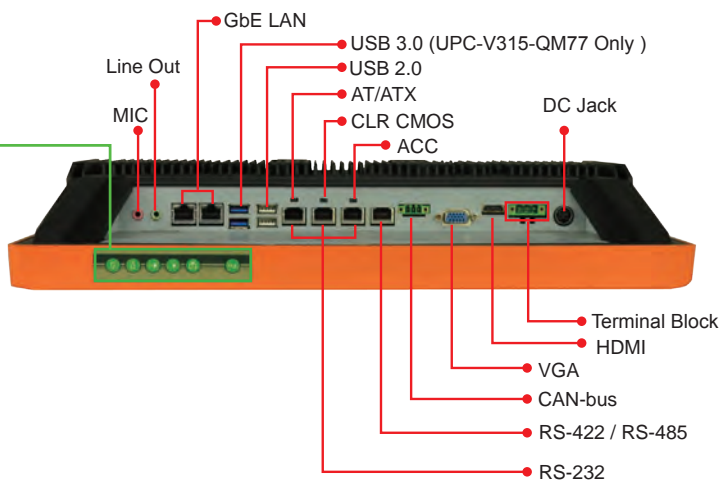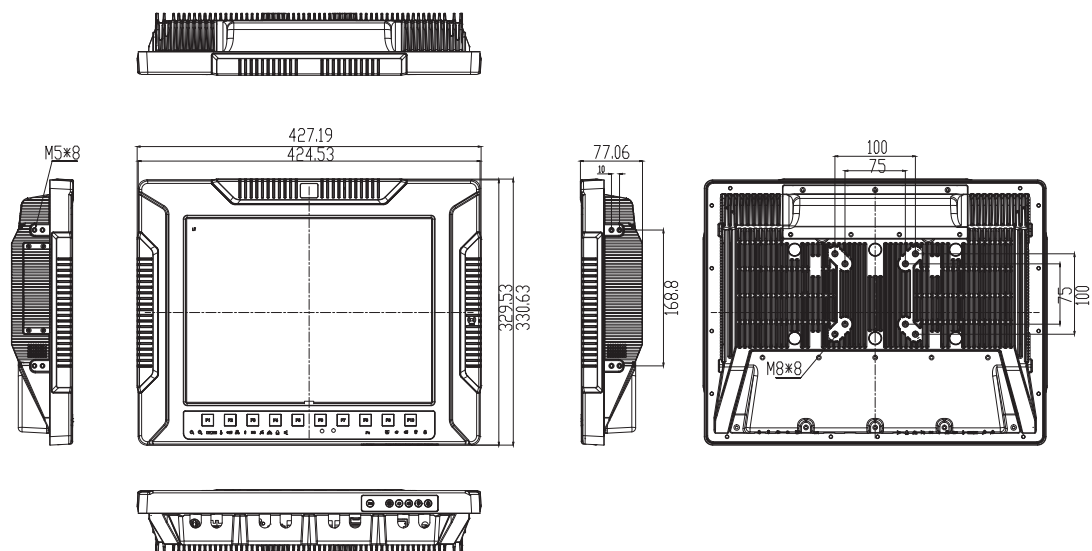
UPC Series

UPC-V312-D525

Intel® Atom™ D525 Dual Core Processor

Features

- Fully IP 65 compliant with Intel® Atom™ D525 1.8GHz dual-core processor
- 12.1'' 600 nits 1024 x 768 LCD with LED backlight
- Dual DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- Dual-band 2.4/5 GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G HSUPA USB module
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-mgeapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- Robust die-casting aluminum chassis

Fanless | Wireless 802.11b/g/n | Touchscreen | Camera | Speakers | Full IP65 | -20ºC~60ºC | Redundant Dual DC

Specifications

Model Name		UPC-V312-D525-R13
Display	LCD Size	12.1"
	Max. Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	600
	Contrast Ratio	700:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.24(H) x 0.24(V)
	Viewing Angle (V/H)	150° / 130°
	Backlight MTBF (hrs)	50000
Touch	Touchscreen	5-wire resistive type with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	UPCMB-V312-D525-R10
	CPU	Intel® Atom™ D525 1.8GHz dual-core processor
	Chipset	Intel® ICH8M
	RAM	On-board 2GB DDR3 SO-DIMM (system max. 2GB)
	Ethernet	Realtek RTL8111CP PCIe GbE controller
	Audio Codec	Realtek ALC888 audio codec
I/O Ports and Switches		RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line-out, Mic) VGA port (DB-15 connector) DC-IN 1 (terminal block) / DC-IN 2 (DC jack) Reset button AT/ATX switch
Connectivity	Wireless	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified
	Bluetooth	Bluetooth V2.0+EDR with USB interface (optional)
	3G	Reserved USB connector (optional)
Driver Bay	SSD	CF Type II / mSATA (SATA2 signal)
Physical	Front Panel Contruction	Aluminum die-casting
	Chassis Construction	Extruded aluminum alloy
	Mounting	VESA 100mm x 100mm and 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Pantone 151C)
	Dimensions (WxHxD) (mm)	338.5 x 276.25 x 62.86
	Cut Out Dimensions (WxH) (mm)	338.5 x 276.25
	Net/Gross Weight	4.5 kg/ 6.8 kg
Expansion Slot		PCIe Mini slot for Wi-Fi module
		PCIe Mini slot
System Cooling		Fanless
Environment	Operating Temperature	-20°C~60°C
	Storage Temperature	-40°C~85°C
	Vibration	MIL-STD-810F 514.5C-2 (with CF card or SSD)
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	IP Level	Full IP 65
	Safety & EMC	CE / FCC
Power	Adapter	65W power adapter (meets PSE) (Power adapter supports operating temperature 0°C ~ 40°C) Input: 90VAC~264VAC, 50/60Hz; Output: 19V DC
	Requirement	Power 1: 9V (+/-0.3)~36V Power 2: 10.5V (+/-0.3)~36V
	Consumption	52W

Ordering Information

Part No.	Description
UPC-V312-D525/R/2G-R13	12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen, 2-megapixel camera, microphone, 2GB DDR3 RAM, R13

Options

Item	P/N
Arm	ARM-11-RS/ARM-31-RS
Wall Mounting Kit	AFLWK-19B/ AFLWK-12
Stand	STAND-A19-RS/STAND-A21-R10/STAND-210-R11
EM RFID Kit	UPC-EM-RFID-KIT01-R10
MiFARE RFID Kit	UPC-MF-RFID-KIT01-R11
OS: Win CE 6.0 (128MB CF Card)	UPCCF-V312-D525-CE060-128M-R10
OS: Win XPE (4GB CF Card)	UPCCF-V312-D525-XPE-4G-R10
OS: Win 7 Embedded (4GB CF Card)	UPCCF-V312-D525-WES7E-4G-R10

Packing List

Item	P/N	Q'ty
Utility CD	7B000-000741-RS	1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket	41003-0382C2-00-RS	2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010065-200-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
RS-422 Cable	32205-002400-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

I/O Interface
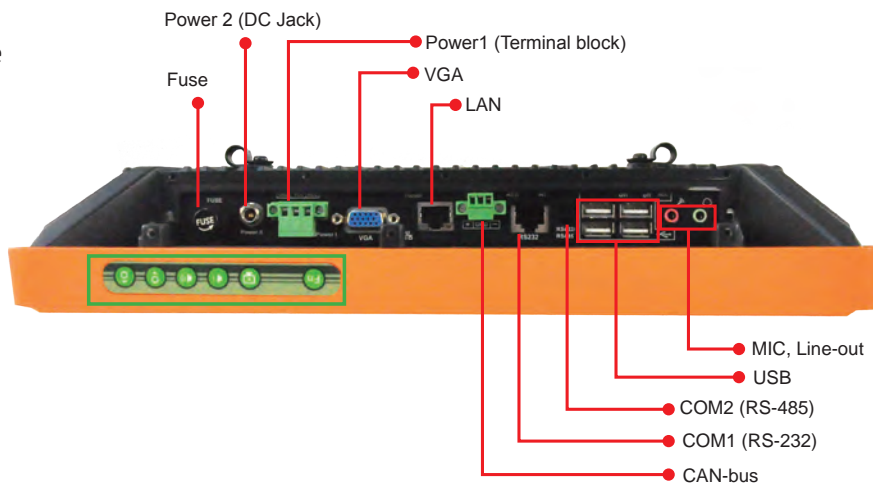
UPC-V312 Dimensions (Unit: mm)
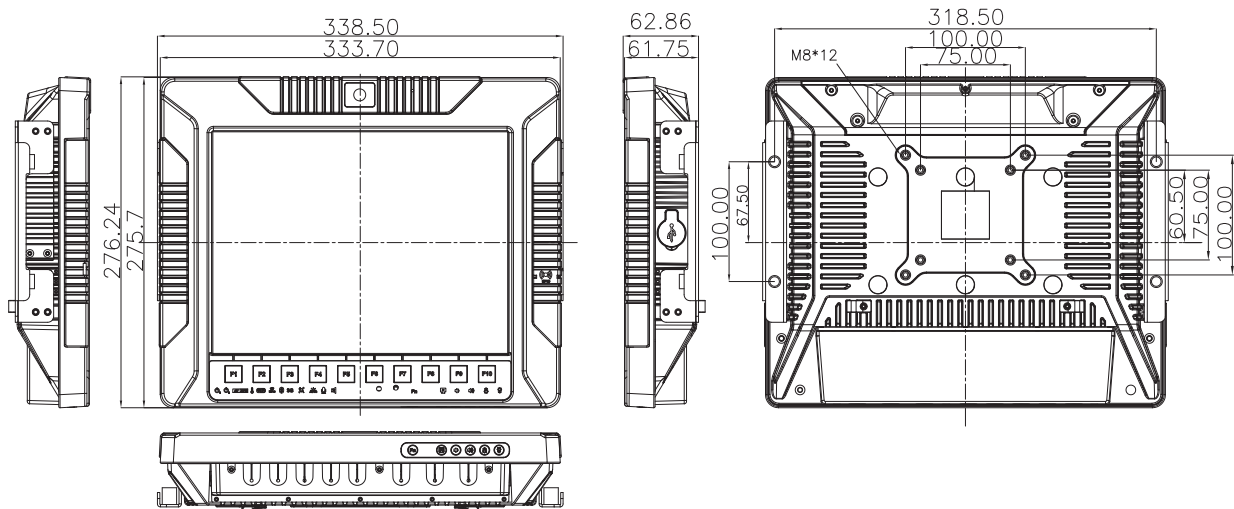
INOX-F15C-ULT3

Intel® Core™ i5 and Celeron® ULT Processor

NEW

Features

- 15'' fanless panel PC with Intel® Skylake ULT processor
- IP69K high pressure, high temperature protection
- SUS304 stainless steel housing
- Operating temperature : -20°C ~ 50°C
- Flat glass PCAP touch with 6H hardness, resistive touch window
- Accessible HDD Bay
- M12 connections

Fanless　**Touchscreen**　**IP-69K**　**-20ºC~50ºC**　**SUS304**

Specifications

Model		INOX-F15C-ULT3
LCD	LCD Display	15"
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	450
	Contrast Ratio	800:1
	LCD Color	16.2M
	Pixel Pitch (mm)	0.297(H) x 0.297(V)
	Viewing Angle (H-V)	160º /150º
	Backlight MTBF (Hrs)	70000
Motherboard	CPU	6th generation Intel® Core™ i5 and Celeron® ULT processor
	RAM	2 x 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB)
	Ethernet	2 x PCIe GbE by Intel® I210 controller
Touchscreen		Resistive Touch / PCAP Touch
Input Interfaces	I/O Ports	2 x 8-pin M12 connector for RS-232/422/485 2 x 8-pin M12 X-Code connector for GbE LAN 2 x 8-pin M12 connector for two USB 2.0 1 x 5-pin M12 connector for DC jack (9-36V DC) 1 x Power switch with power LED indicator 1 x Pressure relief valve
	Expansions	1 x Full-size PCIe Mini card slot (SATA 6Gb/s) 1 x Full-size/half-size (PCIe x1 and USB 2.0 signals) 1 x M.2 B-key slot (2242/2260/2280 with USB 3.0, PCIe x2 and SATA signals)
Storage		1 x 2.5" SATA SSD bay / 1 x mSATA / 1 x M.2 B-key (2242/2260/2280)
Physical	ME Construction	SUS304 stainless steel housing
	Mounting	VESA 100mm x 100mm with M8 screw
	Dimensions (WxHxD) (mm)	414 x 328.4 x 51.9
Environment	Operating Temperature (with air flow)	-20°C ~ 50°C
	Storage Temperature	-30°C ~ 60°C
	IP Level	Front: IP69K; Others: IP66
	Safety	CE / FCC
Power	Adapter	60 W; 63000-CLG6012IC-RS
		60W/12V waterproof power adapter VAC:90V~264V; 12V/5A; 60W
	Requirement	9-36V DC
	Consumption	60W

Ordering Information

Part No.	Description
INOX-F15C-ULT3-C/R/4G-R10	15" 450cd/m² XGA fanless stainless panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, resistive touch, R10
INOX-F15C-ULT3-C/PC/4G-R10	15" 450cd/m² XGA fanless stainless panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, PCAP touch, R10
INOX-F15C-ULT3-i5/R/4G-R10	15" 450cd/m² XGA fanless stainless panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, resistive touch, R10
INOX-F15C-ULT3-i5/PC/4G-R10	15" 450cd/m² XGA fanless stainless panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, PCAP touch, R10

Packing List

Item	P/N
Power Cable	32000-127500-RS
Utility CD	
Touch Pen	
One Key Recovery CD	

Options

Item	P/N
Arm	ARM-31-RS
Stand	STAND-A19-RS STAND-C19-R10 STAND-A21-R10

32000-127500-RS (B) (A)

Optional Cables and Adapter

Item	P/N
USB Cable	CB-M12USB02-R10
RJ-45 LAN Cable	CB-M12RJ45X-R10
DB-9 COM Port Cable	CB-M12COM-R20
Water-proof Power Adapter	63000-CLG6012IC-RS

USB cable
(CB-M12USB02-R10)

RJ-45 LAN cable
(CB-M12RJ45X-R10)

DB-9 CAN-bus and
AUDIO line-out cable
(CB-M12ACAN-R10)

Water-proof Power Adapter
(63000-CLG6012IC-RS)

I/O Interface

DC in 9V~36V — COM 2 — LAN 2 — USB 2.0 — 2.5" SATA SSD bay
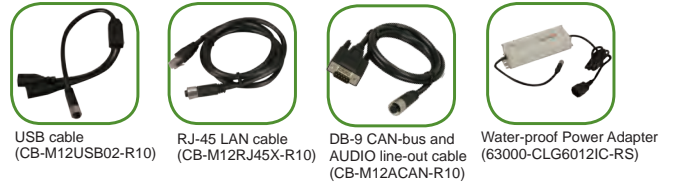
Power switch with power LED indicator — COM 1 — LAN 1 — USB 2.0 — Pressure relief valve
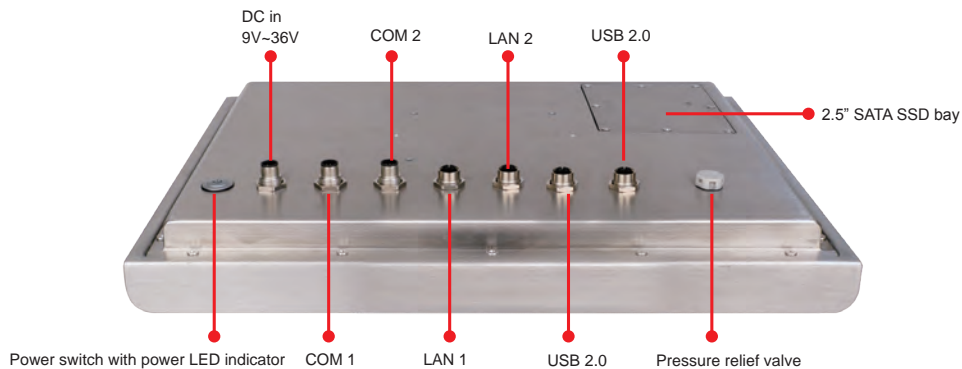
INOX−F15C Dimensions (Unit: mm)

414
306
51.9
33.2
230
328.4
100
4-M4
100
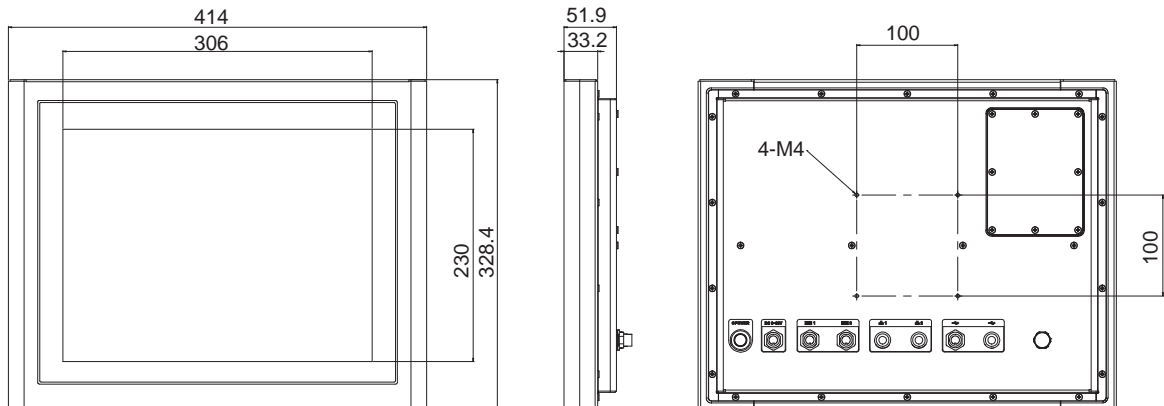
RISC Based Panel PC Solution

The IOVU RISC Based PC Series enables the great embedded flexibility for smart factory, building automation, factory control, and medical usage applications. Making use of the low power consumption RISC platform, the IOVU series adopts a fan-less and power efficient design, providing a cost-effective, stable, and easy to use solution to collect, transfer, process, access , and manage data.

Android Series

- ● ARM Based Cortex™-A9 quad-core 1.0 GHz or Cortex™-A53 octa core 1.5GHz
- ● Projected capacitive touchscreen
- ● Built-in Wi-Fi + BT
- ● Android 4.2 to 6.0a
- ● One CAN 2.0 and four GPIO
- ● Support Power over Ethernet

Platform	7"	10"	12"	15"	17"
Freescale™ i.MX6 Cortex™-A9 quad-core 1.0 GHz	IOVU-07F-AD	IOVU-10F-AD	IOVU-12F-AD	IOVU-15F-AD	IOVU-17F-AD
ARM Based Cortex™-A53 octa core 1.5GHz	IOBA-07F				

Cortex™-A9 on Freescale™ i.MX 6 Series

■ Freescale™ i.MX6 Cortex™-A9 Panel PC

With 12/15/17-inch touchscreen, the IOVU-12/15/17 series wall-mounted PC integrates energy-efficient Freescale™ quad-core processors with Android 4.2 operating system. The IOVU-12/15/17 offers a wide range of wireless communication technologies such as Wi-Fi 802.11b/g/n and Bluetooth 4.0 that allow mobile service providers to stay seamlessly connected. With regard to data capturing functions, the IOVU-12/15/17 supports 10/100/1000 Base-T Ethernet, four digital input, four digital output, one RS-232/485 and one CAN bus, making the IOVU-12/15/17 Android turn-key ready system a perfect HMI solution for industrial field.

- 12/15/17" LED backlight active-matrix TFT
- Projected capacitive touchscreen
- Freescale™ i.MX6 Cortex™-A9 quad-core (1.0GHz) CPU
- Android 4.2 OS
- One 10/100/1000Mbps Power over Ethernet IEEE 802.3at
- CAN 2.0b, 4 x DIO (configurable by software)

i.MX 6 QuadPlus	i.MX 6 Quad
Ultimate Performance • Highly optimized 2D/3D graphics • Enhanced DRAM controller	**High Performance** • High-end 2D and 3D graphics • Dual stream HD video
i.MX 6 DualPlus	**i.MX 6 Dual**
Extreme 3D Graphics • Highly optimized 2D/3D graphics • Enhanced DRAM controller	**Advanced 3D Graphics** • High-end 2D and 3D graphics • Dual stream HD video
i.MX 6 DualLite	**i.MX 6 Solo**
3D Graphics • Advanced 2D and 3D graphics • HD video	**Multimedia** • 2D and 3D graphics • HD video
i.MX 6 SoloX	**i.MX 6 SoloLite**
Secure Processing • With Cortex™-M4 core • 2D and 3D graphics	**Multimedia/eReader** • 2D graphics • Low power
i.MX 6 UltraLite	**i.MX 7 Solo**
Efficient and Secure • Cortex™-A7 core • Enhanced security	**Ultimate Power Efficiency** • Cortex™-A7 with Cortex™-M4 • MIPI CSI/DSI
i.MX 7 Dual	
Efficient Performance • Dual Cortex™-A7 with Cortex™-M4 • EPD panel controller	

■ Cortex™-A9 MPCore

ARM CoreSight™ Multicore Debug and Trace Architecture

FPU/NEON	PTM I/F	FPU/NEON	PTM I/F	FPU/NEON	PTM I/F	FPU/NEON	PTM I/F

Cortex™-A9 CPU	Cortex™-A9 CPU	Cortex™-A9 CPU	Cortex™-A9 CPU

I-Cache	D-Cache	I-Cache	D-Cache	I-Cache	D-Cache	I-Cache	D-Cache

Generic Interrupt Control and Distribution

Snoop Control Unit (SCU)

Cache-2-Cache Transfers | Snoop Filtering | Timers

Accelerator Coherency Port

Advanced Bus Interface Unit

Primary AMBA 3 64-bit Interface | Optional 2nd I/F with Address Filtering

■ Wide Temperature

The IOVU-12/15/17 series supports wide range temperature from -20°C to 60°C and is equipped with IP 65 compliant front panel for harsh environments.

Wide Temperature **IP65**

■ Wire or Wireless Connection

The IOVU-12/15/17 series supports 802.11b/g/n and Bluetooth for connecting to various devices, allowing the IOVU to be deployed into diverse applications for smart building or smart factory. In addition, the IOVU series has a Power over Ethernet (PoE, IEEE802.3at) port for providing power and passing data to the system through a single Ethernet cable.

Wi-Fi **Bluetooth** **PoE**

■ External I/O Connectors

The IOVU-12/15/17 series has a 10-pin I/O connector on the bottom panel for connecting external peripheral devices:

GPIO **CAN-Bus**

- 1 x CAN 2.0
- 4 x GPIO

Pin	1	2	3	4	5
Description	GND	ESD_GPIO1	ESD_GPIO2	GND	ESD_GPIO3
Pin	6	7	8	9	10
Description	ESD_GPIO4	GND	CAN_L	CAN_H	GND

■ DC Input and Terminal Block

The IOVU-12/15/17 equips with two types of 12V ~ 36V DC power input connectors. The locations of the power connectors are shown in the right diagram.

The pinouts of the power terminal block are listed in the following table.

Pin	1	2
Description	DC-IN (12V~36V)	GND

GPIO

DC-in Power Terminal Block

DC-in Power Jack
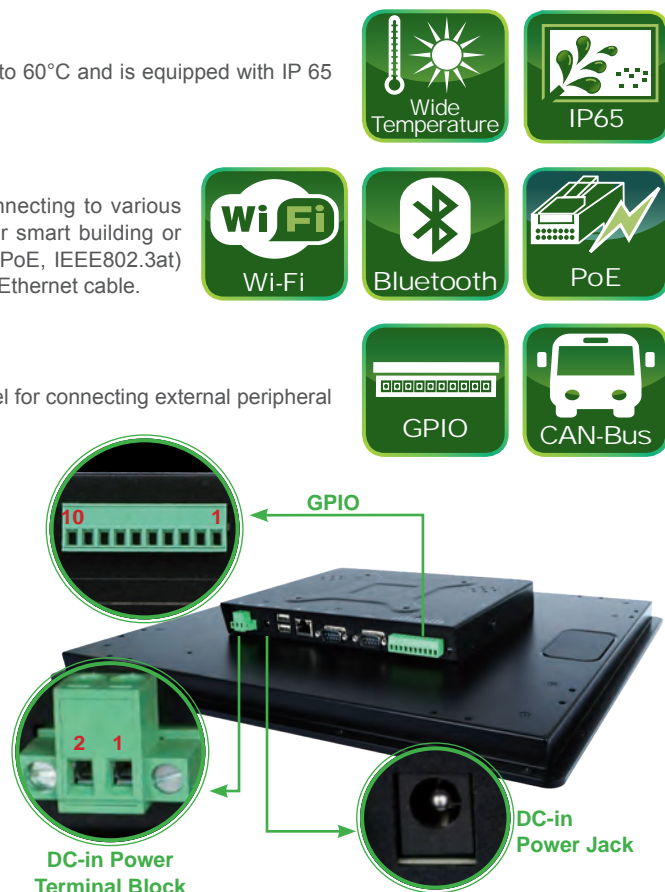
RISC Based Panel PC Selection Guide

LCD Size		7"		10"	
Model Name		**IOBA-07F**	**IOVU-07F-AD**	**IOVU-10F-AD**	**IOBA-10F-AD**
Display	LCD Color	16.7M	16.7M	16.2M	262k
	Display Resolution	1024(W) X 600(H)	1024(W) X 600(H)	1280(W) x 800(H)	1280(W) x 800(H)
	LCD Brightness (cd/m²)	300 nits	500 nits	300 nits	300 nits
	Dot Pitch (mm)	0.150(H) x 0.150(V)	0.05(W) x 0.15(H)	0.1695 x 0.1695	0.1695 x 0.1695
	Viewing Angle (H-V)	70/75/75/75 Deg.	150° / 145°	85/85/85/85 Deg.	85/85/85/85 Deg.
	Backlight MTBF			20000	
	Touch Screen	Project Capacitive	Capacitive Type	Project Capacitive	Project Capacitive
	Multimedia Support	MPEG-4/H.263/H.264	MPEG-2/4, H.263, H.264	MPEG-2/4, H.263, H.264	
System	CPU	ARM Based Cortex-A53 Octa-Core 1.5GHz	Freescale™ i.MX6 Cortex™-A9 quad core 1.0 GHz	Freescale i.MX6 Cortex A9 Quad-Core 1.0GHz	Freescale i.MX6 Cortex A9 Quad-Core 1.0GHz
	Operating System	Android 6.0	Android 4.2.2	Android 5.1	Android 5.1
	Bootloader Storage	16GB eMMC Nand Flash	4G eMMC Nand Flash	16G eMMC Nand Flash	8G eMMC Nand Flash
	RAM	2GB DDR3 SDRAM	1GB DDR3 SDRAM	2GB DDR3 SDRAM	2GB DDR3 SDRAM
	Program Storage Area			Bootloader Storage	
I/O and Communication	I/O Interface	1 x 10/100/1000Mbps LAN 2 x USB2.0 host 1 x Reset button	1 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 Host 1 x RS-232/422/485 support software controllable(DB9) 1 x RS232 Full-Function(DB9) 1 x SD Slot (up to 32GB) 1 x CAN 2.0 4 x DIO 1 x Mic 1 x 2MP front Camera	1 x 10/100/1000 Mbps Ethernet w/ PoE 2 x USB 2.0 1 x RS-232/422/485 support software controllable(DB9) 1 x RS-232 Full-Function (DB9) 1 x 13.56MHz 1 x DC jack 1 x On/Off power switch 1 x Reset button 1 x SD slot (Hidden)	1 x 10/100/1000 Mbps Ethernet w/ POE (WAN) 1 x 10/100/1000 Mbps Ethernet w/o POE (LAN) 2 x USB 2.0 1 x RS-232/422/485 support software controllable(DB9) 1 x RS-232 Full-Function (DB9) 1 x 13.56MHz 6 x Sensor connectors 8 x DIO 1 x DC jack 1 x Reset button 1 x SD slot (Hidden)
	Audio	1 x 2W speaker, 1 x Mic	1 x1.5W Speaker	1 x 2W Speaker	1 x 2W Speaker
	Wireless LAN	BT4.0+ Wi-Fi Controller 802.11 a/b/g/n	1 x BT+WiFi Controller for 802.11b/g/n	BT4.0 + Wi-Fi Controller 802.11 a/b/g/n/ac	BT4.0 + Wi-Fi Controller for 802.11 a/b/g/n
Dimensions	Construction Material	Plastic front cover and metal rear cover	Front panel: ABS+PC Plastic ; Back cover: Metal	Plastic front cover and metal rear cover	Plastic front cover and rear cover
	Front Panel Color	White	Black	White	White
	Dimensions (W x H x D mm)	210 x 154 x 18	210 x 154 x 40.1	293 x 209.5 x 44.49	282.5 x 174.3 x 14.7
Environmental and Power	Operating Temperature (ºC)	0°C~ 50°C	0~50°C	0°C ~ 60°C	0°C ~ 50°C
	Front Panel Protection	IP 54 Compliant	IP54 compliant	IP54 compliant	IP64 compliant
	Power Requirement	9~30V DC	12~36V DC	9~30V DC	9~30V DC
	Power Consumption	N/A	12V , 1.55A	N/A	N/A

	Vibration and Shock		1. Operating Random Vibration Mode
			  A. Axis: 3 axes (Vertical / Transverse / Longitudinal).
			  B. 10-500 Hz, 60min/axis.
			  C. Equivalent to Z:1.04 Grms X:0.204 Grms Y:0.74 Grms
			2. Non Operating Random Mode
			  A. Axis: 3 axes (Vertical / Transverse / Longitudinal).
			  B. 20-1000 Hz, 60min/axis
			  C. 0.04g2/Hz		

	Humidity		5% ~ 90%RH (no-condensing)		

LCD Size	12"	15"	17"
Model Name	**IOVU-12F-AD**	**IOVU-15F-AD**	**IOVU-17F-AD**
Display			
LCD Color	16.2M	16.2M	16.7M
Display Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)
LCD Brightness (cd/m²)	600 nits	400 nits	350 nits
Dot Pitch (mm)	0.24 x 0.24	0.297x 0.297	0.264 x 0.264
Viewing Angle (H-V)	160° / 140°	160° / 140°	170° / 160°
Backlight MTBF	50000	50000	50000
Touch Screen	Projected capacitive flat touch	Projected capacitive flat touch	Projected capacitive flat touch
Multimedia Support	MPEG-2/4, H.263, H.264		
System			
CPU	Freescale™ i.MX6 Cortex™-A9 quad core 1.0 GHz	Freescale™ i.MX6 Cortex™-A9 quad core 1.0 GHz	Freescale™ i.MX6 Cortex™-A9 quad core 1.0 GHz
Operating System	Android 4.2.2	Android 4.2.2	Android 4.2.2
Bootloader Storage	8G eMMC Nand Flash	8G eMMC Nand Flash	8G eMMC Nand Flash
RAM	2GB DDR3 SDRAM	2GB DDR3 SDRAM	2GB DDR3 SDRAM
Program Storage Area	Bootloader Storage		
I/O and Communication			
I/O Interface	1 x 10/100/1000 Mbps Power over Ethernet 2 x USB 2.0 host 1 x RS-232 full function (DB-9) 1 x RS-232/422/485 by DB-9 (software controllable) 1 x 12V~36V DC terminal block 1 x SD slot (up to 32GB) (Hidden) 1 x CAN 2.0 4 x GPIO 1 x DC jack 1 x On/Off power switch 1 x Reset button	1 x 10/100/1000 Mbps Power over Ethernet 2 x USB 2.0 host 1 x RS-232 full function (DB-9) 1 x RS-232/422/485 by DB-9 (software controllable) 1 x 12V~36V DC terminal block 1 x SD slot (up to 32GB) (Hidden) 1 x CAN 2.0 4 x GPIO 1 x DC jack 1 x On/Off power switch 1 x Reset button	1 x 10/100/1000 Mbps Power over Ethernet 2 x USB 2.0 host 1 x RS-232 full function (DB-9) 1 x RS-232/422/485 by DB-9 (software controllable) 1 x 12V~36V DC terminal block 1 x SD slot (up to 32GB) (Hidden) 1 x CAN 2.0 4 x GPIO 1 x DC jack 1 x On/Off power switch 1 x Reset button
Audio	2 x 3W Speaker	2 x 3W Speaker	2 x 3W Speaker
Wireless LAN	BT4.0+WiFi Controller for 802.11 b/g/n	BT4.0+WiFi Controller for 802.11 b/g/n	BT4.0+WiFi Controller for 802.11 b/g/n
Dimensions			
Construction Material	Aluminum front cover and sheet metal rear cover	Aluminum front cover and sheet metal rear cover	Aluminum front cover and sheet metal rear cover
Front Panel Color	Black	Black	Black
Dimensions (W x H x D mm)	322.2 x 262.2 x 45.5	378.5 x 303 x 48.2	408.4 x 341.4 x 54.3
Environmental and Power			
Operating Temperature (ºC)	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
Front Panel Protection	IP65 compliant	IP65 compliant	IP65 compliant
Power Requirement	12~36V DC	12~36V DC	12~36V DC
Power Consumption	36V @ 0.8A	36V @ 0.72A	36V @ 0.86A

Vibration and Shock	1. Operating Random Vibration Mode
	  A. Axis: 3 axes (Vertical / Transverse / Longitudinal).
	  B. 10-500 Hz, 60min/axis.
	  C. Equivalent to Z:1.04 Grms X:0.204 Grms Y:0.74 Grms
	2. Non Operating Random Mode
	  A. Axis: 3 axes (Vertical / Transverse / Longitudinal).
	  B. 20-1000 Hz, 60min/axis
	  C. 0.04g2/Hz		

Humidity	5% ~ 90%RH (no-condensing)		

IOBA-07F

7" RISC-based Panel PC

Preliminary

Features

- OS: Android 6.0
- CPU: ARM Based Cortex-A53 1.5GHz Octa-Core
- Boot Flash: 16G eMMC Nand Flash
- RAM: 2GB DDR3 SDRAM on board
- Storage: microSD card slot (support SD 2.0, Max 32GB)
- Battery backup RTC
- Watch dog timer (WDT)
- 1 x SOS Key (with red bar):
  Press for calling help in case emergency
  2 x Function Keys (with green bar):
  Default hot key by AP programming

Specifications

Model		IOBA-07F
Display	LCD Size	7 " TFT LCD
	Max. Resolution	1024(W) x 600(H) WSVGA
	Brightness (cd/m²)	300 cd/m²
	Viewing Angle	70/75/75/75 Deg.
	Touch Screen	5 point projected capacitive
System	CPU	ARM Based Cortex-A53 1.5GHz Octa-Core
	Operating System	Android 6.0
	Memory	2GB DDR3 SDRAM
	Boot Flash	16GB eMMC iNAND
Communication	Wireless LAN	WiFi 802.11 a/b/g/n
	Bluetooth	Bluetooth Class 4.0 + HS
Data Collection	Camera	2-megapixel CMOS front camera
I/O Interface	USB	2 x USB 2.0
	LAN	10/100/1000Mbps
	Audio	1 x 2W speaker
Environment	Operating Temperature	0˚C ~ 50˚C
	Storage Temperature	-10˚C ~ 60˚C
	IP Level	IP 54 compliant front panel
	Humidity	5%~90%, non-condensing

Ordering Information

Part No.	Description
IOBA-07F-R10	7" TFT-LCD,ARM Based Cortex-A53 Oct Core 1.5GHz,Gigabit Ethernet,P-CAP touchscreen,2GB DDR3,WiFi a/b/g/n,Camera, Android 6.0, RoHS

Options

Part No.	Description
63040-010060-130-RS	Adapter Power;FSP;FSP060-DIBAN2;9NA0605309;;Vin:90~264VAC;60W;Dim:62.0*110*31.5mm;Plug=9.5mm;Cable=1500mm;Erp (NO LOAD 0.21W);Vout:12VDC;Φ2.5/Φ5.5;CCL;RoHS

Camera
Reset
Speaker
Function key
SOS key
Mic

IOBA-07F Dimensions
(Unit: mm)

210
18
154
12.50
16.87
19.97
75
75
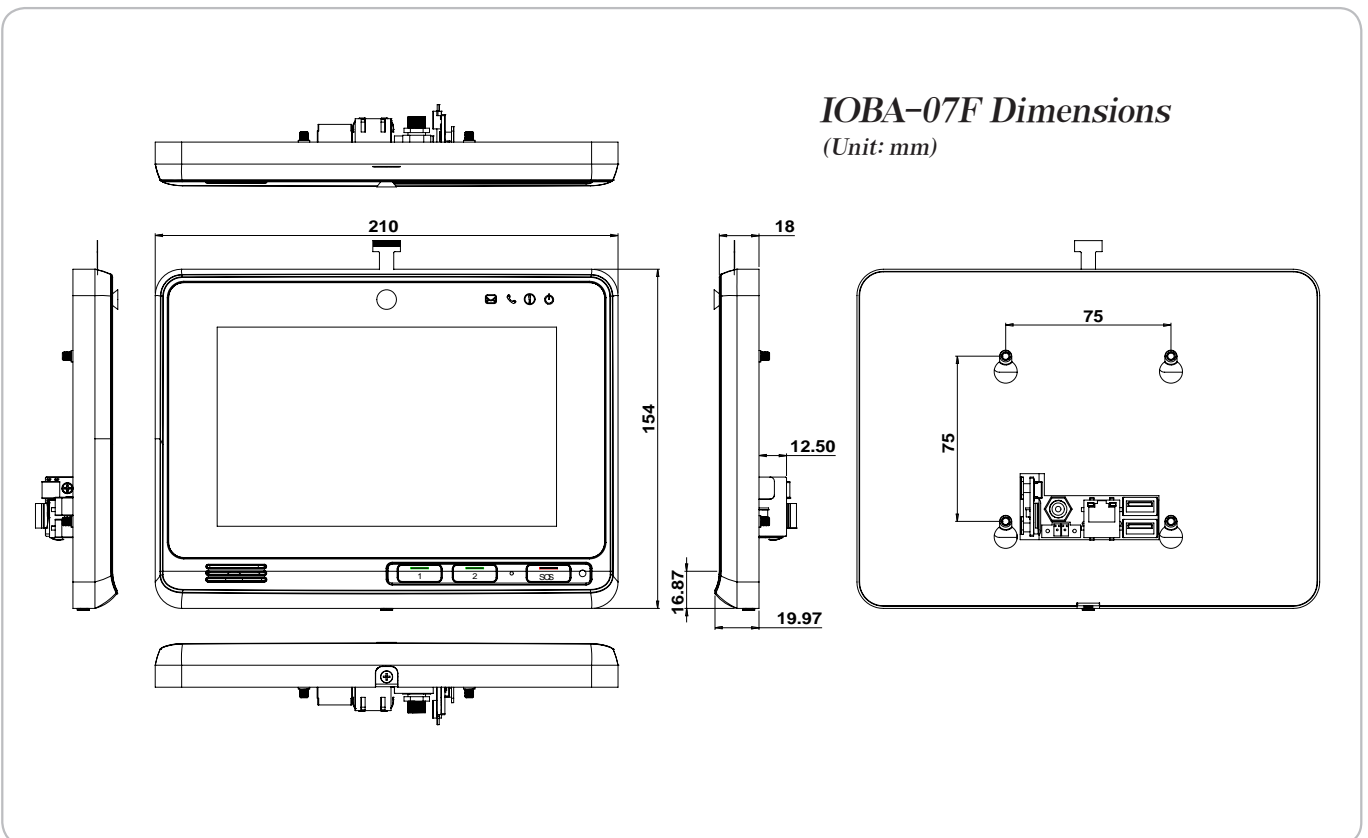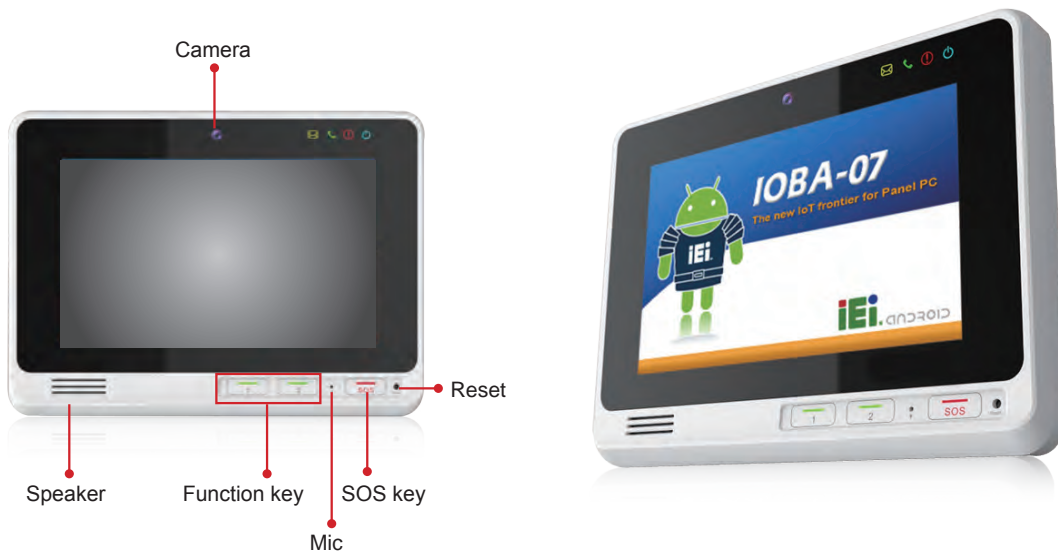
IOVU-07F-AD

7" RISC-based Panel PC

Features

- 7" LED Backlight Color Active Matrix TFT
- Projected Capacitive Touchscreen
- Freescale™ i.MX6 Cortex™-A9 Quad-Core (1.0GHz) CPU
- Android 4.2 OS
- Support 10/100/1000Mbps Power over Ethernet
- Optional Wi-Fi+BT, Camera
- CAN 2.0b, 4 x DIO (configurable by software)

Specifications

IOVU LV

| Fanless | Wireless 802.11b/g/n | Bluetooth | Touchscreen | Camera | CAN-Bus | Android |

Model		IOVU-07F-AD
Display	LCD Size	7 " TFT LCD
	Max. Resolution	1024(W) x 600(H) WSVGA
	Brightness (cd/m²)	500 cd/m²
	Viewing Angle	75/75/70/75 Deg.
	Touch Screen	2 point projected capacitive
System	CPU	Freescale™ i.MX6 Cortex™-A9 quad-core 1.0GHz
	Operating System	Android 4.2
	Memory	1GB DDR3 SDRAM
	Boot Flash	4GB eMMC iNAND
Communication	Wireless LAN	Wi-Fi 802.11b/g/n (optional)
	Bluetooth	Bluetooth Class 4.0 + HS (optional)
Data Collection	CAN	Can 2.0b
	Camera	2-megapixel CMOS front camera (optional)
I/O Interface	USB	2 x USB 2.0
	LAN	10/100/1000Mbps Power over Ethernet for POE version
	RS-232	1 x RS-232/422/485 supports software configurable (DB-9) 1 x RS-232 full-function (DB-9)
	DIO	4 x DIO
	Audio	1 x 1.5W speaker
Environment	Operating Temperature	0˚C ~ 50˚C
	Storage Temperature	-10˚C ~ 60˚C
	IP Level	IP 54 compliant front panel
	Humidity	5%~90%, non-condensing

Ordering Information

Part No.	Description
IOVU-07F-AD-ET-R11	7" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 Quad-Core 1.0 GHz CPU; CAN; Android 4.2
IOVU-07F-AD-WBC-R11	7" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 Quad-Core 1.0 GHz CPU; CAN; Wi-Fi/Bluetooth; Camera; Android 4.2
IOVU-07F-AD-WBC-POE-R11	7" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 Quad-Core 1.0 GHz CPU; CAN; Wi-Fi/Bluetooth; Camera; POE; Android 4.2

Packing List

1 x Utility CD includes application tools, SDK, and technical document
1 x Null modem cable

Options

Part No.	Description
AFLPK-12	Panel mounting kit
AFLWK-12	VESA 75 wall mounting kit
ARM-11-RS	LCD monitor / PPC arm kit, loading capacity from 3 kg ~ 7 kg
STAND-B08	LCD monitor / PPC stand kit for VESA 75 and supports up to 5 kg
VSTAND-A07	LCD monitor / PPC stand V type for VESA 75, 0~90 degree adjustable hinge and supports up to 2.5 kg
63040-010060-130-RS	Adapter Power;FSP;FSP060-DIBAN2;9NA0605309;;Vin:90~264VAC;60W;Dim:62.0*110*31.5mm;Plug=9.5mm;Cable=1500mm;Erp (NO LOAD 0.21W);Vout:12VDC;Φ2.5/Φ5.5;CCL;RoHS
63040-010060-140-RS	Adapter Power;FSP;FSP060-DIBAN2;9NA0605310;;Vin:90~264VAC;60W;Dim:62.0*110*31.5mm;;Cable=1200mm;Erp(NO LOAD 0.21W);Vout:12VDC;Bare Wire;CCL;RoHS

DC Terminal

Pin 1, 4, 7 & 10=>GND
Pin 2, 3, 5 & 6=>DIO
Pin 8 & 9=>CAN-bus

DC IN
2 x USB 2.0
10/100/1000Mbps
2 x RS-232   Power Switch

IOVU-07F-AD Dimensions
(Unit: mm)
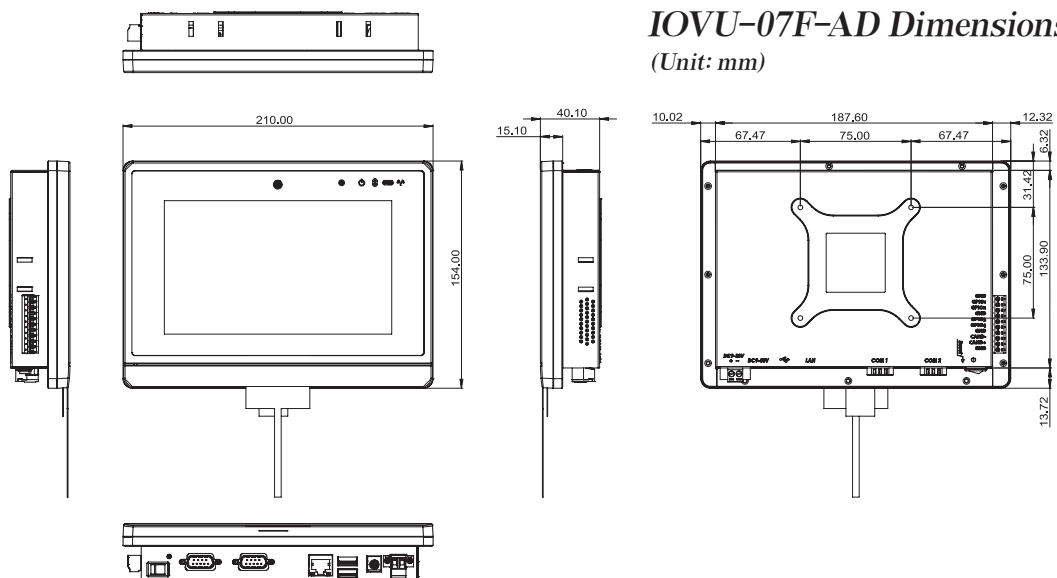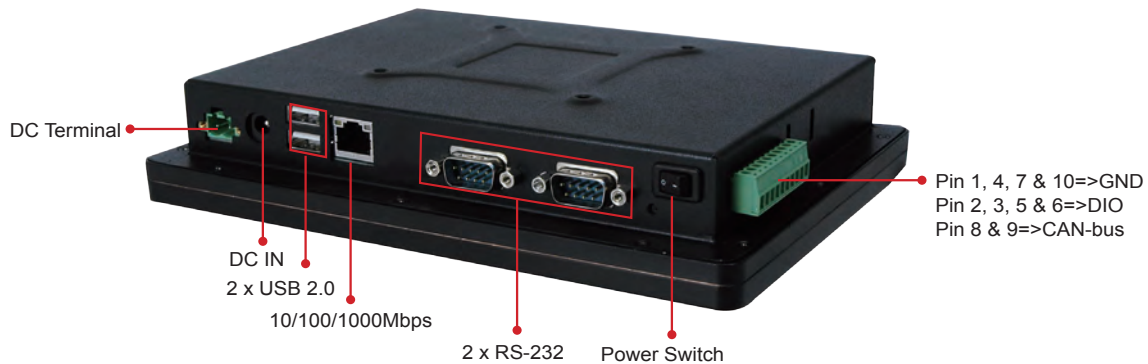
IOVU-10F-AD

10.1" RISC Base Panel PC

NEW

Features

- 10.1" 1280x800 LCD
- Project Capacitive Touch Screen
- CPU: Freescale i.MX6 Cortex-A9 Quad-Core 1GHz
- OS: Android 4.2 or 5.1
- Boot Flash: 16GB eMMC Nand Flash
- RAM: 2GB DDR3 SDRAM on board

IOVU IV

Fanless | Wireless 802.11b/g/n | Bluetooth | Touchscreen | RFID | RS-232 | Android

Specifications

Model	IOVU-10F-AD-WB-ET	IOVU-10F-AD-WB-TC	IOVU-10F-AD-WB
LCD Size	10.1 " (16:9)		
Resolution	1280(W) x 800(H)		
Brightness (cd/m²)	400	300	300
Contrast Ratio	800:1		
LCD Color	16.2M	262K	262K
Pixel Pitch (mm)	0.1695 x 0.1695		
Viewing Angle	85/85/85/85 Deg.		
Backlight MTBF(hrs)	30000	20000	20000
Touch Screen	Project Capacitive		
CPU	Freescale i.MX6 Cortex A9 Quad-Core 1.0GHz		
RAM	1GB DDR3 SDRAM	2GB DDR3 SDRAM	
Boot Flash	4GB eMMC Nand Flash	16GB eMMC Nand Flash	
Operating System	Android 4.2.2	Android 5.1	Android 5.1
Input / Output	1 x 10/100/1000 Mbps 2 x USB 2.0 1 x RS-232/422/485 (DB9) 1 x RS-232 Full-Function (DB9) 1 x 13.56MHz 1 x DC jack 1 x On/Off power switch 1 x Reset button 1 x SD slot (Hidden)	1 x 10/100/1000 Mbps 2 x USB 2.0 1 x RS-232/422/485 (DB-9) 1 x RS-232 full function (DB-9) 1 x 13.56MHz 1 x DC jack 1 x Reset button 1 x SD slot (Hidden)	1 x 10/100/1000 Mbps w/ POE 2 x USB 2.0 1 x RS-232/422/485 (DB-9) 1 x RS-232 full function (DB-9) 1 x 13.56MHz 1 x DC jack 4 x GPIO 1 x Reset button 1 x SD slot (Hidden) 1 x Audio Jack (Mic+Speaker) 1 x MINI USB
Camera	N/A	N/A	1 X 2M Camera
Audio	1 x 2W Speaker		
VOIP Phone	N/A	Optional VoIP Phone w/ user self define button	N/A
LED Indicator	N/A	1 x Power LED 1 x WiFi LED 1 x BT LED	1 x Power LED 1 x WiFi LED 1 x BT LED
Thermal Solution	Fanless		
Wireless	BT4.0 + Wi-Fi Controller for 802.11b/g/n	Wiress a/b/g/n/ac + BT 4.0 w/ BLE	Wiress a/b/g/n/ac + BT 4.0 w/ BLE
Construction Material	Plastic front cover and metal rear cover		
Mounting	Panel, Wall, Stand, VESA Mount 75mmx75mm or 100mm x 100mm		
Color	White		
Dimensions (WxHxD)(mm)	293 x 209.5 x 44.49		
Operating Temperature	0˚C ~ 40˚C	0˚C ~ 60˚C	0˚C ~ 60˚C
Storage Temperature	-10˚C ~ 60˚C		
Humidity	5%~90% non-condensing		
IP Level	IP64 front panel only		
Power Requirement	9~30V DC		

Ordering Information

Part No.	Description
IOVU-10F-AD-WB-ET-R10	10.1" TFT-LCD; Freescale i.MX6 Cortex-A9 QC 1GHz; WiFi/BT; 13.56MHz RFID; Android 4.2, RoHS
IOVU-10F-AD-WB-TC-R20	10.1" TFT-LCD, Freescale i.MX6 Cortex-A9 QC 1GHz, WiFi/BT, RFID, 10/100/1000Mbps Ethernet, Android 5.1, RoHS
IOVU-10F-AD-WB-R20	10.1" TFT-LCD, Freescale i.MX6 Cortex-A9 QC 1GHz, WiFi/BT, RFID, IEEE 802.3at for POE, phone jack, 4xDIO, Android 5.1, RoHS

Options

Part No.	Description
Power Adapter	63040-010060-130-RS (Vin:90~264VAC;60W;Vout:12VDC)
ARM	ARM-11-RS
Stand	STAND-A12-RS
Wall Mount Kit	AFLWK-19B
Panel Mount Kit	FPK-01-R10
VOIP Phone for IOVU-10F-AD-WB-TC-R20	MEDP-HS-RJ-R20

DC Terminal   2 x USB 2.0   2 x RS-232

DC IN   10/100/1000Mbps   Power Switch
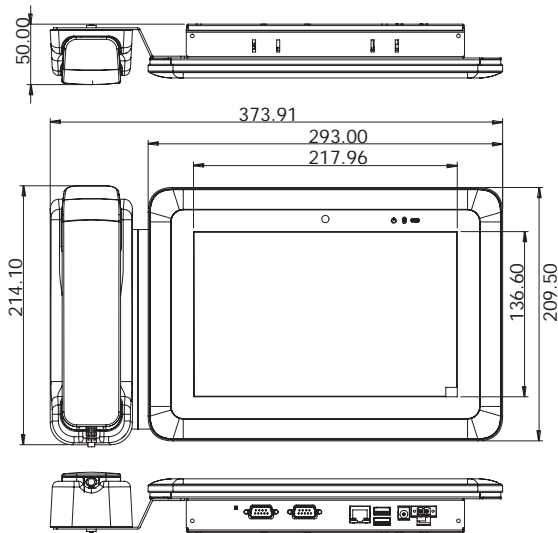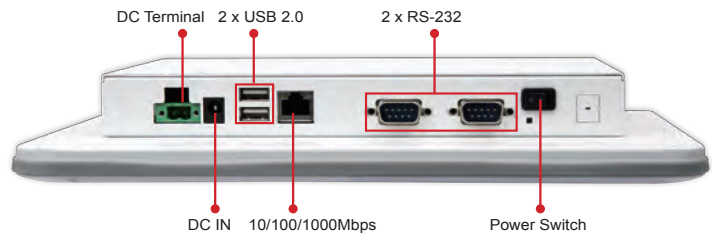
IOVU-10F-AD-WB Dimensions
(Unit: mm)

50.00
373.91
293.00
217.96
214.10
136.60
209.50
44.49
230.00
143.00

IOVU-10F-AD Dimensions
(Unit: mm)

293.00
209.50
16.49
44.49
31.50
230.00
31.50
100.00
75.00
100.00
75.00
10.55
48.95
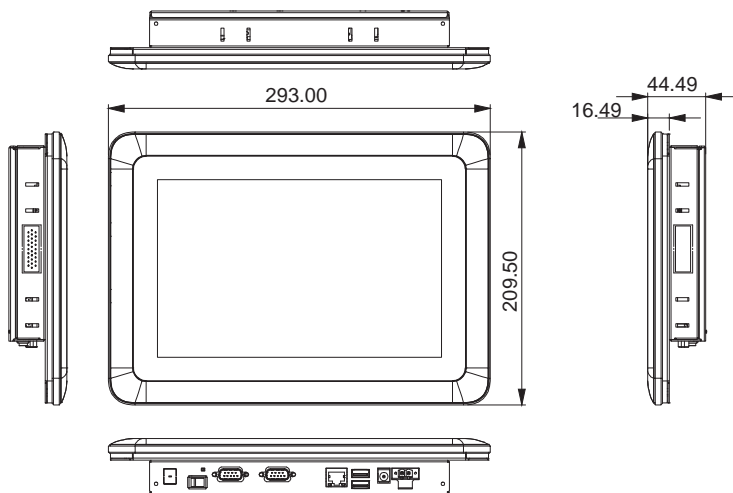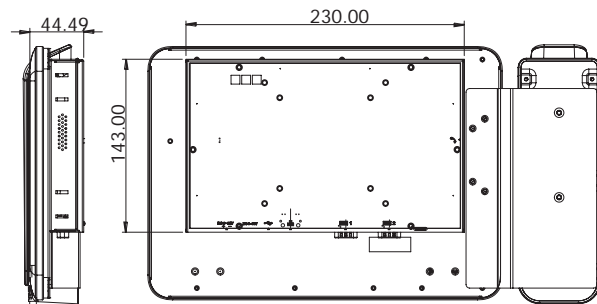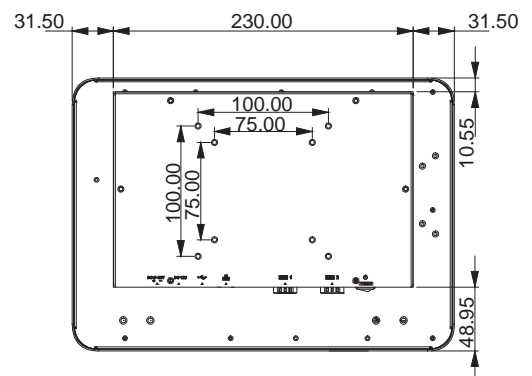
IOBA-10F-AD

10.1" RISC Based Panel PC

NEW

Features

- 10.1" 1280x800 LCD
- Project Capacitive Touch Screen
- CPU: Freescale i.MX6 Cortex-A9 Quad-Core 1GHz
- OS: Android 5.1
- Boot Flash: 8GB eMMC Nand Flash
- RAM: 2GB DDR3 SDRAM on board
- Grove Interface IOT Sensor connectors

Fanless | Wireless 802.11b/g/n | Bluetooth | Touchscreen | Camera | Dual GbE | Android

Specifications

Model	IOBA-10F-AD-R10	IOBA-10F-AD-ET-R10
LCD Size	10.1" (16:9)	
Resolution	1280(W) x 800(H)	
Brightness (cd/m²)	300	
Contrast Ratio	800:01:00	
LCD Color	262K	
Pixel Pitch (mm)	0.1695 x 0.1695	
Viewing Angle	85/85/85/85 Deg.	
Backlight MTBF(hrs)	20000	
Touch Screen	Project Capacitive	
CPU	Freescale i.MX6 Cortex-A9 Quad Core 1.0GHz	
RAM	2GB DDR3 SDRAM on board	
Boot Flash	8G eMMC Nand Flash	
OS	Android 5.1	
Input / Output	1 x 10/100/1000 Mbps Ethernet w/ POE (WAN) 1 x 10/100/1000 Mbps Ethernet w/o POE (LAN) 2 x USB 2.0 1 x RS-232/422/485 support software controllable(DB9) 1 x RS-232 (Grove Interface) 1 x 13.56MHz 3 x Analog sensor connectors (4pin) 3 x I2C sensor connectors (4pin) 1 x DIO1 (6-pin) 1 x DIO2 (4pin) 1 x DIO3(4pin) 1 x DC jack 1 x Reset button 1 x MicroSD slot	1 x 10/100/1000 Mbps Ethernet w/o POE (LAN) 2 x USB 2.0 1 x RS-232/422/485 support software controllable(DB9) 1 x DC jack 1 x Reset button 1 x SD slot
Audio	1 x 2W Speaker	
Camera	1 x 2MP CMOS webcam	
Thermal Solution	Fanless	
USB	2 x USB 2.0 Host	2 x USB 2.0 Host
Wireless	BT4.0 + Wi-Fi Controller for 802.11 a/b/g/n	N/A
Construction Material	Plastic front cover and rear cover	
Mounting	Panel, Wall,	
Color	White	
Dimensions (WxHxD)(mm)	282.5 x 174.3 x 14.7	
Operation Temperature	0°C ~ 50°C	
Storage Temperature	-10°C ~ 60°C	
Humidity	5% ~ 90%RH (no-condensing)	
IP Level	IP64 Front Panel	
Power Input	12V DC input (range : 9V ~ 30V)	

Ordering Information

Part No.	Description
IOBA-10F-AD-R10	10.1",Freescale i.MX6 Cortex-A9 QC 1.0GHz, POE 802.3at, COM port, DIO, 4pin sensor connector, Front Camera, NFC, Android 5.1, RoHS
IOBA-10F-AD-ET-R10	10.1",Freescale i.MX6 Cortex-A9 QC 1.0GHz, POE 802.3at, COM port, Front Camera, Android 5.1, RoHS

Options

Item	IOBA-10F-AD
Power Adapter	63040-010060-130-RS (Vin:90~264VAC;60W;Vout:12VDC)
41320-0490E4-00-RS	FPK-01-R10

IOBA‑10F‑AD Dimensions
(Unit: mm)
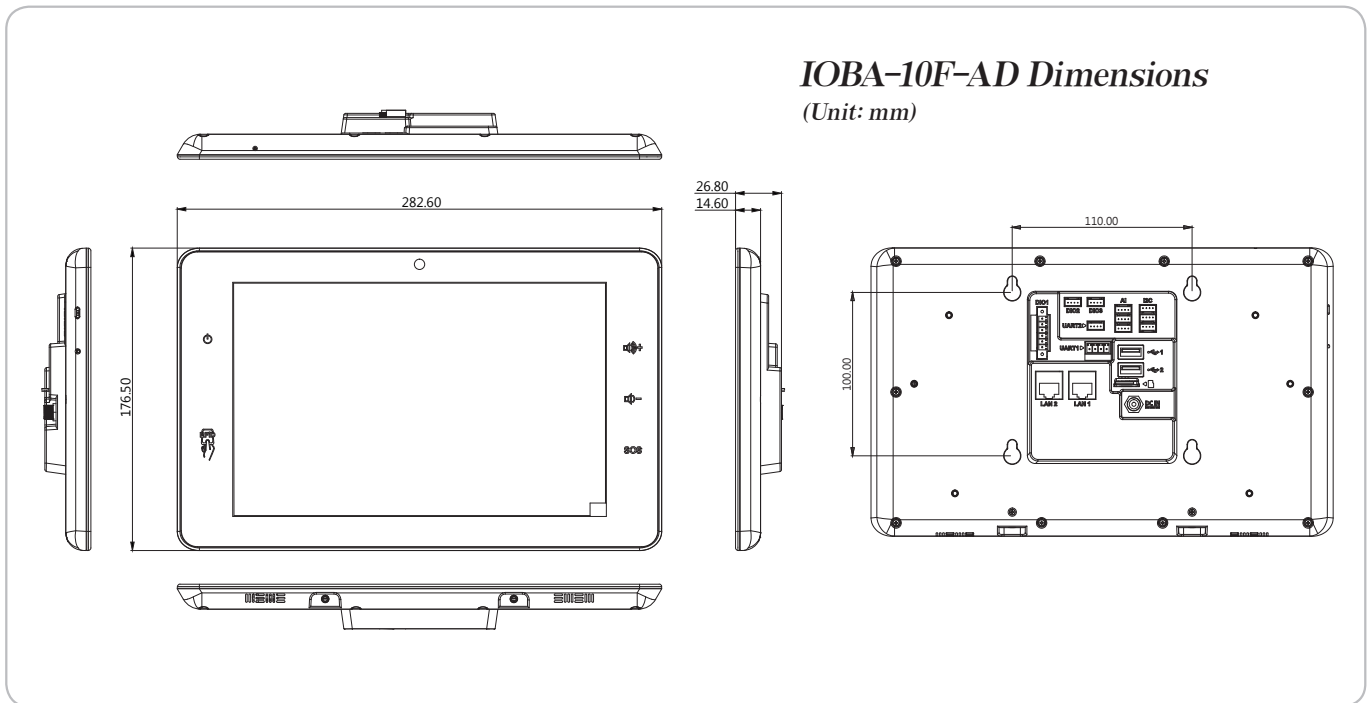
IOBA‑10F‑AD‑ET Dimensions
(Unit: mm)
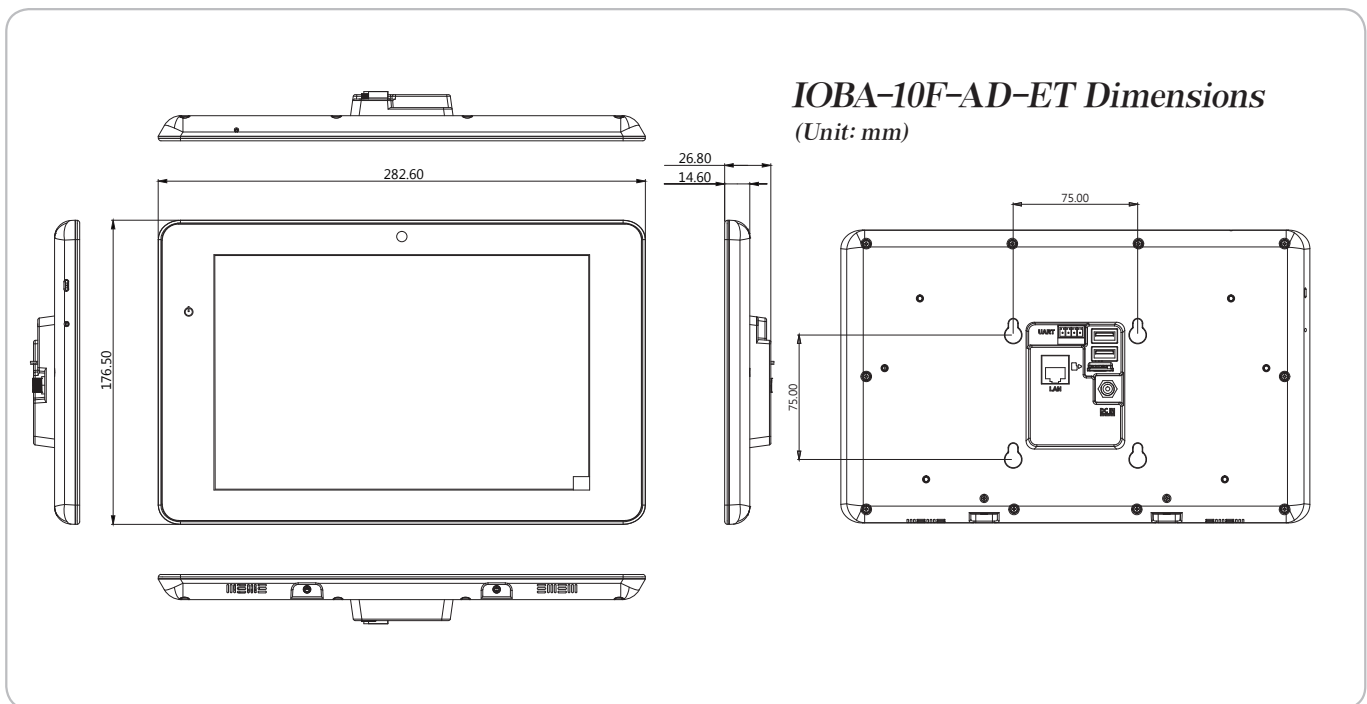
IOVU-12F-AD	12" Freescale™ i.MX6 Cortex™-A9 Quad Core 1.0 GHz
IOVU-15F-AD	15" Freescale™ i.MX6 Cortex™-A9 Quad Core 1.0 GHz
IOVU-17F-AD	17" Freescale™ i.MX6 Cortex™-A9 Quad Core 1.0 GHz

Features

- Freescale™ i.MX6 Cortex™-A9 Quad Core 1.0 GHz
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected Capacitive Touchscreen
- Robust IP65 aluminum front bezel
- Build-in Wi-Fi+BT & PoE
- Android 4.2 OS
- One CAN 2.0 and four GPIO
- 12V~36V wide range DC power input

Specifications

IOVU LV

Fanless | Wireless 802.11b/g/n | Bluetooth | Touchscreen | CAN-Bus | Speakers | Android

Model	IOVU-12F-AD	IOVU-15F-AD	IOVU-17F-AD
Size	12" (4:3)	15" (4:3)	17" (4:3)
Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)
Brightness (cd/m²)	600	400	350
Contrast Ratio	700 : 1	700 : 1	800 : 1
LCD Color	16.2M	16.2M	16.7M
Pixel Pitch (mm)	0.24 x 0.24	0.297x 0.297	0.264 x 0.264
Viewing Angle (H-V)	160° / 140°	160° / 140°	170° / 160°
Backlight MTBF(hrs)	50000	50000	50000
Touchscreen	Projected capacitive flat touch	Projected capacitive flat touch	Projected capacitive flat touch
CPU	Freescale™ i.MX6 Cortex™-A9 quad core 1.0 GHz		
RAM	2GB DDR3 SDRAM		
Boot Flash	8G eMMC Nand Flash		
OS Support	Android 4.2.2		
Input / Output	1 x 10/100/1000 Mbps Power over Ethernet 2 x USB 2.0 host 1 x RS-232 full function (DB-9) 1 x RS-232/422/485 by DB-9 (software controllable) 1 x 12V~36V DC terminal block 1 x SD slot (up to 32GB) (Hidden) 1 x CAN 2.0 4 x GPIO 1 x DC jack 1 x On/Off power switch 1 x Reset button		
Audio	2 x 3W Speaker		
Thermal Solution	Fanless		
Wireless	BT4.0+WiFi Controller for 802.11 b/g/n		
Construction Material	Aluminum front cover and sheet metal rear cover		
Mounting	Panel, Wall, Stand, VESA Mount 100mm x 100mm		
Color	Black		
Dimensions (WxHxD) (mm)	322.2 x 262.2 x 45.5	378.5 x 303 x 48.2	408.4 x 341.4 x 54.3
Operating Temperature (°C)	-20°C ~ 60°C		
Storage Temperature (°C)	-30~70°C		
Humidity	5% to 90% (non-condensing)		
IP Level	IP 65 compliant front panel		
Power Requirement	12~36V DC		
Power Consumption	36V @ 0.8A	36V @ 0.72A	36V @ 0.86A

Ordering Information

Part Number		Description
12"	IOVU-12F-AD-R10	12" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 1.0 GHz; WiFi/Bluetooth; POE 802.3 at; Android 4.2 ,RoHS
15"	IOVU-15F-AD-R10	15" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 1.0 GHz; WiFi/Bluetooth; POE 802.3 at; Android 4.2 ,RoHS
17"	IOVU-17F-AD-R10	17" TFT-LCD; Freescale™ i.MX6 Cortex™-A9 1.0 GHz; WiFi/Bluetooth; POE 802.3 at; Android 4.2 ,RoHS

Options

Item	IOVU-12F-AD	IOVU-15F-AD	IOVU-17F-AD
Power Adapter	63040-010060-130-RS (Vin:90~264VAC;60W;Vout:12VDC)		
ARM	ARM-11-RS	ARM-31-RS	ARM-31-RS
Stand	STAND-A12-RS	STAND-A19-RS STAND-B19-RS	STAND-C19-RS STAND-A21-RS
Wall Mount Kit	AFLWK-19B		
Panel Mount Kit	FPK-01-R10		

IOVU-12F-AD

DC Jack · LAN · Reset Button · DC Terminal · 2 x USB2.0 · RS-232, RS-232/422/485 (SW controllable) · 1 x CAN 2.0 4 x GPIO

IOVU-15F-AD

DC Jack · LAN · Reset Button · DC Terminal · 2 x USB2.0 · RS-232, RS-232/422/485 (SW controllable) · 1 x CAN 2.0 4 x GPIO

IOVU-17F-AD

DC Jack · LAN · Reset Button · DC Terminal · 2 x USB2.0 · RS-232, RS-232/422/485 (SW controllable) · 1 x CAN 2.0 4 x GPIO

2 x 3W Speaker · Power switch
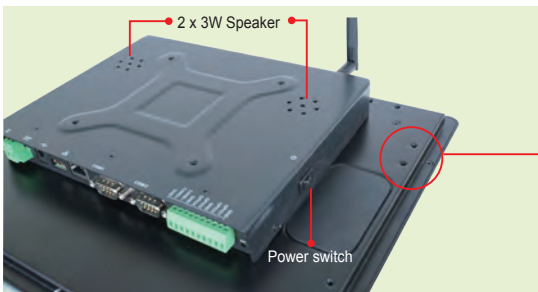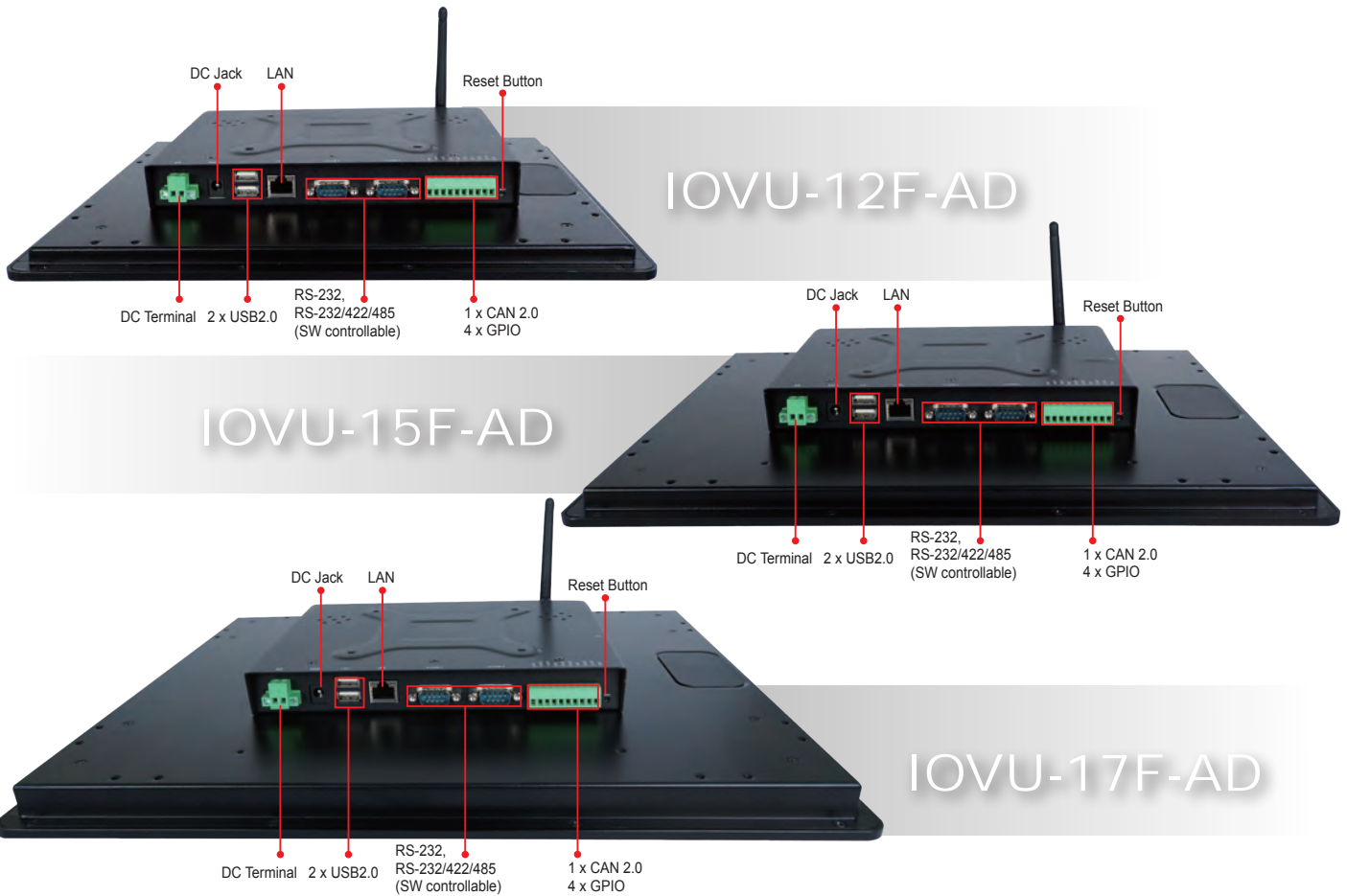
■ New Panel Mount Screw Design
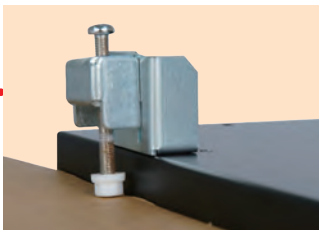
The IOVU series is shipped with the new panel mount screws allowing users to fasten either with screwdrivers or hands.

IOVU–12F–AD
Dimensions *(Unit: mm)*
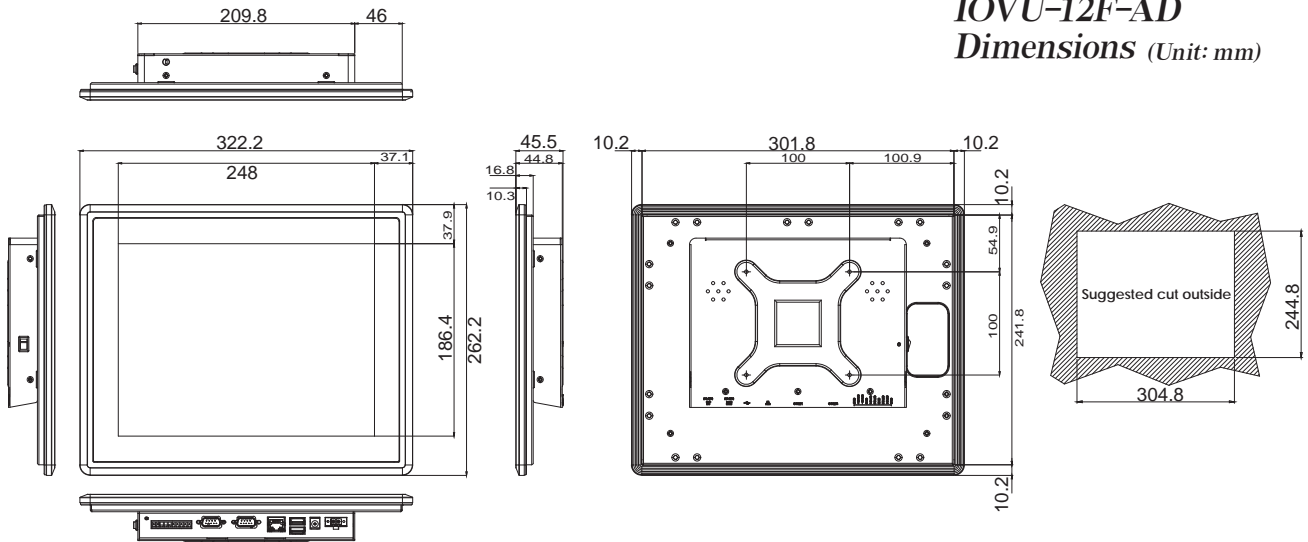
IOVU–15F–AD
Dimensions *(Unit: mm)*
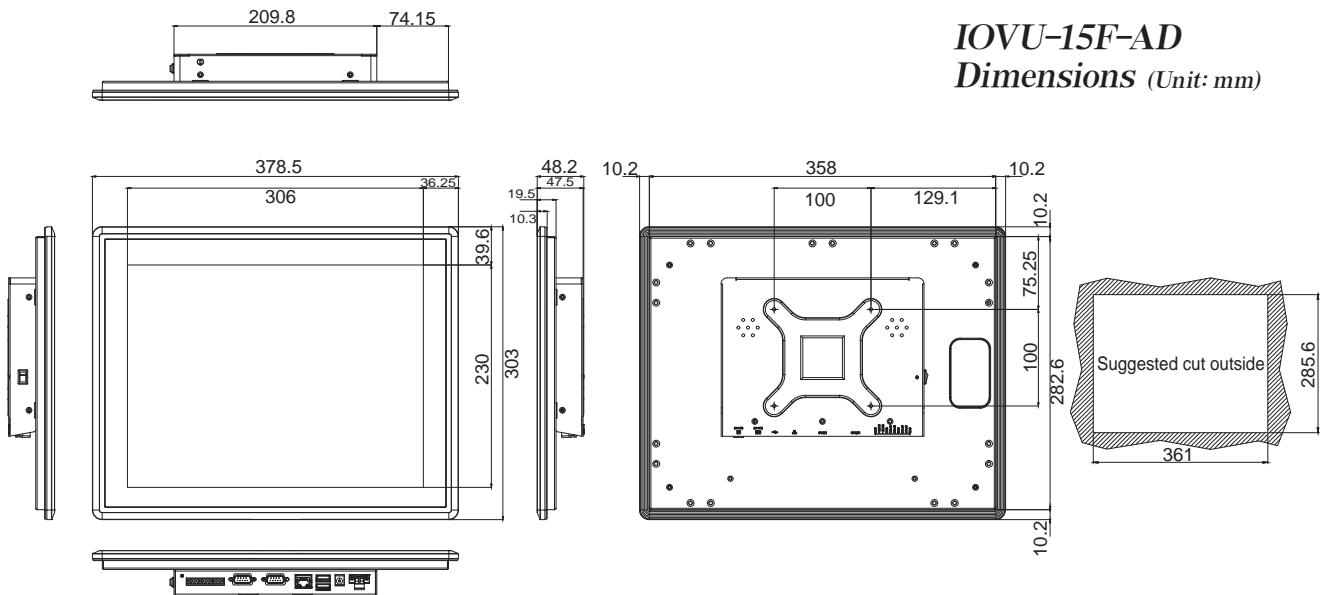
IOVU–17F–AD
Dimensions *(Unit: mm)*
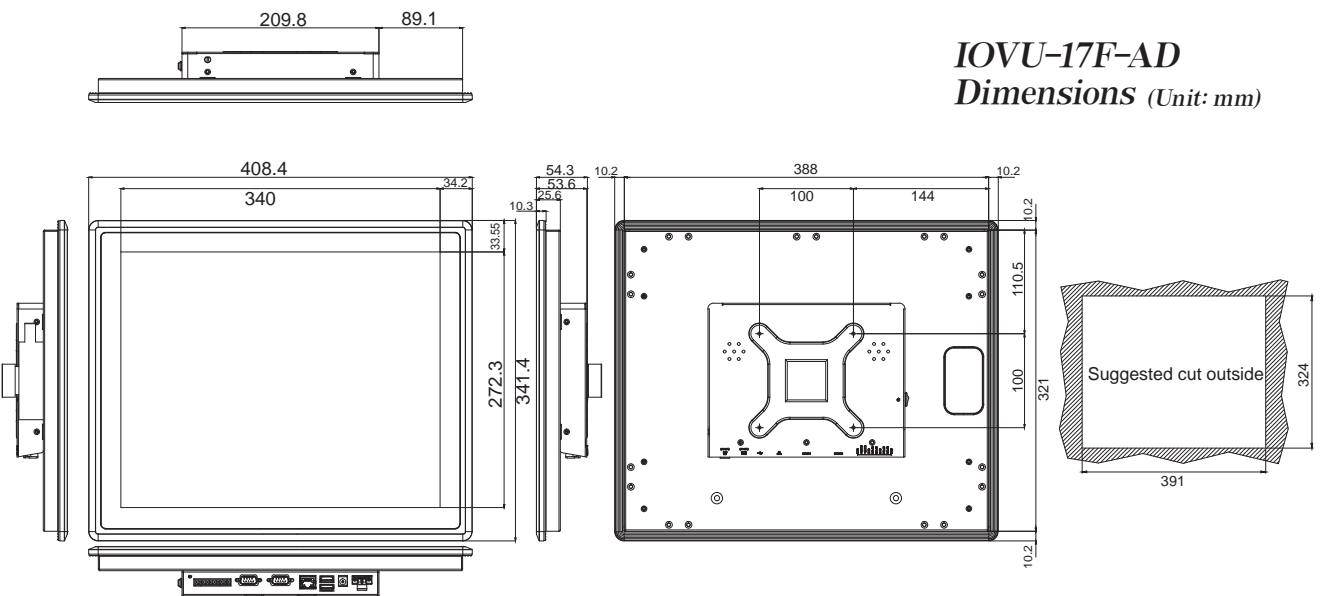
Industrial Monitor Solution

Durable waterproof displays are essential in today's commercial and industrial applications. IEI's versatile lines of flat-bezel IP 65 compliant industrial displays with shock and vibration resistance are designed specifically to endure the rigorous demands of modern commerce and industrial environments. These displays are easily integrated into automation applications, ATM machines and human machine interfaces.

Industrial Monitor Introduction

| Display Monitor | Open Frame Monitor | Maritime Monitor |

DM-F Series

- IP65 flat-bezel
- Resistive touch window: 6H anti-scratch PCAP multi-touch
- HDMI/DP high definition audio/video interface
- 9~36V wide range DC input

LCD-KIT-F Series

- Integrated open frame mounting holes
- Flexible touch selection: resistive touch, resistive touch window or PCAP touch
- Flexible power selection: 12V DC or 9-36V DC power

SxxM Series

- IP66 flat-bezel
- PCAP multi-touch
- DVI/VGA/BNC output and BNC input
- Redundant power : AC and 18-36V DC
- 0%~100% dimmable LCD backlight
- Remote OSD control by serial port or LAN port
- Duplicate daisy chain monitor connection by VGA port

Product Line	DM-F Series	LCD-KIT-F Series	SxxM series
LCD Size	6.5" ~ 24"	12.1"~19"	19" / 24"
Input Signal Interface	6.5"/ 8": VGA+DVI-D 12.1" ~ 24": VGA+HDMI+DisplayPort	VGA+DVI-D	2 x VGA, 2 x DVI 1 x BNC input, 1 x BNC output
Brightness (cd/m²)	250 ~ 800	350 ~ 800	300
Operating Temperature	-20°C ~ 60°C	-20°C ~ 60°C	-15°C ~ 55°C
OSD Function	Yes	Yes	Yes
IEI samrtOSD Support	Yes	Yes	-
Front Panel Protection	IP 65	-	IP 66

Industrial Monitor Redefine

■ Flexible Video Input Selection

DM-F provides comprehensive video input from conventional analog VGA to broad bandwidth digital HDMI and DisplayPort to fulfill different needs.

Display port

VGA   HDMI
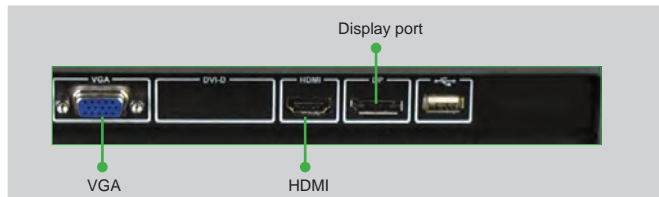
Benefits of HDMI

HDMI
● Single-link bandwidth to 340 MHz (10.2 Gbit/s)
● Blu-ray disc content support
● Downward convertible for DVI

Benefits of DisplayPort

DisplayPort
● 17.28 Gbit/s broad bandwidth for faster transmission
● 15M for 1080p 60fps long transmission distance
● Blu-ray disc content support
● Lockable cables against vibration
● Downward convertible for HDMi and DVI

Lockable

■ 9V~36V Wide Range DC Input

Power requirement varies from applications. DM-F series provides 9V~36V DC input which simplifies system integration through adapter or DC source.

Supports Mobile Application

Display Monitor series M models support wide 9V~36V DC power input. Factory and mobile environments, such as vehicles, usually use 12V or 24V DC power source. The wide 9V~36V power input range by terminal block and 12V power input by power jack can be adapted to a wide variety of appliance requirements.

Power Adapter12V DC input

■ Dual Touch Screen Control Interface: RS-232 & USB

Display monitor series provides both RS-232 and USB ports for touch screen connection.

● Lockable RS-232 connector ensures secure attachment (Optional)
● Standard Type A USB 2.0 interface with 480 Mbit/s maximum transfer rate provides faster data transmission than a traditional RS-232 interface

Combination of USB & RS-232 Interfaces

■ IP 65 Waterproof Aluminum Front Panel

IP 65 is the highest dust, water and oil proof standard in ground usage, It absolutely prevents any micro-particles from getting into the system front panel and allows the system to function in harsh environments.

■ Wide Operating Temperature

Design for outdoor applications, DM-F series support wide operating temperature from -20°C ~ 60°C for 12" to 17" models. 22" and 24" are by project request.

-20°C 60°C

■ Gamma Correction - Pursuit of Perfection

Gamma correction enables each panel model to follow the specified look-up-table (LUT) in gamma curve doing color adjustment through software encode. In this way, various monitors can display in an unified color by following Gamma 2.2 standard for PC products, ensuring color consistency for multiple monitor applications.
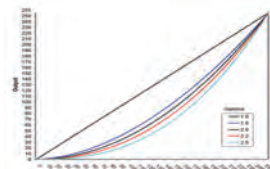
■ Cable Cover for Neat Cabling

The DM-F series provides an optional cable cover for easy and neat cabling.

On Screen Display (OSD)

■ OSD Keypad on Back

In order to keep the front panel simple and clean, the membrane keypad of the DM-F series is located on the rear panel to prevent the possibility to adjust the setting accidentally.

■ SmartOSD

● 100% compatible with Windows environment -Windows 95/NT 4.0/98/2000/2003/XP/Vista
● Normal video cable (VGA/DVI) connection only
● Overcome operation obstacles

Distance, location and multiple display units no longer present obstacles when controlling the monitors with the SmartOSD.

Multiple Control Displays   Untouchable Location

■ IEI SmartOSD Software OSD for IEI LCD Monitors

IEI SmartOSD is a proprietary On-Screen-Display (OSD) software solution that enables easy remote monitor setting adjustments in Windows environment. IEI SmartOSD delivers excellent performance and provides more flexibility than typical OSD hardware solutions when adjusting a monitor. SmartOSD also allows monitor settings such as brightness, contrast, screen position, size, and color gain to be read and changed over normal video cable (VGA/DVI by project base).

Directly controls IEI display device through standard video cables !

VESA DDC / CI Protocol

Local Control System   DVI~10m   VGA~30m

■ 100% Compatible with VESA DDC / CI Protocol

IEI LCD monitors are implemented with the VESA DDC/CI protocol and standard VESA Monitor Control Command Set (MCCS). Compliance software for designing displays compatible with VESA's DDC/CI and MCCS standards are easily modified and applied in other application programs.

smart OSD

Various Remote Management Functions

1.EDID
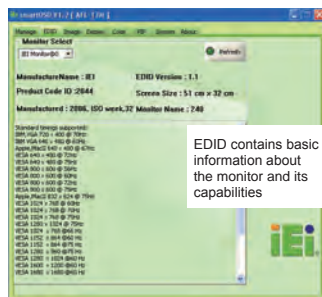
EDID contains basic information about the monitor and its capabilities

2.Image Setting
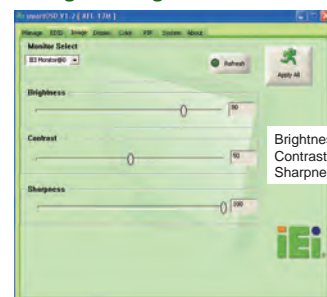
Brightness Contrast Sharpness

3.Display Setting
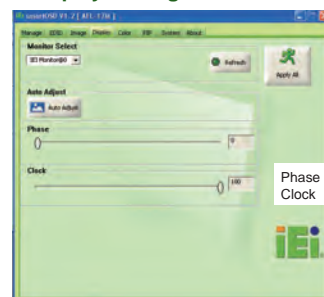
Phase Clock

4.Color Setting

User Red Gain User Green Gain User Blue Gain Color Temperature Gamma

5. Picture in Picture Setting

PIP On/Off PIP Input Source PIP Size

6. System Setting

Monitor Power Control Auto Brightness Main Source Input Volume Misc (Factory Reset/OSD Lock/OSD Unlock) Mute

7.Monitor Power Management and File Saving
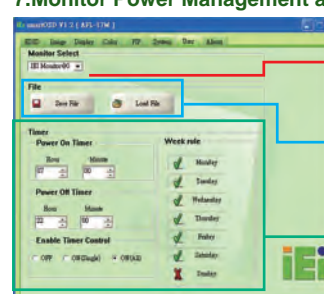
Monitor Select
Selects the monitor unit for which the system parameters will be adjusted

Settings Saving
Saves the referred settings of all the OSD functions as .dat files and load the settings

Power Management
Setts the monitor power on/off by time and week

Heavy Industrial Monitor

6.5"~15.6" DM-F IP65 Industrial Monitor

Features

- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- DC input
- DVI / VGA flexible video input solution
- Resistive single touch
- Wide temperature support

IP65 | High Brightness | -20ºC~60ºC | MOUNT

DM-FW15A
DM-F15A
DM-F12A
DM-F08A
DM-F65A

Specifications

Preliminary

	Model	DM-F65A	DM-F08A	DM-F12A	DM-F15A	DM-FW15A
LCD	LCD Display	6.5" (4:3)	8" (4:3)	12" (4:3)	15" (4:3)	15.6" (16:9)
	Max. Resolution	640 (W) x 480 (H)	800 x 600	1024 (W) x 768 (H)	1024 (W) x 768 (H)	1336 (W) x768 (H)
	Brightness (cd/m²)	800	500	600	450	400
	Contrast Ratio	600:1	500:1	700 : 1	800 : 1	500:1
	LCD Color	16.2M	262K	16.2M	16.2M	16.2M
	Pixel Pitch (mm)	0.207 x 0.207	0.0675 x 0.2025	0.24 x 0.24	0.29 x 0.29	0.252 x 0.252
	Viewing Angle (H-V)	160° / 140°	140°/120°	160° /140°	160° / 150°	170° / 160°
	Backlight MTBF (Hrs)	50000	50000	50000	70000	50000
Touchscreen & Controller		5-wire resistive single touch window/ Penmount 6000		5-wire resistive single touch window/ Penmount 6000 2-point projected capacitive touch window/ EETI EXC3000		
I/O Ports		1 x VGA (DB-15) 1 x DVI 1 x USB 2.0 (touch) 1 x RS-232 (reserved for resistive touch ATO) 1 x Lockable 12V DC jack		1 x VGA (DB-15) 1 x HDMI 1 x DisplayPort 1.1 1 x USB 2.0 (touch) 1 x RS-232 (reserved for resistive touch ATO) 1 x Lockable 9V-36V DC jack 1 x 9V-36V terminal block		
OSD	OSD Button	5-key membrane OSD keypad		7-key membrane OSD keypad		
	Smart OSD Software	Smart OSD Software				
Physical	Construction Material	Aluminum front frame and sheet metal rear cover				
	Mounting	Panel Mount/ Rack Mount 75 x 75 VESA Mount		Panel Mount/ Rack Mount/ 100 x 100 VESA Mount		
	Enclosure Color	Black C				
	Dimensions (mm)	191.8 x 154.36 x 42.88	222.2 x 182.2 x 42.7	262.2 x 322.2 x 40.5	303 x 378.5 x 43.2	400.1 x 253.3 x 52.9
	Cutout Dimensions (mm)	180 x 140	206 x 154	244.8 x 304.8	285.6 x 361.1	379.1 x 232.3
	Weight (kg) Net/ Gross	1.1 / 2.6	1.33 / 4.5	2.7 / 4.9	3.5 / 5.5	4 / 6.5
Environment	Operating Temperature (with air flow)	-20°C ~ 60°C (with air flow)				
	Storage Temperature	-20°C ~ 70°C				
	Humidity	10% to 95% (non-condensing)				
	IP Level	IP 65 compliant front panel				
	Safety and EMC	CE & FCC certified				
Power Input		12V DC		9V~36V DC		
Power consumption		12V @ 0.5A	12V @ 0.5A	9V @ 2.2A 36V @ 0.5A	9V @ 1.6A 36V @ 0.4A	9V @ 1.3 36V @ 0.33

Heavy Industrial Monitor

17"~23.8" DM-F IP65 Industrial Monitor

Features

- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Wide range 9V~36V DC input
- HDMI / DisplayPort / VGA flexible video input solution
- Projected capacitive multi-touch and resistive single touch options
- Wide temperature support

IP65 | 9V~36V DC Input | High Brightness | Multi-touch | MOUNT

DM-F24A
DM-F22A
DM-FW19A
DM-F19A
DM-F17A
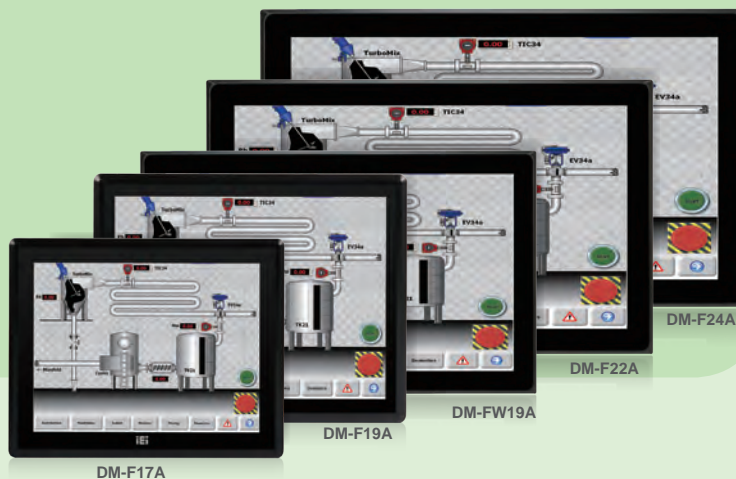
Specifications

Preliminary

Model		DM-F17A	DM-FW19A	DM-F19A	DM-F22A	DM-F24A
LCD	LCD Display	17" (5:4)	18.5" (16:9)	19" (5:4)	21.5" (16:9)	23.8" (16:9)
	Max. Resolution	1280 (W) x 1024 (H)	1336 (W) x 768 (H)	1280 (W) x 1024 (H)	1920 (W) x 1080 (H)	1920 (W) x 1080 (H)
	Brightness (cd/m²)	350	400	350	250	250
	Contrast Ratio	1000 : 1	1000 : 1	1000 : 1	1000 : 1	3000 : 1
	LCD Color	16.7M				
	Pixel Pitch (mm)	0.26 x 0.26	0.3 x 0.3	0.294 x 0.294	0.25 x 0.25	0.28 x 0.28
	Viewing Angle (H-V)	170° / 160°			170° / 160°	178° / 178°
	Backlight MTBF (Hrs)	50000			30000	30000
Touchscreen & Controller		5-wire resistive single touch window/ Penmount 6000 2-point projected capacitive touch window/ EETI EXC3000			2-point projected capacitive touch window/ EETI EXC7200	2-point projected capacitive 2-point touch window/ EETI EXC7200
I/O Ports		1 x VGA (DB-15) 1 x DVI (F19A only) 1 x HDMI (F17A & FW19A only) 1 x DisplayPort 1.1 1 x USB 2.0 (touch) 1 x RS-232 (reserved for resistive touch ATO) 1 x Lockable 9V-36V DC jack 1 x 9V-36V terminal block			1 x VGA (DB-15) 1 x HDMI 1 x DisplayPort 1.1 1 x USB 2.0 (touch) 1 x RS-232 (reserved for resistive touch ATO) 1 x Lockable 9V-36V DC jack 1 x 9V-36V terminal block	
OSD	OSD Button	7-key membrane OSD keypad				
	Smart OSD Software	Smart OSD Software				
Physical	Construction Material	Aluminum front frame and sheet metal rear cover				
	Mounting	Panel Mount/ Rack Mount/ 100 x 100 VESA Mount			Panel Mount / 100 x 100 VESA Mount	Panel Mount / 100 x 100 VESA Mount
	Enclosure Color	Black C				
	Dimensions (mm)	341.4 x 408.4 x 49.3	468.8 x 288.2 x 48.9	372.4 x 447.4 x 49.57	358.4 x 550.4 x 49.1	382 x 600 x 49.4
	Cutout Dimensions (mm)	324 x 391	447.8 x 267.2	430 x 355	340 x 532	358.6 x 576.6
	Weight (kg) Net/Gross	4.4 / 7.1	5 / 8.1	5.4 /8.4	6.3 / 9.6	7.6 / 10.9
Environment	Operating Temperature (with air flow)	-20°C ~ 60°C	-20°C ~ 60°C (with air flow)	-20°C ~ 60°C	-10°C ~ 50°C	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 70°C	-20°C ~ 70°C	-20°C ~ 70°C	-20°C ~ 60°C	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)				
	IP Level	IP 65 compliant front panel				
	Safety and EMC	CE & FCC certified				
Power input		9V~36V DC				
Power consumption		9V @ 2.6A 36V @ 0.6A	9V @ 1.33A 36V @ 0.35A	9V @ 3.3A 36V @ 0.8A	9V @ 2.5A 36V @ 0.6A	9V @ 3.4A 36V @ 0.8A

Ordering Information

		Description
6.5"	DM-F65A/R-R10	6.5" 800 cd/m² high-luminance VGA LCD monitor with aluminum die casting front panel, black color, USB resistive touchscreen, R10
8"	DM-F08A/R-R10	8" 500 cd/m² SVGA LCD monitor, Aluminum front panel, Black color, W/ USB resistive touch screen, 12V DC input, R10
12"	DM-F12A/R-R11	12" 600 cd/m² XGA LCD monitor, aluminum front panel, black color, W/ USB resistive touchscreen, 9 ~36V DC input, R11
	DM-F12A/PC-R11	12" 600 cd/m² XGA LCD monitor, aluminum front panel, black color, W/ USB projected capacitive touchscreen, 9 ~36V DC input, R11
15"	DM-F15A/R-R20	15" 450 cd/m² XGA LCD monitor, Aaluminum front panel, black color, W/ USB resistive touchscreen, 9 ~36V DC input, R20
	DM-F15A/PC-R20	15" 450 cd/m² XGA LCD monitor, aluminum front panel, black color, W/ USB projected capacitive touchscreen, 9 ~36V DC input, R20
17"	DM-F17A/R-R11	17" 350 cd/m² SXGA LCD monitor, aluminum front panel, black color, W/ USB resistive touchscreenn, 9 ~36V DC input, R11
	DM-F17A/PC-R11	17" 350 cd/m² SXGA LCD monitor, aluminum front panel, black color, W/ USB projected capacitive touchscreen, 9 ~36V DC input, R11
19"	DM-F19A/R-R10	19" 350 cd/m² SXGA LCD monitor, aluminum die casting front panel, black color, W/ USB resistive touchscreen, 9 ~36V DC input, R10
	DM-F19A/PC-R10	19" 350 cd/m² SXGA LCD monitor, aluminum die casting front panel, black color, W/ USB projected capacitive touchscreen, 9 ~36V DC input, R10
21.5"	DM-F22A/PC-R11	21.5" 250 cd/m² FHD LCD monitor, aluminum front panel, black color, W/ USB projected capacitive touchscreen, 9 ~36V DC input, R11
24"	DM-F24A/PC-R20	23.8" 250 cd/m² FHD LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R20

Options

Item	DM-F65A	DM-F08A	DM-F12A	DM-F15A	DM-F17A	DM-F19A	DM-F22A	DM-F24A
Arm	ARM-11-RS		ARM-11-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS
Stand	STAND-B08		STAND-A12-RS STAND-C12-R10	STAND-A19-RS STAND-C19-R10 STAND-A21-R10	STAND-A19-RS STAND-C19-R10 STAND-A21-R10	STAND-A19-RS STAND-C19-R10 STAND-A21-R10	STAND-A19-RS STAND-C19-R10 STAND-A21-R10	STAND-A19-RS STAND-C19-R10 STAND-A21-R10
Wall Mount Kit	AFLWK-12		WK-190MS-R10					
Panel Mount Kit	FPK-07-R10		FPK-01-R10	FPK-01-R10	FPK-01-R10	FPK-02-R10	FPK-02-R10	FPK-03-R10
Rack Mount Kit	FRK65-R10	FRK08-R10	FRK12-R10	FRK15-R10	FRK17-R10	FRK19D-R10	N/A	N/A
Cable Cover	N/A	N/A	N/A	DM-F-CC01-R10	DM-F-CC01-R10	DM-F-CC02-R10	DM-F-CC02-R10	DM-F-CC02-R10
RS-232 Touch Cable Kit	DM-F-COMKIT-R10						N/A	N/A
HDMI Cable	N/A		32012-000800-101-RS	32012-000800-101-RS	32012-000800-101-RS	N/A	32012-000800-101-RS	32012-000800-101-RS
DisplayPort Cable	N/A		32004-000200-100-RS					
DVI Cable	32000-086600-RS		N/A	N/A	N/A	32000-086600-RS	N/A	N/A
Power Adapter	N/A		63040-010060-120-RS					

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
Touch Pen	43125-0002C0-00-RS (DM-F65A/F08A/F12A/F15A/F17A/F19A only)	1	Resistive touch only
USB Cable	32001-006100-100-RS	1	For touchscreen
VGA Cable	32000-036200-RS	1	
Power Adapter	63040-010036-121-RS (for DM-F65/08A)		

DM-F65A/08A
Fully Integrated I/O

USB for touchscreen

DVI

VGA

RS-232 (optional)

12V DC jack
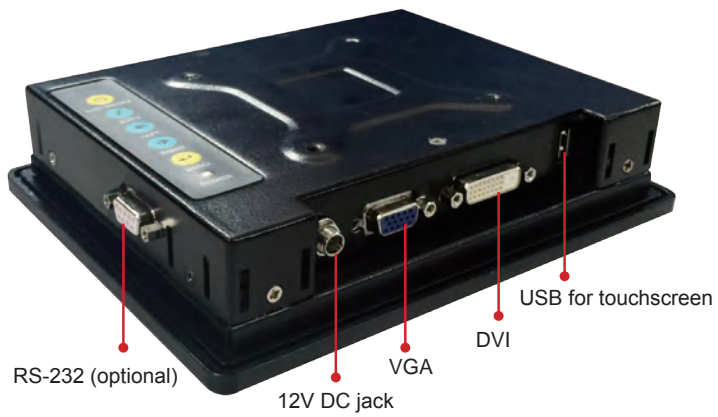
DM-F12A/F15A/FW15A/F17A
Fully Integrated I/O

VGA

DisplayPort

9V-36V terminal block

USB for touchscreen

HDMI

9V-36V lockable DC jack

RS-232
(reserved for resistive touch ATO)

DM-F19A
Fully Integrated I/O

9V-36V terminal block   VGA   HDMI   USB for touchscreen

9-36V lockable DC jack   DisplayPort

Auto-adjustment

Screen on/off

Up   Menu

Left   Right

Down
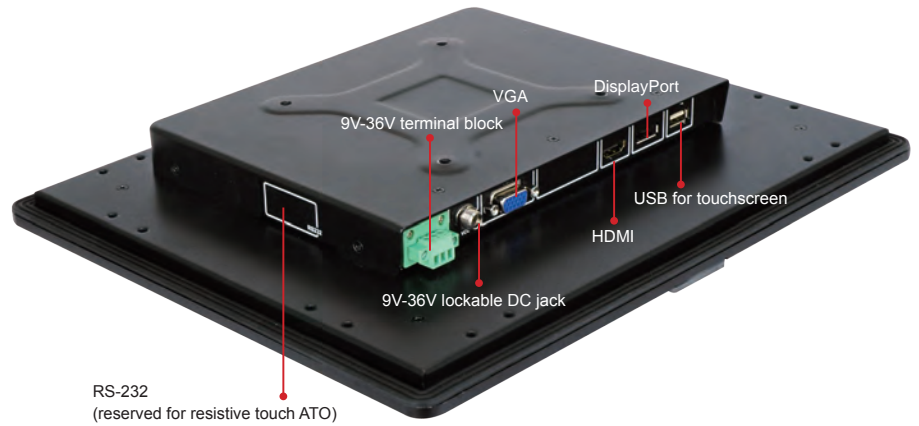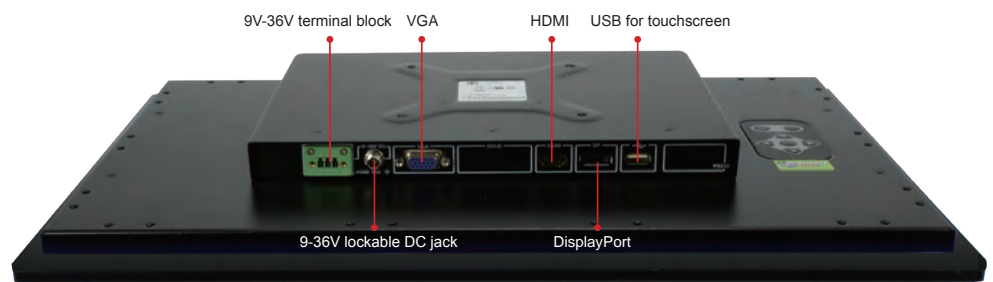
DM-F22A/F24A
Fully Integrated I/O

9V-36V terminal block VGA   HDMI   USB for touchscreen

9-36V lockable DC jack   DisplayPort
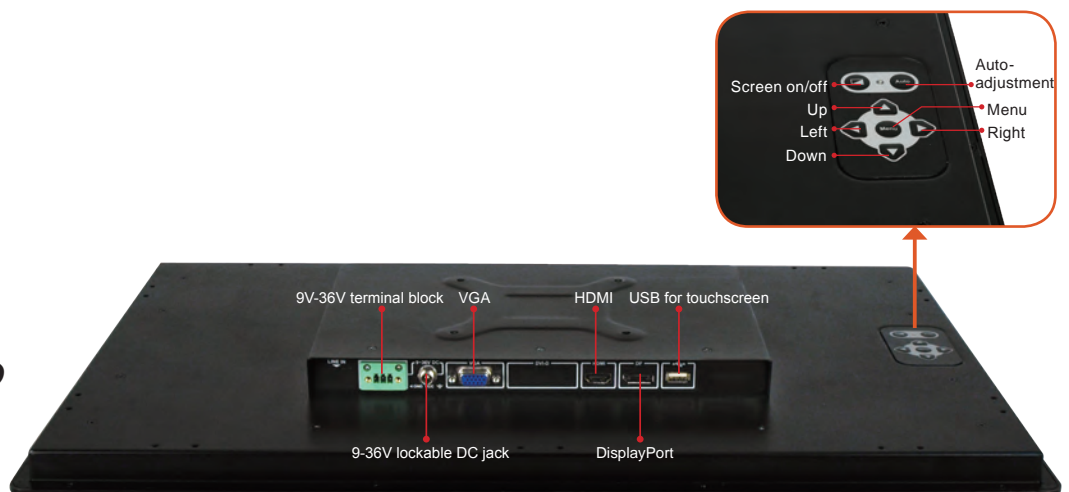
DM−F65A Dimensions
(Unit: mm)
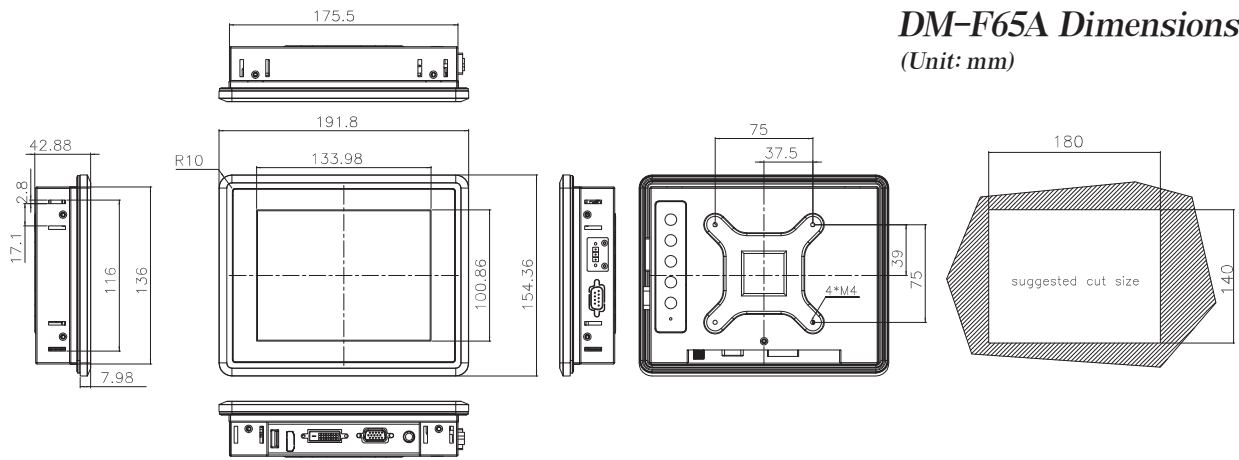
DM−F08A Dimensions
(Unit: mm)
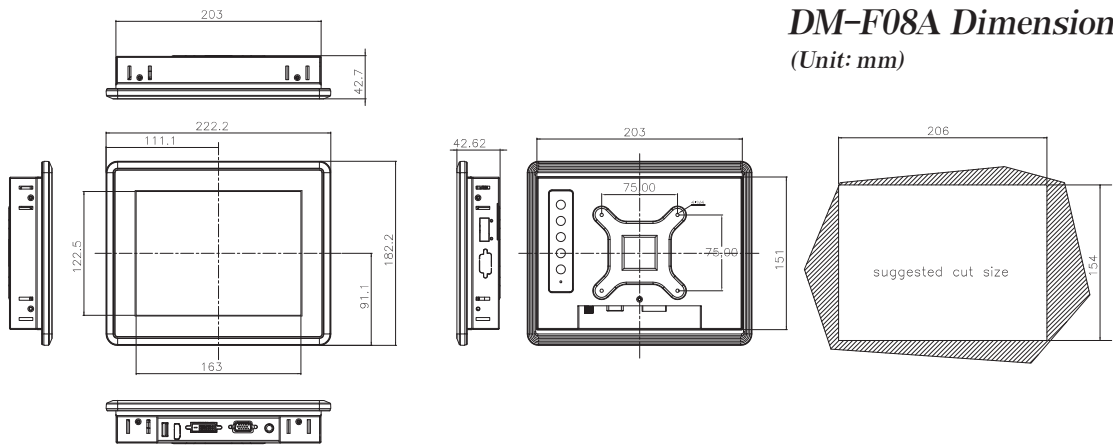
DM−F12A Dimensions
(Unit: mm)
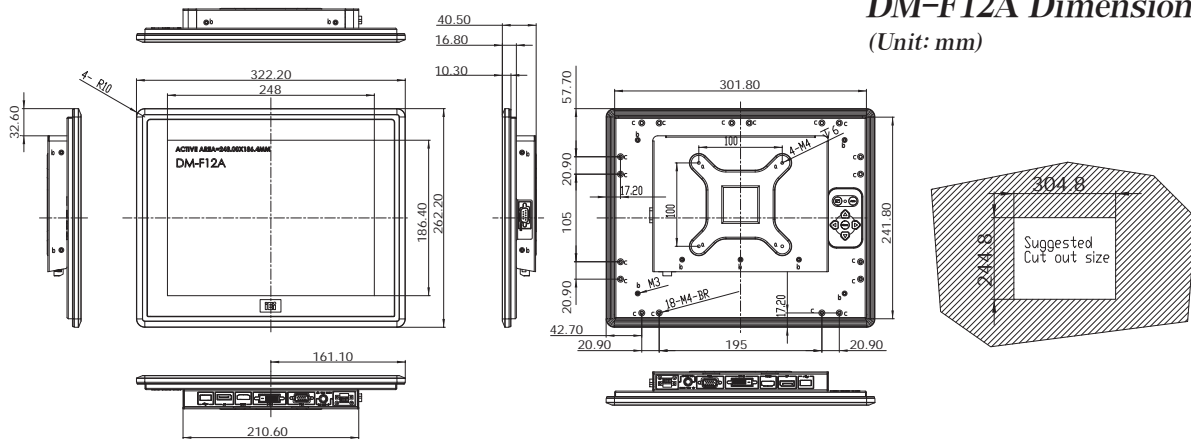
DM−F15A Dimensions
(Unit: mm)
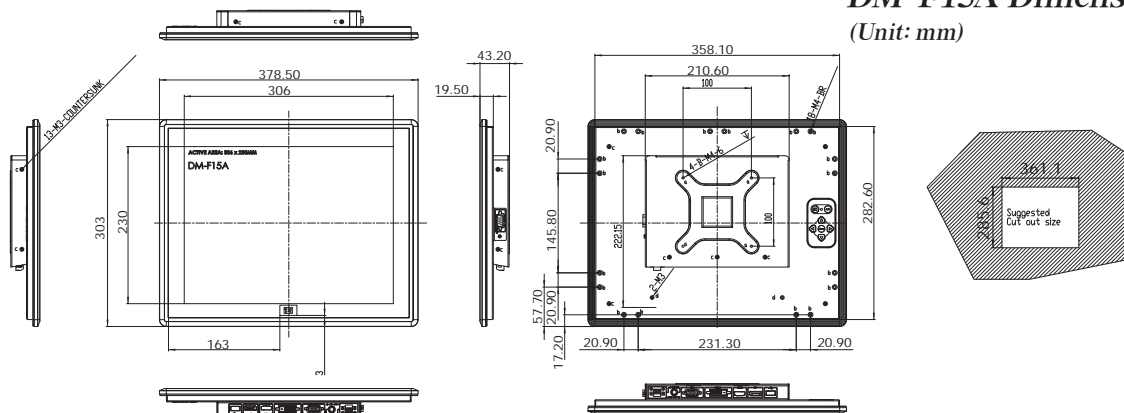
DM-FW15A Dimensions
(Unit: mm)
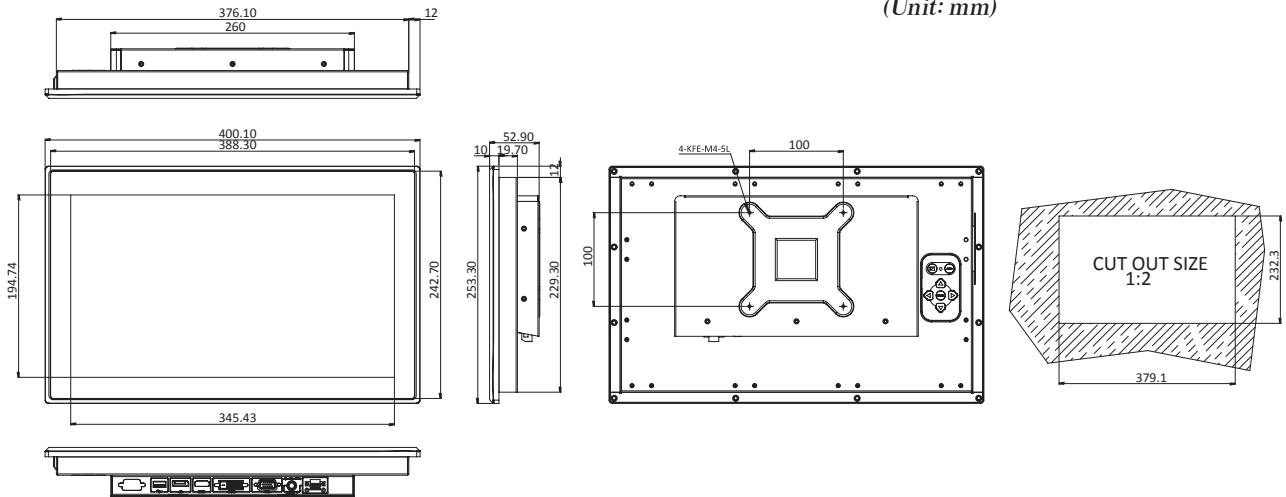
DM-F17A Dimensions
(Unit: mm)
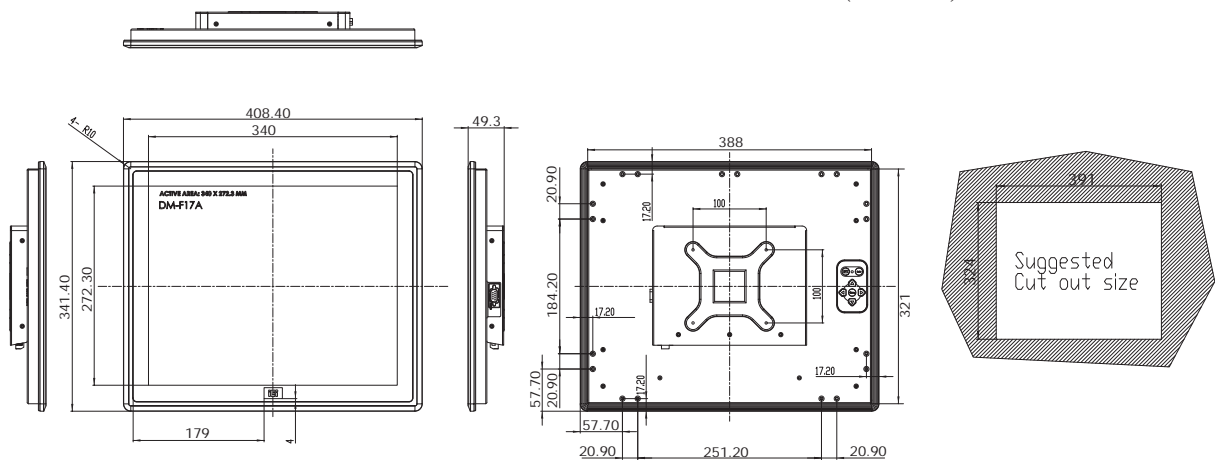
DM-F19A Dimensions
(Unit: mm)

DM–FW19A Dimensions
(Unit: mm)

444.80
260
468.80
234.40
48.90
25.70
183.20
264.20
74.65
288.20
144.10
100
100

VESA MOUNT
M4 SCREW

447.80
267.20

Suggested
Cut Out Size

DM–F22A Dimensions
(Unit: mm)

49.07
25.16
550.40
477
358.40
269
ACTIVE AREA: 477.0 X 269.00 MM

530
20.90 179.55 179.55 20.90
20.90
17.20
20—M4—5R
50
4—M9—V6
17.20
20.90
338
89.55
89.55
100
50
100
89.55
89.55
20.90
17.20
20.90
20.90 179.55 179.55 20.90
17.20

532
340
Suggested Cut Out Size

DM–F24A Dimensions
(Unit: mm)

600
528.6
49.36
25.46
574.6
142   142   142   142
125
118
382
298
356.6
200
100
100
100
8—M4—V6
24—M3—8R

359
577
Suggested cut out size

LCD-KIT-F Series

Slim Open Frame Monitor

IEI LCD monitor series is designed for system manufacturers, integrators, or value-added resellers that want to provide all the performance, quality and reliability of an LCD display solution at a cost effective price. The open front panel can be combined with any front bezel design, and makes installation easier and efficient, which is ideal for various embedded markets.

Features

- 12.1"~19" open frame architecture for embedded integration
- Over 350cd/m² high brightness and 50000hrs MTFB long lifetime panel
- Analog VGA or digital DVI interfaces support most of general systems
- Various touch panel solution : Resistive / Resistive touch windows / PCAP multi-touch
- Optional 9-36V DC module
- -20°C~60°C extended operating temperature
- Support software OSD for remote control applications
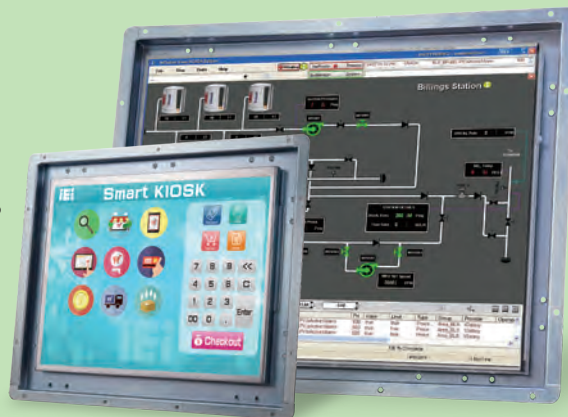
Automated Parking System

Machine Automation

Vending Machine

Kiosk

Wide Temperature Support

Slim Design

Support -20°C~60°C wide range temperature

Ideal for outdoor or semi-outdoor applications

Slim design, 20% thinner than LCD-KIT series

-20°C ← → **60°C**

20% thinner on depth

52mm

42mm

LCD-KIT150G   **LCD-KIT-F-15A**
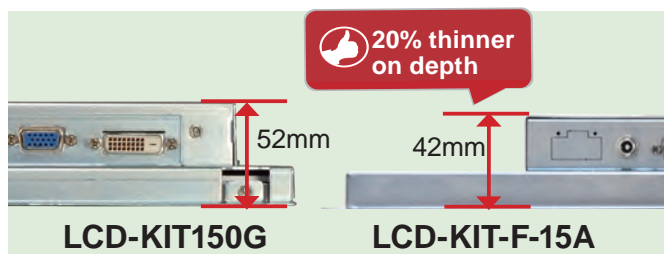
Flexible Mounting Support

Panel Mount
- With clamps and M5 screw

Rear Mount
- M3 screw holes
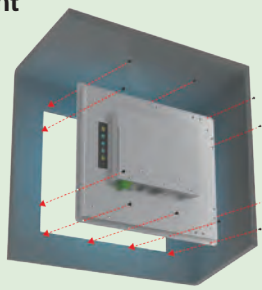
VESA Mount
- VESA 100
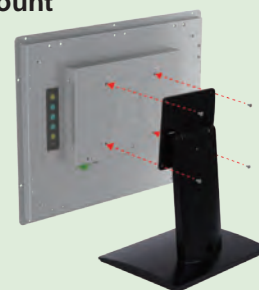
Clean Room

The LCD-KIT-F series can be shipped with touchscreen bonded or separated. Air-bonding method will be taken for Air Bonding resistive type or capacitive type touchscreen.
IEI Integration Corp. has a Class 10,000 LCD clean room with ISO certification. It brings add-on value, cost efficiency and higher quality to our products.

Control room particle measure result: Class 10000

Various Touch and Power Options

LCD-KIT-F

12" to 19"

Touch Screen

Resistive Touch screen

PCAP, Resistive Touch window

Power Input

12V DC (default)

9-36V DC (optional)
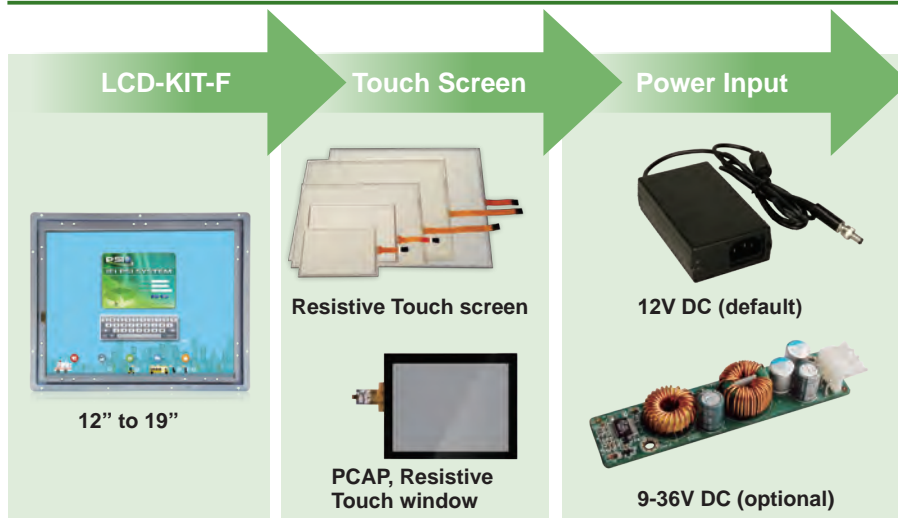
Product Line	LCD-KIT-F Series
LCD Size	12.1"~19"
Input Signal Interface	VGA+DVI-D
Brightness (cd/m²)	350~600
DC Input	12VDC or 9~36VDC
Touch Screen	Resistive touch screen/Resistive touch window/PCAP touch screen
IEI samrtOSD	Yes

I/O Interface

Terminal block DC in VGA USB (Optional for Touch Screen)

DC Jack DVI-D RS-232 (Optional for Touch Screen)

OSD Keypad

Brightness 100
Contrast 46
Clock 50
Phase 57
H.Position 43
V.Position 43
Sharpness

1 2 4 5

Enter Select

LCD on/off

Auto-adjust / ESC

Left

Right

Menu/Select

Power Indicator
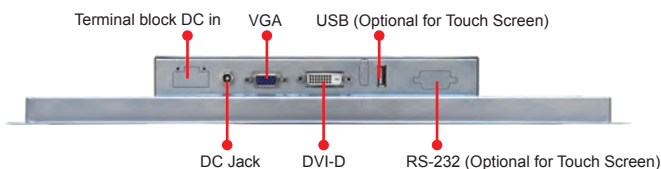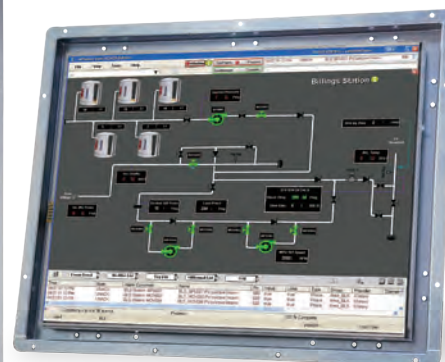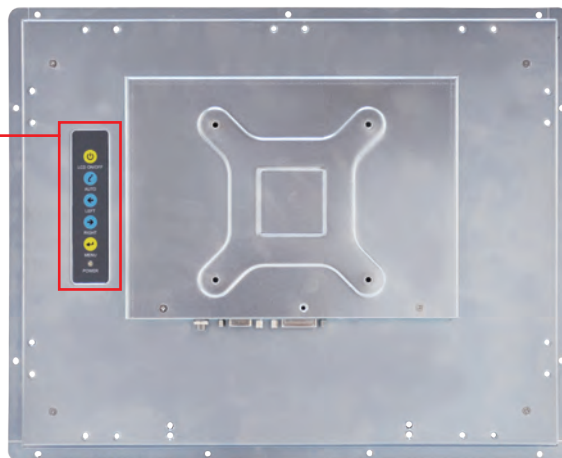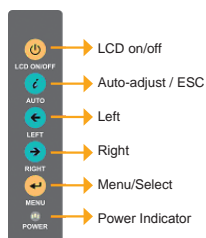
Specifications

Model	LCD-KIT-F12A	LCD-KIT-F15A	LCD-KIT-F17A	LCD-KIT-F19A
LCD Size	12.1"	15"	17"	19"
Resolution	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	600	450	350	350
Contrast Ratio	700:1	800:1	800:1	1000:1
Display Color	16.2M	16.2M	16.7M	16.7M
Pixel Pitch (mm)	0.24	0.297	0.264	0.294
Viewing Angle (H/V)	160°/140°	160°/150°	170°/160°	170°/160°
Input Interface	Analog VGA, DVI-D, RS-232/USB (for Touch)			
Touchscreen & controller	Resistive type 5-wire single touch / Penmount 6000 or Projected capacitive 2-point touch / EETI EXC7200 (Assembly by adhesive tape)			
OSD Function	5-key OSD			
smartOSD	Yes			
Dimensions (W x H x D) (mm)	323.8 x 263.8 x 40.3	380.1 x 304.6 x 43.2	410 x 343 x 49.4	449 x 374 x 49.45
Net Weight (Net/Gross)	1.9 kg/2.3 kg	2.6 kg/3.1 kg	3.3 kg/4.1 kg	4.3 kg/6.2 kg
Operating Temperature	-20°C~60°C			
Storage Temperature	-20°C~70°C			
Humidity	10% ~ 95% (non condensing)			
Input Voltage	12VDC			
Construction Material	sheet metal rear cover SPCC			
Mounting	Panel Mount, Rear Mount, VESA 100			

Ordering Information

P/N	Description
LCD-KIT-F12A-R10	12.1" 600 cd/m² XGA open frame monitor, VGA and DVI-D input, R10
LCD-KIT-F15A-R10	15" 450 cd/m² XGA open frame monitor, VGA and DVI-D input, R10
LCD-KIT-F17A-R10	17" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, R10
LCD-KIT-F19A-R10	19" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, R10

Resistive Touch

P/N	Description
LCD-KIT-F12A/R-R10	12.1" 600 cd/m² XGA open frame monitor, VGA and DVI-D input, Resistive touch screen RS-232/USB interface,R10
LCD-KIT-F15A/R-R10	15" 450 cd/m² XGA open frame monitor, VGA and DVI-D input, Resistive touch screen RS-232/USB interface,R10
LCD-KIT-F17A/R-R10	17" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Resistive touch screen RS-232/USB interface,R10
LCD-KIT-F19A/R-R10	19" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Resistive touch screen RS-232/USB interface,R10

Flat Resistive Touch

P/N	Description
LCD-KIT-F12A/TW-R10	12.1" 600 cd/m² XGA open frame monitor, VGA and DVI-D input, Resistive touch window RS-232/USB interface,R10
LCD-KIT-F15A/TW-R10	15" 450 cd/m² XGA open frame monitor, VGA and DVI-D input, Resistive touch window RS-232/USB interface,R10
LCD-KIT-F17A/TW-R10	17" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Resistive touch window RS-232/USB interface,R10
LCD-KIT-F19A/TW-R10	19" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Resistive touch window RS-232/USB interface,R10

Flat P-CAP Touch

P/N	Description
LCD-KIT-F12A/PC-R10	12.1" 600 cd/m² XGA open frame monitor, VGA and DVI-D input, Projected capacitive touch window USB interface,R10
LCD-KIT-F15A/PC-R10	15" 450 cd/m² XGA open frame monitor, VGA and DVI-D input, Projected capacitive touch window USB interface,R10
LCD-KIT-F17A/PC-R10	17" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Projected capacitive touch window USB interface,R10
LCD-KIT-F19A/PC-R10	19" 350 cd/m² SXGA open frame monitor, VGA and DVI-D input, Projected capacitive touch window USB interface,R10

9~36VDC Module

| P/N	Description
LCD-KIT-F-936160-R10	60W DC/DC 9~36V input 12V output power kit, R10

Options

| Description	Part Number
RS-232 cable (for Touch)	32005-001100-200-RS
DVI cable	32000-086600-RS
Panel mount kit	FPK-01-R10 (LCD-KIT-F-12A/LCD-KIT-F-15A)
	FPK-02-R10 (LCD-KIT-F-17A/LCD-KIT-F-19A)

Packing List

Item	P/N	Q'ty
AC power cable		1
VGA cable	32000-036200-RS	1
USB cable (for Touch)	32001-006100-200-RS	1
AC power adapter	63040-010036-121-RS	1
Utility CD		1

LCD-KIT-F12A Dimensions
(Unit: mm)

ACTIVE AREA:246X184.5MM
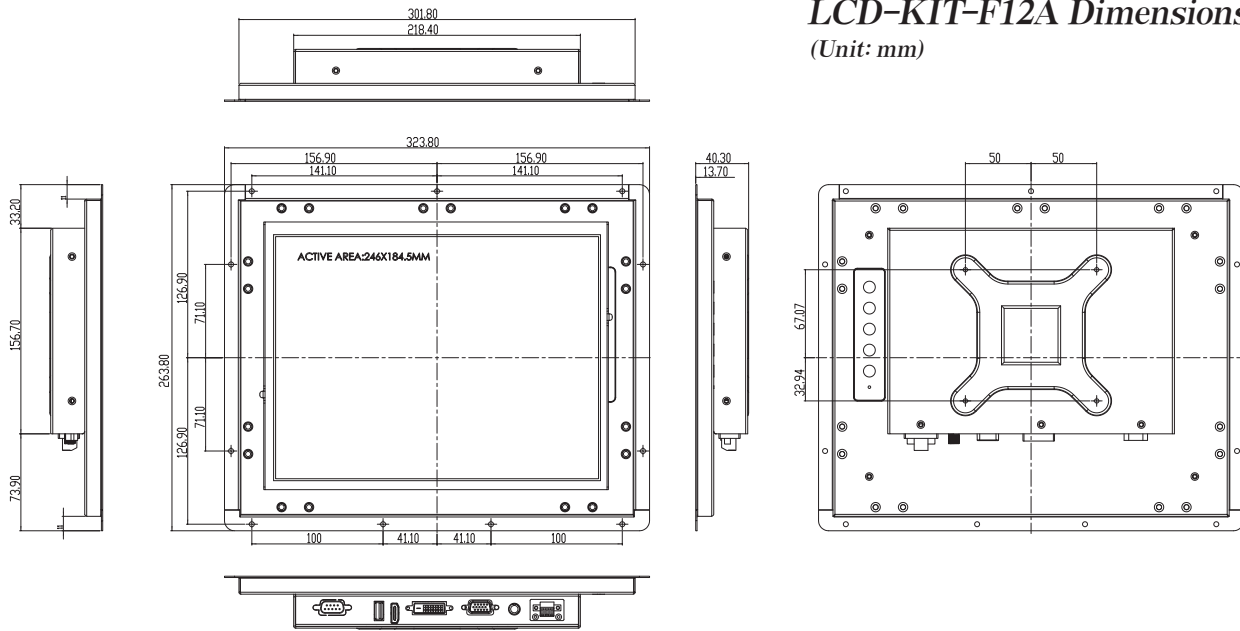
LCD-KIT-F12A-R10
Dimensions (Unit: mm)

ACTIVE AREA 246x184.5mm
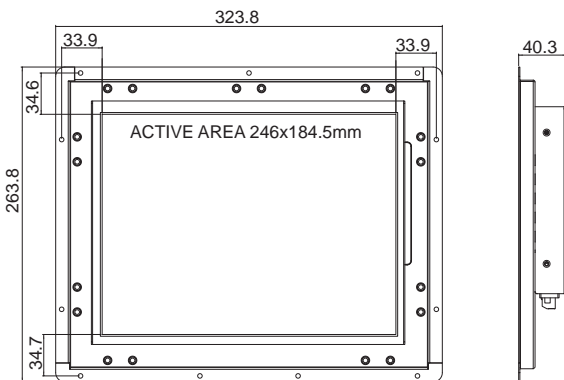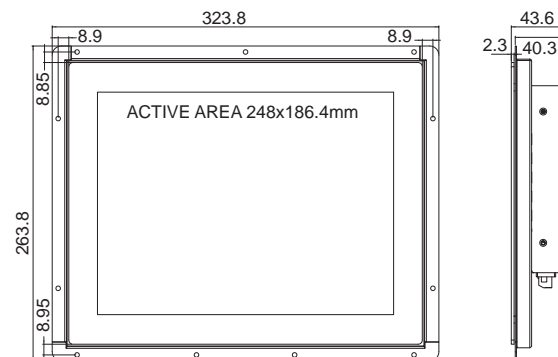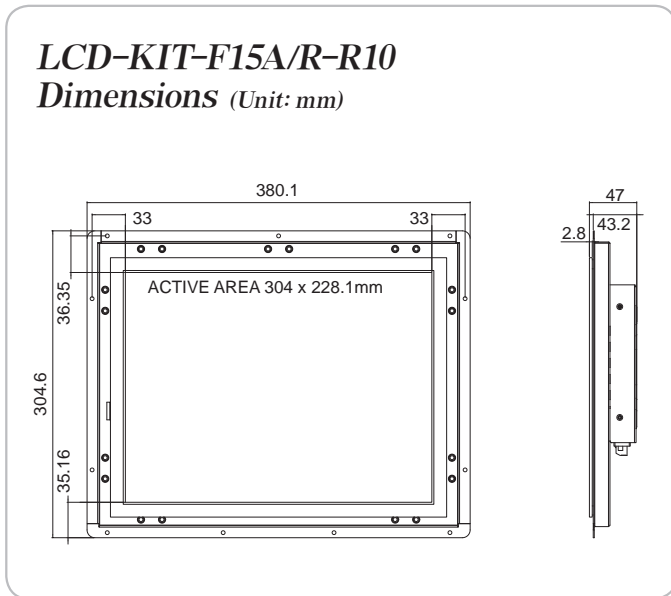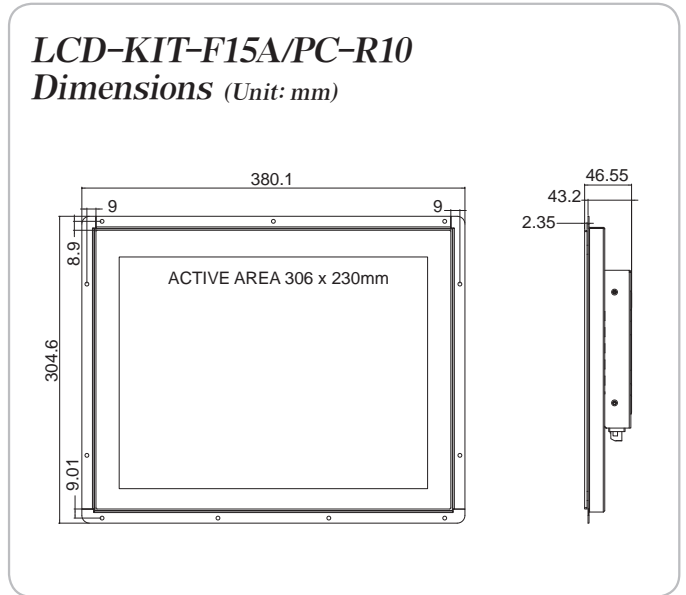
LCD-KIT-F12A/PC-R10
Dimensions (Unit: mm)

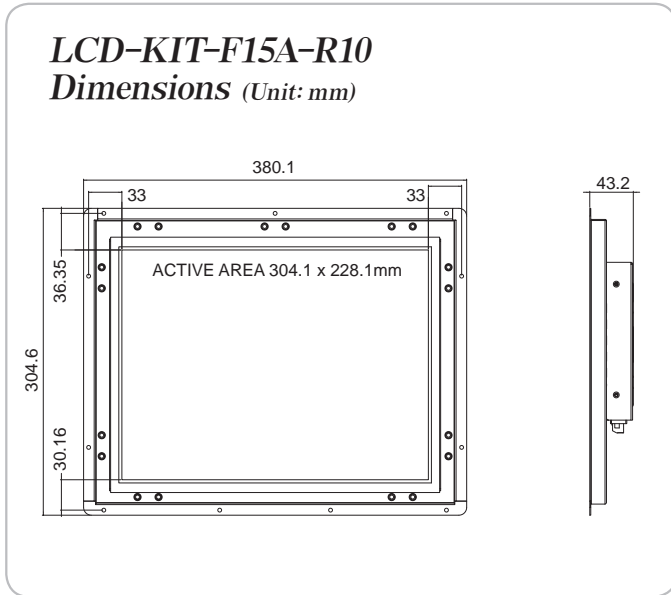ACTIVE AREA 248x186.4mm
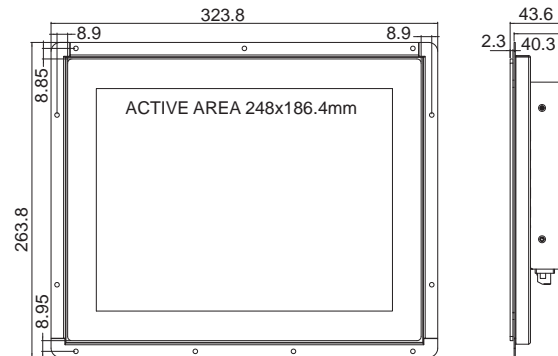
LCD-KIT-F12A/R-R10
Dimensions (Unit: mm)

ACTIVE AREA 246x184.5mm
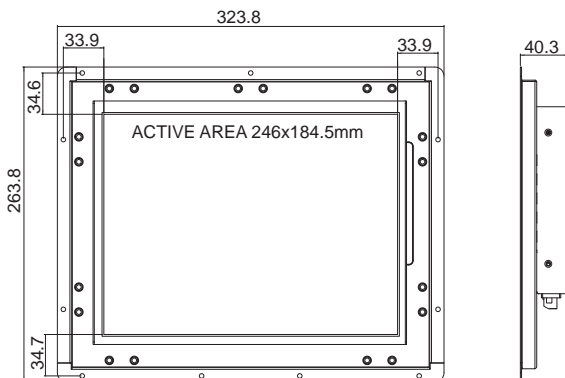
LCD-KIT-F12A/TW-R10
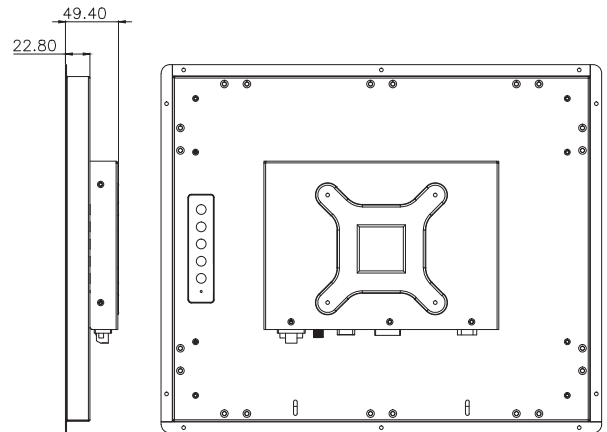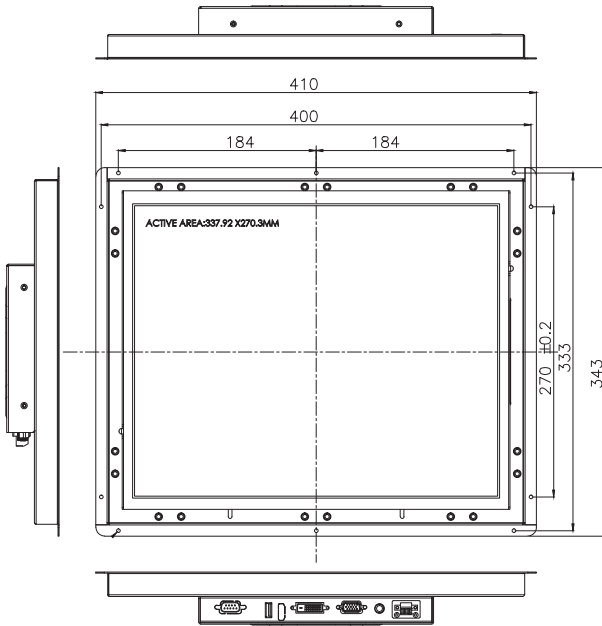*Dimensions (Unit: mm)*

ACTIVE AREA 248x186.4mm

LCD-KIT-F15A Dimensions
(Unit: mm)

LCD-KIT-F15A-R10
Dimensions *(Unit: mm)*

ACTIVE AREA 304.1 x 228.1mm

LCD-KIT-F15A/PC-R10
Dimensions *(Unit: mm)*

ACTIVE AREA 306 x 230mm

LCD-KIT-F15A/R-R10
Dimensions *(Unit: mm)*

ACTIVE AREA 304 x 228.1mm

LCD-KIT-F15A/TW-R10
Dimensions *(Unit: mm)*

ACTIVE AREA 306 x 230mm
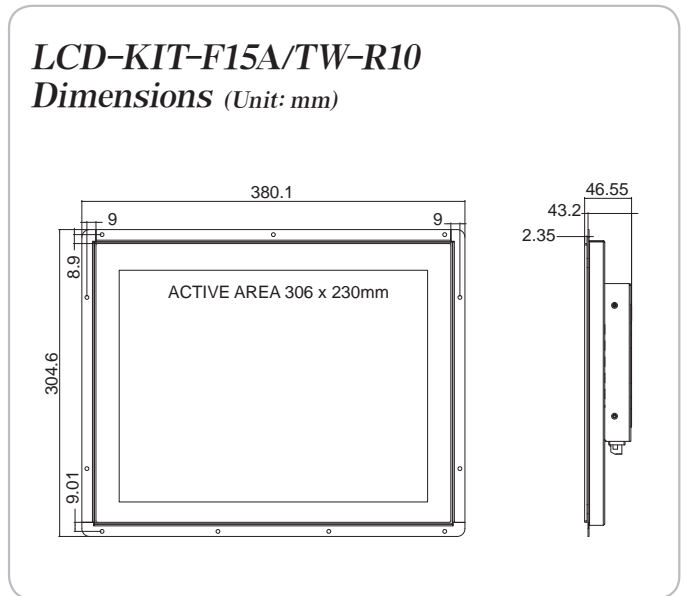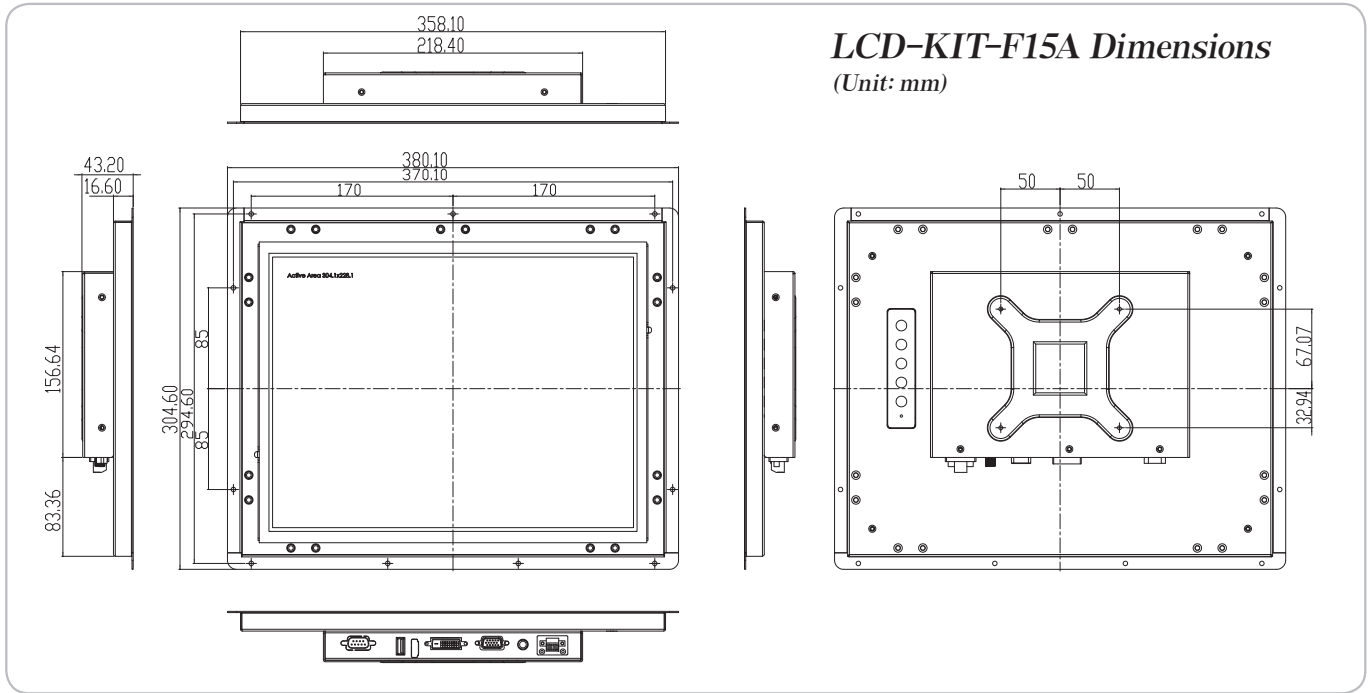
LCD-KIT-F17A Dimensions
(Unit: mm)

ACTIVE AREA:337.92 X270.3MM

410
400
184 184
270 ±0.2
333
343
49.40
22.80

LCD-KIT-F17A-R10
Dimensions *(Unit: mm)*

410
30.33
337.92 (ACTIVE AREA)
36.04
49.20
ACTIVE AREA 337.92 x 270.3mm
343
270.34 (ACTIVE AREA)
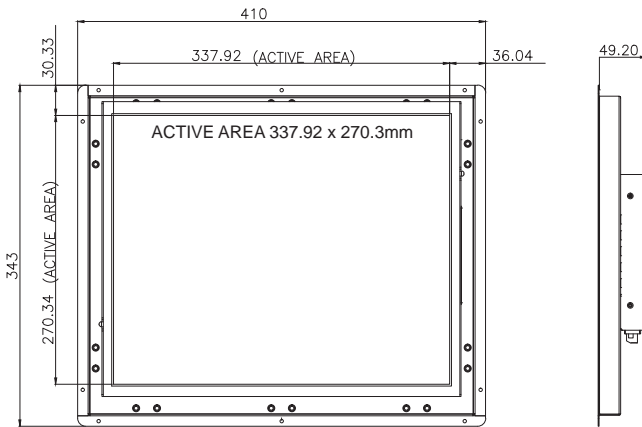
LCD-KIT-F17A/PC-R10
Dimensions *(Unit: mm)*

410
29.35
340(ACTIVE AREA)
35.00
49.20
ACTIVE AREA 304 x 272.3mm
343
272.30(ACTIVE AREA)
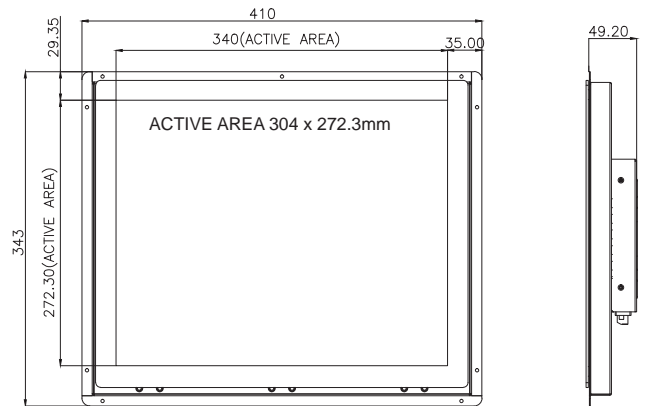
LCD-KIT-F17A/R-R10
Dimensions *(Unit: mm)*

410
29.30
339(ACTIVE AREA)
35.50
49.20
ACTIVE AREA 339 x 272.4mm
343
272.40(ACTIVE AREA)
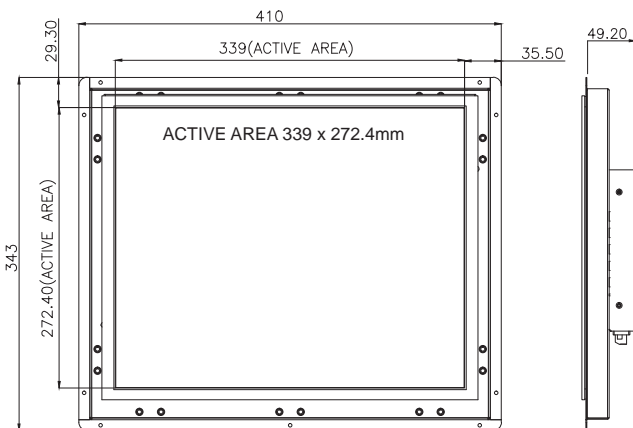
LCD-KIT-F17A/TW-R10
Dimensions *(Unit: mm)*

410
29.35
340(ACTIVE AREA)
35.00
49.20
ACTIVE AREA 304 x 272.3mm
343
272.30(ACTIVE AREA)
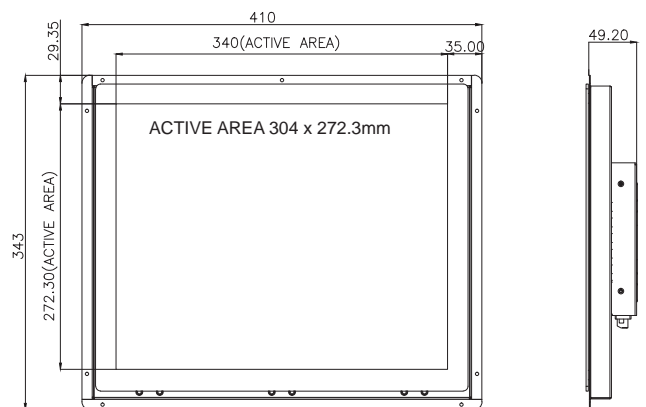
LCD-KIT-F19A Dimensions
(Unit: mm)

449
439
134.50 120 134.50
AA=376.32*301.06
157
364
374
157
ø 3.50
49.45
22.85
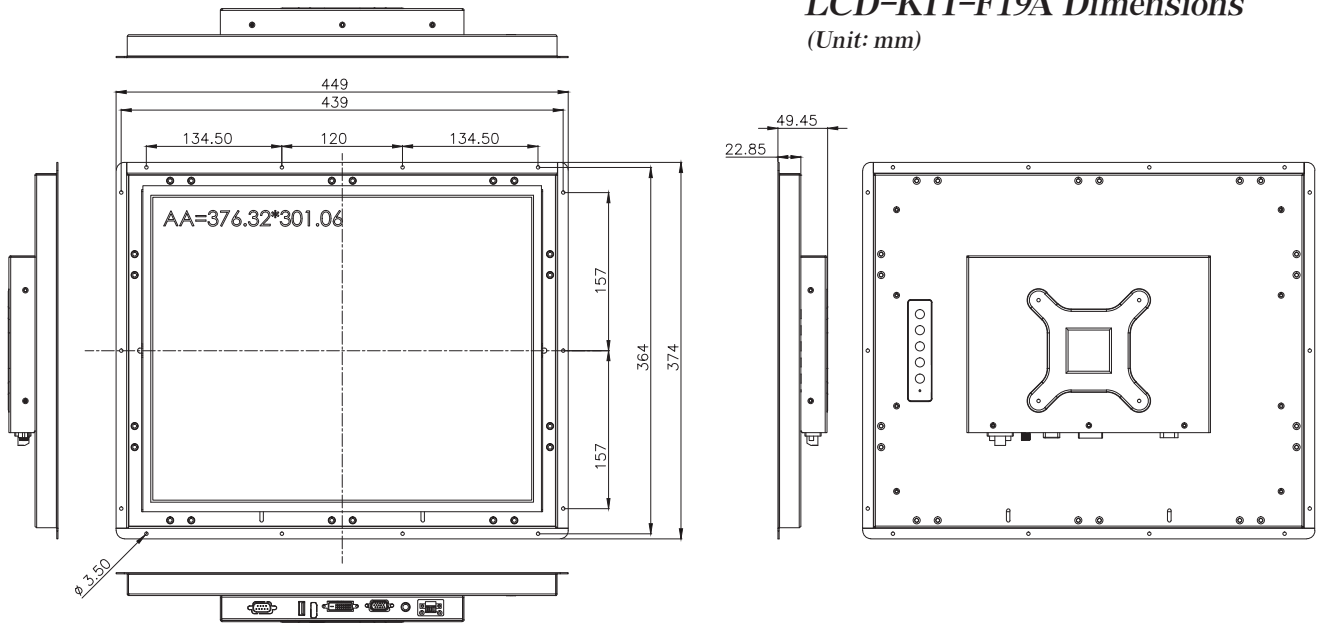
LCD-KIT-F19A-R10
Dimensions *(Unit: mm)*

49.45
22.85
34.47
449
376.32
36.34
ACTIVE AREA 376.32 x 301.06mm
94.37
352
156.64
374
301.06
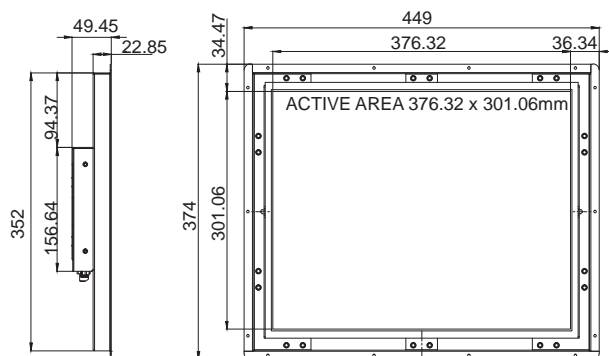
LCD-KIT-F19A/PC-R10
Dimensions *(Unit: mm)*

49.45
22.85
3.25
2.25
33.47
449
378.32
35.34
ACTIVE AREA 378.32 x 303.06mm
94.36
352
156.64
374
303.06
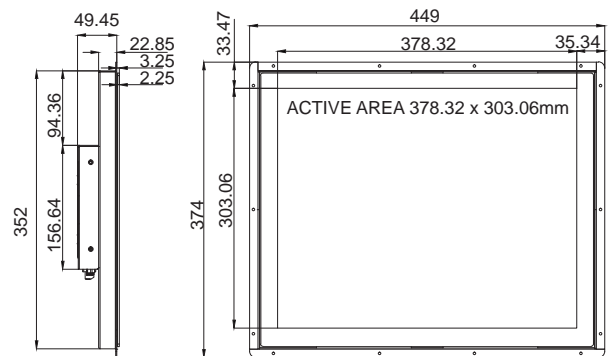
LCD-KIT-F19A/R-R10
Dimensions *(Unit: mm)*

49.45
22.85
4.10
3.10
34.47
449
376.3
36.35
ACTIVE AREA 376.3 x 301.05mm
94.36
352
156.64
374
301.05
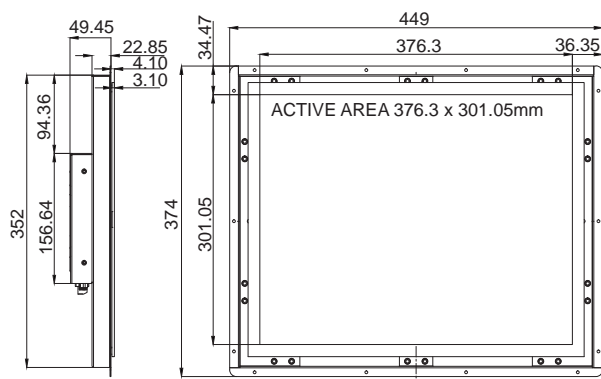
LCD-KIT-F19A/TW-R10
Dimensions *(Unit: mm)*

49.45
22.85
3.25
2.25
33.47
449
378.32
35.34
ACTIVE AREA 378.32 x 303.06mm
94.36
352
156.64
374
303.06

IMS
IEI Marine System

Marine Monitor Series

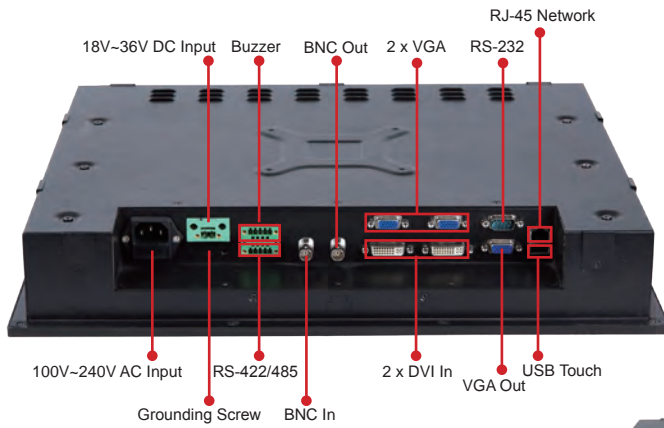| S19M	19" IP66 Marine Monitors
S24M	24" IP66 Marine Monitors

Features

- IP66 Front / IP22 Rear
- -15°C ~ +55°C Wide Temperature and Flat-bezel Projected Capacitive Touchscreen
- **Excellent Visual Performance**
  - Full OSD function configuration
  - 0%~100% full range dimming
  - 178°/178° wide viewing angles
- **Multiple Video Input**
  - Two VGA, two DVI, and one BNC
- **Multiple Video Output**
  - One VGA and one BNC
- Dual Isolated AC/DC Input with Redundant Power Protection
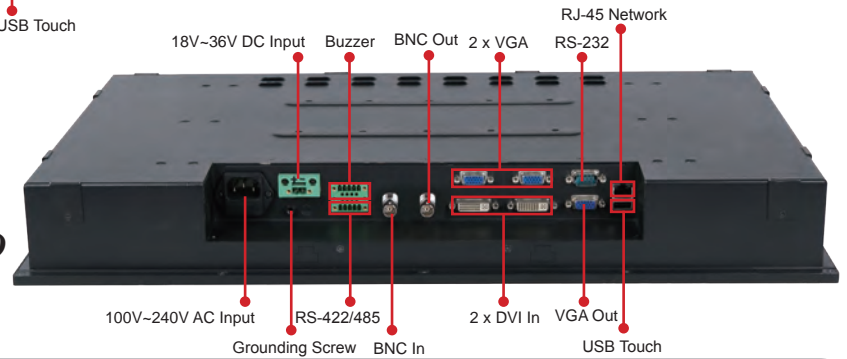- Remote OSD Settings through LAN, RS-232, RS-422 and RS-485

DNV | IEC 60945 | IACS -E10 | Fanless

Specifications

Model		S19M	S24M
LCD	LCD Size	19"	24"
	Panel Type	PMVA	AMVA
	Max Resolution	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000 : 1	5000 : 1
	Brightness (cd/m²)	300	300
	LCD Color	16.7M	16.7M
	Pixel Pitch (um)	294 x 294	276.75 x 276.75
	Viewing Angles (H-V)	178° / 178°	178° / 178°
	Backlight MTBF (HRs)	50000	50000
Scalar Chip		STDP8028	
I/O Ports		• DVI-D Signal Input: 2 x DVI (24-pin, female) • VGA Signal Input: 2 x D-sub (15-pin, female) • VGA Signal Output: 1 x D-sub (15-pin, female) - Clone of VGA IN* • Composite Video Input: 1 x BNC connector (Female) Composite Video Output: 1 x BNC connector (Female) • RS-232/422/485 for Remote Control (Non-isolated) • Touchscreen: 1 x USB Type A Connector (Female) • Ethernet: 1 x RJ-45 Connector for Remote Control • Isolated AC Power Inlet: 100V~240V AC • Isolated DC Terminal Block: 18V~36V DC • 1 x Buzzer	
PIP		Yes	
OSD Button		P-CAP Button (LCD on/off, Menu, Auto, Up, Down, Left, Right)	
LED/Sensor		Ambient light sensor (0%~100%)	
Power Requirement		Multi-power Supply: Isolated AC Power: 100-240V, 2-1A, 50-60Hz Isolated DC Power: 18-36V, 8-4A	
Operating Temperature		-15°C ~ 55°C	
Storage Temperature		-20°C ~ 60°C	
Humidity		5% to 95% RH	
Thermal Design		Fanless	
Housing		Aluminum front , sheet metal back (Black C)	
Cut-out Dimensions (L x W)		442 mm x 373 mm	576 mm x 358 mm
Dimensions (L x W x D)		463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm
Mounting		VESA 100mm x 100mm	VESA 100mm x 100mm
Net Weight (kg)		7.74	11.48
Gross Weight (kg)		11.54	15.97
Approvals		EMC: CE, FCC	
		Safety: DNV, IEC 60945 4th, IACS-E10	
		IP Rating: IP66 front , IP22 rear	

IMS
IEI Marine System

S19M Fully Integrated I/O

18V~36V DC Input · Buzzer · BNC Out · 2 x VGA · RS-232 · RJ-45 Network

100V~240V AC Input · RS-422/485 · 2 x DVI In · VGA Out · USB Touch

Grounding Screw · BNC In

S24M Fully Integrated I/O

18V~36V DC Input · Buzzer · BNC Out · 2 x VGA · RS-232 · RJ-45 Network

100V~240V AC Input · RS-422/485 · 2 x DVI In · VGA Out · USB Touch

Grounding Screw · BNC In

S19M Dimensions (Unit: mm)

438.80 · 366 · 463 · 75.50 · 74 · 8 · 1.50 · 170 · 394 · 196.45 · 170 · 369.80 · 100 · 100 · 372.80 · Suggested Cut Out Size · 441.80

VESA MOUNT M4 SCREW

S24M Dimensions (Unit: mm)

571 · 170 · 170 · 170 · 10.50 · 41.30 · 66 · 74 · 592 · 10.50 · 76.50 · 374 · 200 · 353 · 100 · 100 · 100 · 50 · 50 · 10-M4-KFE-L8 · 575.60 · 356 · Suggested Cut out Size · 1:4 · 41.30 · 30.50 · 169.85 · 169.85 · 30.50

Ordering Information

PN	Description
S19M-AD/PC-R10	19" SXGA 300cd/m² Marine Display with AC and DC redundant power, PCAP touch screen, R10
S24M-AD/PC-R10	24" FHD 300cd/m² Marine Display with AC and DC redundant power, PCAP touch screen, R10

Options

Item	Part No.	Description
Panel Mount Kit	PK-S19M-R10	for S19M
	PK-S24M-R10	for S24M
Desktop Stand	STAND-A21-R10	for S19M & S24M

Packing List

Item	Q'ty	Remark
User Manual & Driver CD	1	Drivers and user manual
VGA	1	VGA Signal Cable
DVI	1	DVI Signal Cable
USB	1	Touch Screen Cable USB
Power Cord	1	Power Cord
S19M or S24M	1	

Display Workstation Solutions

## ■ IP 64 waterproof front panel, membrane keys, mouse pad & drive-bay

The industrial workstation's front cover is IP 64 compliant. The front cover is completely protected against the entry of dust and water sprayed from any direction.

Waterproof key lock and drive bay cover

■ Compact die-cast aluminum front panel and integrated LCD back frame

Rack or wall mount systems always apply the whole system weight on the front bezel and LCD container. One piece design has higher strength and lighter weight because of aluminum die casting.
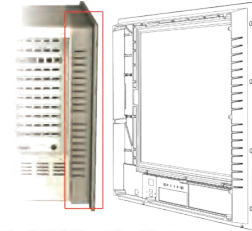
■ New robust chassis and retention kit structure to against shock and vibration

The whole chassis and retention kit are designed to be sturdy and rugged. The whole chassis has less joints and connections to increase resistance to shock and vibration.
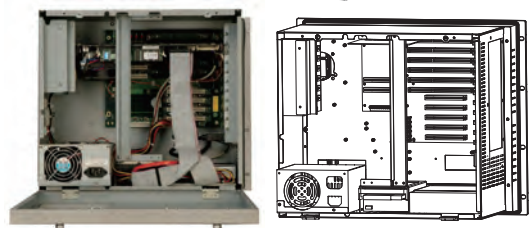
■ Enhanced thermal management

Built-in fans and hard drive cooling ensure that temperatures stay within operating range all the time. This extends product life and increases system reliability.
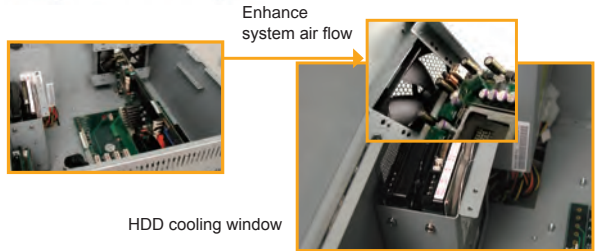
Enhance system air flow

■ CPU card and Micro-ATX support

The WS-855GS can support microATX motherboards. microATX motherboards are widely used and offer a larger range of options to suit the needs of the system.

HDD cooling window

■ Optional RS-232 interface touch screen

The WS series provides an RS-232 port reserved for touch screen. IEI Workstation provides T-R model with high strength fiber glass touchscreen applications.
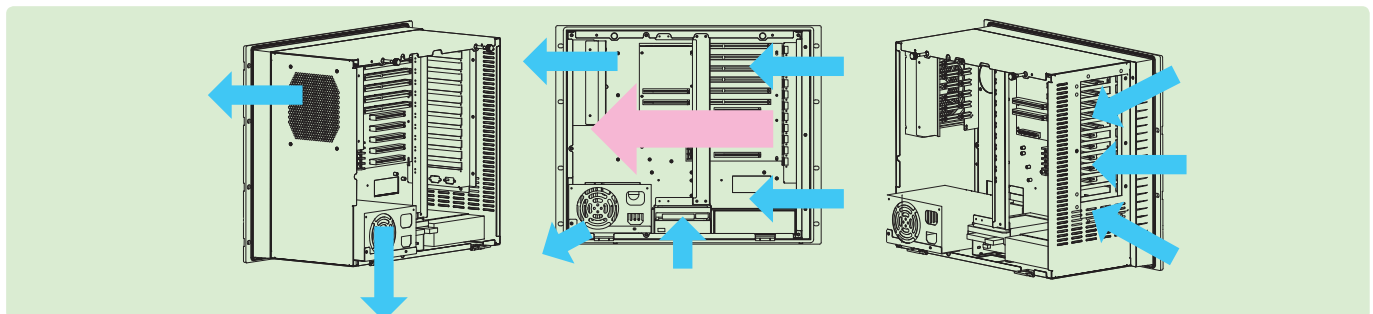
■ Complete drive support

The industrial workstations support 3.5" and 5.25" drives, and a floppy drive.

■ Advanced thermal and air-flow design

The thermal issue is an important issue for the modern industrial PC. The IEI industrial workstation is designed to have air flows through the computer by pulling cool air in one side and exhaust heated air out the other.

WS-855GS

15" IP 64 Waterproof Workstation: Robust, Shock Resistance

Features

- Die-cast aluminum front panel with integrated LCD screen
- New robust chassis and retention kit structure for shock and vibration
- Front panel, membrane keys, mouse pad and drive-bay enclosure meet IP 64 standard for tough environment
- Full function membrane keys and submerged OSD controller
- Advanced thermal and air-flow design
- Analog VGA interface supports all CPU boards

Specifications

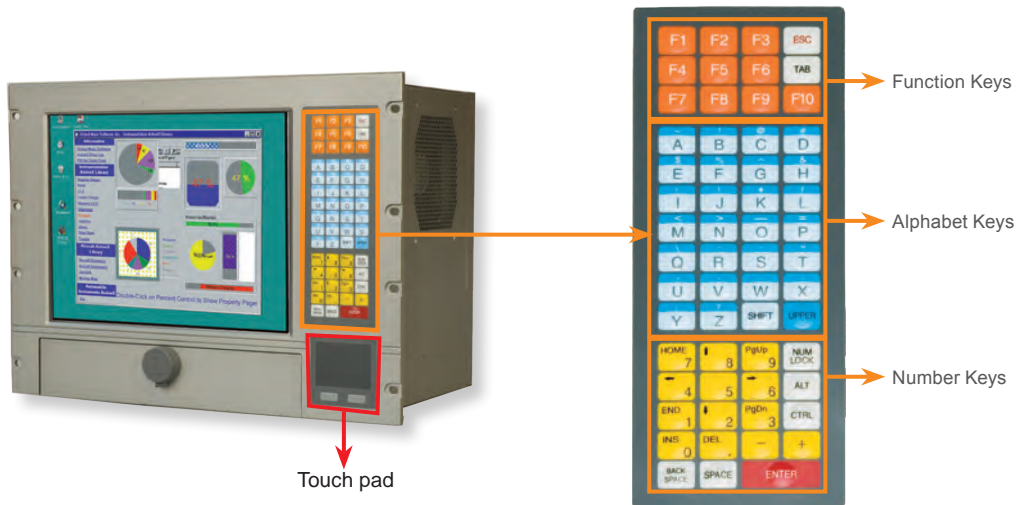| Model	WS-855GS
LCD Size	15"
Resolution	1024 x 768
Brightness (cd/m²)	450
Contrast	800:1
LCD color	16.2M
Backlight Hours	70000 (LED Backlight)
Input Interface	Analog VGA (DB-15)
Slot	10 slots / MB
Form Factor	Full/Half-size SBC / microATX motherboard
Mounting	19" rack mount
Rack Height	8U
Front Frame	Aluminum
IP Level	IP 64
KeyPad	59 Keys
Function Key	10 Keys
Touch Pad	Yes
Front Panel USB	2
HDD Drive Bay	1 x 3.5" HDD
CD-ROM Drive Bay	1 x 5.25" CD-ROM
FDD Bay	1 x 3.5" FDD
System Fan	12cm ball bearing 99.6 CFM fan
Touch Screen	5-wire resistive touch screen
Vibration	5 ~ 17 Hz, 0.1" double amplitude displacement / 17~640 Hz, 1.5G acceleration peak to peak
Shock	10G acceleration peak to peak (11ms)
Relative Humidity	10%~95%, non-condensing
Operating Temperature	0°C ~ 50°C
Storage Temperature	-10°C ~ 60°C
Color	Silver (Pantone PMS-8001)
Dimensions (W x H x D) (mm)	483 x 353 x 261
Weight (NW / GW)	12 kg / 18.2 kg
Recommended Backplane	**AT:** BP-10S **ATX:** PCI-10S2, HPE-7S1/8S, PE-6S/7S/7S2/8S/9S **AT/ATX:** PCI-10S, IP-10S, IPX-9S
Recommended microATX MB	IMB-9454, IMB-G41A
Power Supply	**AT:** ACE-925A(AP-U)-RS, ACE-932A-RS, ACE-935AL-RS, ACE-T140A-RS **ATX:** ACE-4860AP-R11-RS, ACE-828A(A/M/V)-RS, ACE-A130B-R10, ACE-A140A-R10, ACE-A140A-S-R10, ACE-A160A-R10

Ordering Information

Part No.	Description
WS-855GS/A130B/R-R40	8U 15" 400cd/m² XGA LCD 10-slot industrial workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen, R40
WS-855GSATX/A130B/R-R40	8U m-ATX 15" 400cd/m² XGA LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen, M-ATX version, R40

Packing List

Part Number	Description	Amount	Remark
32000-000002-RS	AC Power Cable	1	Standard Packing, for Europe, 32000-000004-RS for South Africa 32000-000022-RS for Australia, 32000-000025-RS for America 32000-000026-RS for Switzerland
32000-101200-RS	VGA Cable	1	A)D-SUB 15P MALE 90°(B)D-SUB 15PIN MALE
32100-034801-RS	PS_ON Cable for ATX signal	1	
41015-0003C0-00-RS	Press Stick Kit (Long)	4	
41015-0004C0-00-RS	Press Stick Kit (Short)	3	
47001-000101-RS	Press Stick Rubber	7	
	User Manual	1	
32000-075000-RS	KeyPad / MousePad PS/2 Cable	1	For SBC Models
32000-078400-RS	KeyPad / MousePad PS/2 Cable	1	For m-ATX (Motherboards) Models
32000-101100-RS	RS-232 Cable / Touch Pen / Driver CD-ROM for Touch Screen	1	(A)D-SUB 9P MALE 90°(B)D-SUB 9PIN FEMALE

Full function membrane keys & submerged OSD controller with Touch pad

Touch pad

Function Keys

Alphabet Keys

Number Keys

Dimensions (Unit: mm)