Automatic Identification and Data Capture (AIDC) Technology

Near Field Communication (NFC) Technology

QNAP NAS

ICEROCK3   ICECARE-10W

NFC IC

Antenna

NFC IC

Antenna

MODAT-532A

■ Comparison of Short-range Communication Technologies

Technology	Standard	Frequency	Range	Data Rate
RFID	ISO 10536	13.56 MHz	0~2 mm	9.6 Kbps
	ISO 14443	13.56 MHz	0~10 cm	106, 212, 424 Kbps
	ISO 15693	13.56 MHz	0~70 cm	26 Kpbs
NFC	ECMA-340, 352, 356, ISO/IEC 18092, 2148, 1ETSI TS 102 190	13.56 MHz	0~20 cm	106, 212, 424 Kbps
Infrared	IrFM	405 THz-300 GHz	20 cm~30 cm low power to 1 m~2 m	9.6 Kbps~4 Mbps
Bluetooth	Bluetooth V4.0	2.4 GHz	10 m-100 m	720 Kbps

● NFC, as an open platform technology, is standardized in the NFC Forum, which was found by Philips (MIFARE®), Sony (FeliCa™), Samsung and Nokia.
● NFC is based on and the extension of RFID. It operates on 13.56 MHz frequency and is compatible with today's field proven contactless MIFARE® and FeliCa™ smart cards
● NFC communication range is up to 10 cm.
● NFC standard supports different data transmission rates such as 106 kbps, 212 kbps, and 424 kbps.

■ Three NFC Application Families

The Near Field Communication (NFC) extends the RFID technology, and utilizes the 13.56MHz frequency to communicate and exchange data between devices which are in close proximity (less than 10cm) to each other. Popular applications include payment, gaming, and social networking (e.g. mobile gaming and device-to-device communication).
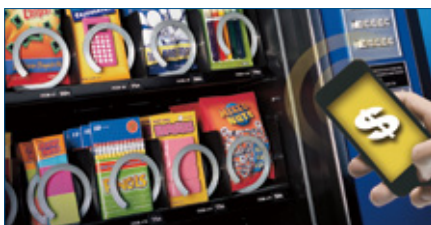
Card Emulation Mode
An NFC-enabled device acts as a reader when in contact with tags. In this mode, the device can act as a tag or a contactless card for existing readers.

Peer-to-peer Mode
Two NFC-enabled devices can exchange data. Peer-to-peer mode is standardized on the ISO/IEC 18092 standard.

Reader/Writer Mode
The NFC enabled device can read or write data to any of the supported tag types in a standard NFC data format.

Commerce Mobile Payment

Medical & Healthcare Devices

Logistics Goods Tracking

Communication Easy Pairing

Soical Networking Data Exchange P2P

Automobile Security Key Car Transponder

IoT Appliances

Gaming Toys Interactive Toys

Secure Identity Door Access

1 IEIMobile Solutions

2 Automation Panel Solutions

3 Healthcare Panel PC Solution

4 Industrial System

5 ORing Network Communication

6 Automation Control

7 Optional Peripherals

Radio Frequency Identification (RFID)

The RFID technology uses radio frequency as a data transmission intermediary. It can be classified by the frequency band the RFID system adopts since different frequencies will result in different physical attributes.

Frequency band	Operating range*	Applications		Benefits	Drawbacks
LF, < 135KHz	< 0.5m	• Access control • Product authentication	• Animal tracking	Works well around water and metal	• Short read range • Slower read rate
HF, 13.56MHz	< 1m	• Smart cards • Airline baggage	• Library books	Low cost	Higher read rate than LF
UHF 860MHZ to 930MHz	< 4m	• Pallet tracking • Parking lot access	• Carton tracking	EPC standard built around this frequency	Does not work with items of high water or metal content
Microwave 2.4GHZ	< 1m	• Airline baggage • Electronic toll collection		Most expensive	Fastest read rates

* The operating range depends on reader power and operating environment

■ HF RFID and NFC Supported Models

New

	IKARPC-07A	ICECARE-10W	ICEROCK3	MODAT-532A
Size	7"	10.1"	10.1"	5.3"
Protocols supported	•ISO/IEC 14443A, ISO/IEC 14443B PCD 106 kbit/s to 848 kbit/s •ISO/IEC 14443A, ISO/IEC 14443B PICC 106 kbit/s to 424 kbit/s •MIFARE® reader encryption mechanism (MIFARE® 1K/4K) •Reading NFC Forum tags (MIFARE® Ultralight, Jewel, FeliCa™ open tag, ISO/IEC 14443-4) •Reading DESFire card •ISO/IEC 15693/ICODE reader •NFC-IP1 and NFC-IP2 protocols (ISO/IEC 18092 / ECMA 340 and ISO/IEC 21481/ECMA 352) 106 kbit/s to 424 kbit/s •B' and MIFARE® card emulation	•Supports ISO/IEC 14443A Reader/Writer mode up to 848 kbit/s •Supports ISO/IEC 14443B Reader/Writer mode up to 848 kbit/s •Supports contactless communication according to the FeliCa™ protocol at 212 kbit/s and 424 kbit/s •Supports MIFARE® encryption •Typical operating distance in Read/Write mode for communication to ISO/IEC 14443A/MIFARE®, ISO/IEC 14443B or FeliCa™ cards up to 50 mm depending on antenna size and tuning		•Reader Features (106k-848Kbits/s) -Support ISO 15693-Support ISO14443A -Support NFC Forum Type 1-4 Tag •Card Emulation Mode (106K-848Kbits/s) (optional) -Support ISO 14443A -Support NFC Forum Type 1-4 Tag -Support MIFARE® via CLT •Near Field Communication (106K-424Kbits/s) -Peer to Peer Active/Passive mode -ISO 18092 compliant

	AFL2-xxxA Series	POC-W22A-H81
Size	7" ~22"	22"
Protocols supported	•ISO14443A/B 106kbps/212 kbps/424 kbps/848 kbps •ISO15693	•ISO/IEC 14443A/MIFARE® Reader/Writer •FeliCa™ Reader/Writer •ISO/IEC 14443B Reader/Writer •ISO/IEC 14443A/MIFARE® Card MIFARE® 1 KB or MIFARE® 4 KB emulation •FeliCa™ Card emulation •ISO/IEC 18092, ECMA 340 Peer-to-Peer

UHF RFID Supported Models

Dedicated to the AIDC technology, IEIMobile now offers a range of products with the UHF RFID reader solution. In order to ensure the quality performance of our UHF RFID readers, a series of tests were performed during the Design Quality Validation stage of product development.

		IVS-100-BT
Characteristics	Frequency (MHz)	840 ~ 960
	Maximum Power Output (dBm)	30
	Antenna (Circular/Linear) Polarization	Circular
	Tag Support	EPC C1 Gen2 / ISO 18000-6C, ISO 18000-6B
Test Items	Maximum Reading Distance (m)	>12
	Maximum Reading Speed (tags/sec)	14

■ Reading Distance Test

In the reading distance test, a tag is located at the center of the room while the UHF RFID reader is located at different distances and angles from the tag. The tag is read at different distances until it cannot be detected anymore.

■ Reading Speed Test

In the reading speed test, the UHF RFID device is placed in front of a wall (4m x 2m) covered with UHF RFID tags that are located in both horizontal and vertical directions. The number of tags read in one minute is recorded to calculate the overall reading speed.
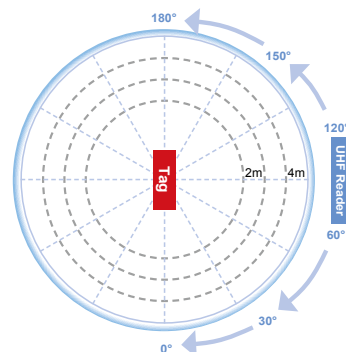
1

IEIMobile
Solutions

2

Automation
Panel
Solutions

3

Healthcare
Panel PC
Solution

4

Industrial
System

5

ORing
Network
Communication

6

Automation
Control

7

Optional
Peripherals

Tag

■ Ultra High Frequency (UHF) RFID Tags

IEI provides the design and business case for ODM tag projects. That includes comprehensive passive Ultra High Frequency (UHF) RFID tags which are specially designed to operate and store under a wide range of temperatures. With an outstanding read distance and reading multiple items indentification, the ultra high frequency RFID tag provides a cost-effective solution for applications such as anti-counterfeiting and stock identification on high value products (wine, jewelry).

	UHF Metal Asset Tag	UHF Tag	UHF Jewelry Tag	UHF (Heat-resistant) Tag
Frequency	860 to 960MHz	860 to 960MHz	860-960 MHz	860-960 MHz
RF Air Protocol	EPC Class1 Gen2 ISO18000-6C	EPC Class1 Gen2 ISO18000-6C	EPC Class1 Gen2	EPC Class1 Gen2
Functionality	Read/write	Read/write	Read/write	Read/write
Operating Mode	Passive	Passive	Passive	Passive
Read Distance	Up to 10m (read dependent)	8 m	0.3 m	1 m
Applications	Animal management	Retail management, asset tracking, inventory control	Asset tracking, security management	Warehouse and retail management, asset tracking, inventory control
Storage Temperature	-40°C to 85°C	-40°C to 85°C	-20°C to 65°C (Non-condensing)	-40°C to 85°C (120 Short-term)
Dimensions	52.5 mm x 45 mm x 14.0 mm	95 mm x 8mm	72 mm × 34 mm	64 mm × 7 mm

■ HF RFID Sensor Tags plus Data Logger

IEI provides various RFID sensor tags plus data logger for long-term temperature, humidity, vibration, ambient light and GPS recordings. The RFID tags can use an SD card as a mass storage media which can store 134 million points and are targeted at frozen food environment monitoring, humidity monitoring and transportation GPS tracking applications.
Besides, IEI also provides GSM GPS tag which is designed to work for long-term GPS record. The data is recorded on the device or transferred to end user's mobile phone via SMS message.
Meanwhile IEI provides an application which can be downloaded from Google Play for Android phone and the GPS data can be uploaded to a NAS for data management.

Shipment — **Transportation** — **Arrival**

GSM GPS Tag — Vibration Sensor Tag — Record value — MODAT-532A *Handy reader* — NAS — Collected data

Model Number	RFID-TP-D-ST-R10	RFID-VB-D-ST-R10	RFID-AL-D-ST-R10	RFID-HT-D-ST-R10	RFID-GPS-D-ST-R10	RFID-STP-D-ST-R10	RFID-TP-N-ST-R10
Function	Temperature sensor tag	Vibration sensor tag	Ambient light sensor tag	Humidity and temperature sensor tag	GPS	Slim RFID temperature sensor plus data logger	RFID temperature sensor tag
Accuracy	0.5°C~1.0°C	±3.9mg	±4 LUX	Relative humidity ±2% Temperature ±0.2°C	<3m	0.5°C~1.0°C	0.5°C~1.0°C
Max Storage	134,217,724 points	134,217,724 points	134,217,724 points	134,217,724 points	67,108,862 points	3423 points	1 point
Time Stamp	Yes	Yes	Yes	Yes	Yes	Yes	No
FRID Frequency	13.56 MHz						
RF Air Protocol	ISO 15693						
PC Interface	USB 2.0 mass storage device						N/A
Applications	Frozen food environment monitor	Transportation quality Machine abnormality	Environment monitor	Environment monitor	Transportation tracking	Frozen food environment monitor	Frozen food environment monitor

Model Number	GSM-TP-D-ST-R10	GSM-GPS-D-ST-R10	NTAG-T-200-R10	GSM-TP-RD-R10	GSM-GPS-RD-R10
Function	GSM temperature tag	GSM GPS tag	NTAG	GSM temperature reader	GSM GPS reader
Accuracy	0.5°C (max) from 0°C to 65°C 1.0°C (max) from −40°C to 125°C	<3m	0.5°C (max) from 0°C to +65°C1.0°C (max) from −40°C to +125°C	N/A	N/A
Max Storage	4GB	4GB	1 record	2MB	2MB
Time Stamp	Yes	Yes	No	N/A	N/A
FRID Frequency	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz
RF Air Protocol	ISO 15693	ISO 15693	ISO/IEC 14443, NFC Forum Tag 2 Type	GSM/GPRS, 2G, QuadBand	GSM/GPRS, 2G, QuadBand
PC Interface	USB 2.0 mass storage device	USB 2.0 mass storage device	No	USB 2.0	USB 2.0

■ NFC Temperature Tag

The NFC temperature tag is designed for someone who need to record real time temperature. The NFC tag supports a range from -20°C to 60°C and fully supports IP 68 for harsh environments. Besides, it is a battery-free design for long term usage. The user can use MODAT-532A to read data from NFC tag and upload to the database on QNAP NAS. IEI develops an application for both Modat-532A and QNAP NAS. Users can easily grape data and temperature chart.

QNAP NAS — Upload to NAS — Read NFC Tag — Send Data to MODAT-532A — MODAT-532A

1 IEIMobile Solutions

2 Automation Panel Solutions

3 Healthcare Panel PC Solution

4 Industrial System

5 ORing Network Communication

6 Automation Control

7 Optional Peripherals

1D/2D Barcode Capability

■ Mobile Barcode Reading

The embedded Honeywell or Motorola scan engine, which is a decoded miniature area imaging scan engine designed to scan 1D and 2D barcodes, features a megapixel imaging sensor, a wide angle lens design, the integration of illumination and aiming function, and an industrial leading decoding software to deliver fast and aggressive scanning performance.

● Accurately decodes all 1D and 2D codes, even wrinkled, damaged or poorly printed
● Large scanning area
● Fast scan rate

Technology	1D Barcode	2D Barcode
Reading Condition	20 to 25 characters	100 to about 2,000 characters
Symbologies	EAN/UPC, RSS, Code 39, Code 128, UCC/EAN 128, ISBN, ISBT, Interleaved, Matrix, Industrial and Standard 2 of 5, Codabar, Code 93/93i, Code 11, MSI, Plessey, Telepen, postal codes.	Data Matrix, PDF417, Micro PDF 417, Maxicode, QR, Aztec, EAN.UCC composite

MODAT-532A   ICECARE-10W

IEI Cloud Mobile POS Solution

IEI Cloud Mobile POS solution suits for any devices such as PDA, tablet, PC with IOS, Android or Windows operating system. The database can be stored in your own devices and also backed up on the cloud database. It includes staff management, cash register and member database. Easy to control your retail shops, restaurants, temporary market. We also provide data analytics of sales revenue, consumer behavior, store comparison etc. You may manage all of your businesses from everywhere anytime through the Internet to the Cloud POS.

Public Cloud

Wi-Fi

AP

QNAP NAS

Panel PC		Tablet PC		PDA
AFL3-12A-BT	IOVU-17F-AD	ICECARE-10W	ICEROCK3	MODAT-532A

Administrator Panel

Mobile POS

SaaS Platform

iEi API via Internet

iEi API via Internet

IEI Analytics

Sync

Online

Offline

QNAP NAS

Store Operations

POS Terminal

POS Terminal

LAN

Supervisor Analytics
■ Sale analytics
■ Marketing plan
■ Member discount

Marketing Manager   Store Owner

Sale / Member / Inventory / Return information

Cloud database
■ Create new item
■ Inventory management
■ Member management

Store Manager   Store Manager

Product / Price / Discount information   Sale information

Cloud POS APP
■ Sale checkout
■ Return of goods
■ Receipt printing

Cashier   Cashier   Cashier

1 IEIMobile Solutions

2 Automation Panel Solutions

3 Healthcare Panel PC Solution

4 Industrial System

5 ORing Network Communication

6 Automation Control

7 Optional Peripherals

Our Dedicated Product Lines

Tablet PC

ICE Series -
Your cutting-edge digital assistant

With a focus on ergonomic design and features, the ICE series tablet PC offers versatility in application and field-proven durability.

The ICE Series tablet PC features exceptional ergonomics, industrial sealing and high drop resistance for withstanding the most extreme industry-specific environment. Our obsessive attention to detail and passion for quality create a winning formula that promises to delight and inspire your staff on-the-go. It is the ultimate productivity tool for field services.

Industrial PDA

MODAT Series -
Your data manager on the go

The Modat series industrial PDA brings real-time mobile computing and cost-effective mobility in one customizable, robust package.

The Modat Series, provides a total wireless solution with Android operating system. The Modat Series industrial PDA features a full range of wireless communication options and optimal suites of data capture technologies in one lightweight, versatile and robust package. It is specially suited to solutions in the retail, hospitality and logistics environments.
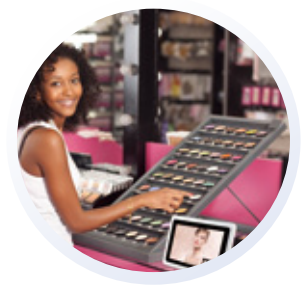
1
IEIMobile
Solutions

2
Automation
Panel
Solutions

3
Healthcare
Panel PC
Solution

4
Industrial
System

5
ORing
Network
Communication

6
Automation
Control

7
Optional
Peripherals

Tablet PC Selection Guide

Model		ICEROCK3	ICECARE-10W	ICEFIRE2
Display	LCD size	10.1" TFT LCD	10.1" TFT LCD	10.4 TFT LCD
	Brightness (cd/m²)	350	350	350
	Max Resolution	1280 x 800	1280 x 800	1024 x 768
	Viewing Angle	85/85/85/85 Deg.	85/85/85/85 Deg.	88/88/88/88 Deg.
	Touchscreen	Projected capacitive type	Projected capacitive type	Projected capacitive type
	Digitizer	N/A	N/A	2048 levels @ full scale Pressure Resolution
System	CPU	Intel® Celeron® 1007U or Intel® Core™ i7-3517UE	Intel® Celeron® 1007U or Intel® Core™ i7-3517UE platform	Intel® Atom™ N2800 1.86GHz
	Chipset	Intel® HM76	Intel® HM-76	Intel® NM10
	Operating System	Windows® Embedded Standard 7 P	Windows Embedded Standard 7	Microsoft® Windows Embedded Standard 7 P(WS7P)
	Memory	4.0 GB DDR3 SDRAM on board and optional 4.0 GB DDR3 SDRAM SO-DIMM	On-board 4GB DDR3	1333MHz 4GB DDR3 SDRAM
	Storage	mSATA 32GB MLC	mSATA 32GB MLC	mSATA 8G SLC
Communication	Wi-Fi	Wi-Fi 802.11b/g/n	Wi-Fi 802.11b/g/n	Wi-Fi 802.11b/g/n
	Bluetooth	Bluetooth 3.0	Bluetooth 3.0	Bluetooth 3.0
	Modem	WCDMA/HSUPA	WCDMA/HSUPA	WCDMA/HSUPA
	GPS	GPS with internal antenna	N/A	N/A
Data Collection	Camera	1.3-megapixel front camera 5-megapixel rear camera	N/A	1.3-megapixel front camera 3-megapixel rear camera
	Barcode	1D/2D imager scan engine	1D/2D imager scan engine	1D/2D Imager Scan Engine
	RFID	13.56 MHz RFID supports ISO 14443A/B (MIFARE®, FeliCa™)	13.56 MHz RFID supports ISO 14443A/B (MIFARE®, FeliCa™)	13.56 MHz RFID supports ISO 15693 and 14443A/B compliant
Indicators & Buttons	LED Indicators	Battery charging/peripheral device/storage/ wireless device	Battery Charging/Peripheral Device/Storage/ Wireless	Power/ Wi-Fi/Bluetooth/ RFID/Battery Status LED
	Hot Keys	1 x Power button 2 x Hot keys 1 x iMenu	1 x Power button 1 x IEI menu	5-way navigation key Barcode scanner/ RFID / LED Torch/ Camera/ Wi-Fi/ Bluetooth/ SAS/Function Key
I/O Interface	USB	3 x USB 3.0 1 x SIM card slot	2 x USB 2.0	1 x USB 3.0
	Micro HDMI	1 x Micro HDMI	1 x Micro HDMI	N/A
	Audio	1 x Headphone 1 x Mic-in 2 x Speakers (1 W)	1 x Speaker (1.5 W) 1 x Audio mic-in	1 x Speaker (2 W)
	Expansion	1 x SD card (internal)	Smart card reader Magnetic stripe reader	1 x LED torch
Power	Power Adapter	Input AC: 100~240V Output DC: 19V / 3A	Input AC: 100~240V Output DC: 19V / 2.1A	12V @ 5A @ 60W
	Battery	40 W standard battery pack 40 W optional battery pack	14.8V 3500mAh, 51.8WH	Dual 11.1V 1880mAh Li-ion Battery
Environment	Operating Temperature	0°C~40°C	0°C~40°C	0˚C ~ 40˚C
	Storage Temperature	-20°C~60°C	-20°C~60°C	-10˚C ~ 60˚C
	Humidity	5%~95%, non-condensing	5%~95%, non-condensing	5%~95% non-condensing
	Drop Survival	1.2M	1M	90 cm
	Environmental Protection	Front panel: IP65 Back side: IP64	IP 54 compliant front panel	IP 64 compliant front panel
	Cerification	CE / FCC Class B / FCC ID /Rohs compliant	CE / FCC Class B / FCC ID /Rohs compliant	CE/FCC
Physical Characteristics	Dimensions (W x H x D) (mm)	297 x 234 x 32	290 x 206.5 x 22.5	270 x 265 x 29
	Weight	1.9 kg	1.1 kg	1.7 kg

ICEROCK 3

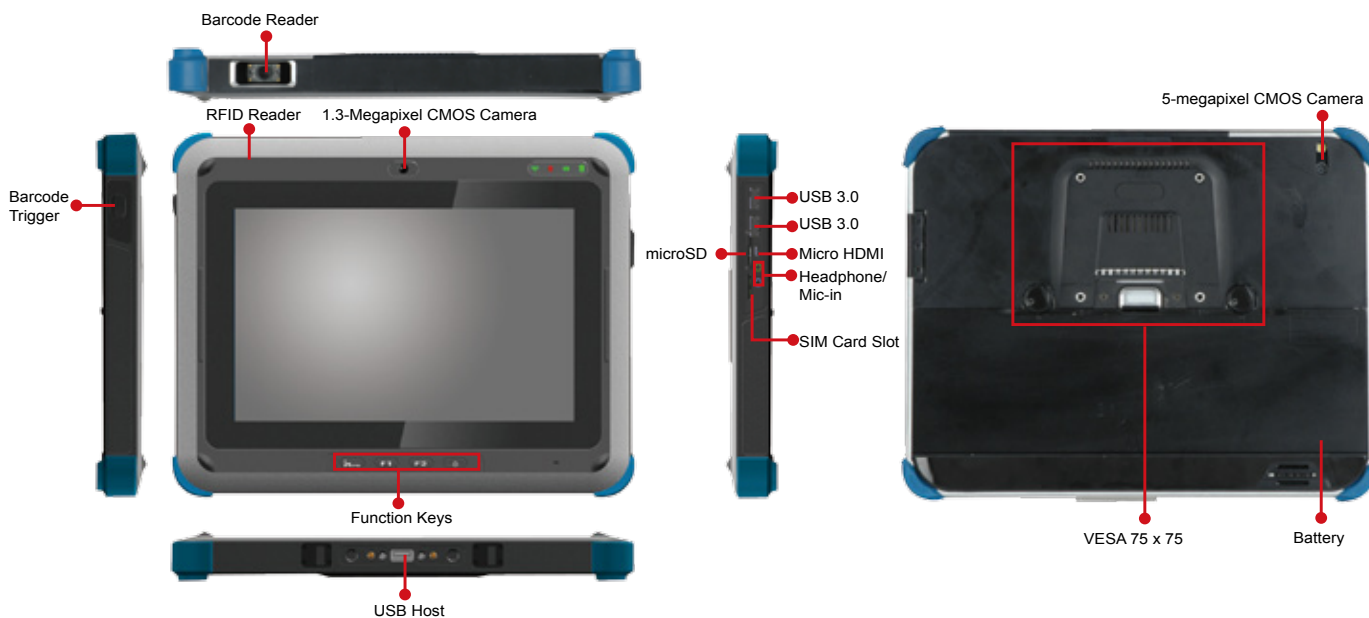## Ultra Tough Assistant

CORNING Gorilla® Glass

Features

- 10.1" 350 cd/m² TFT LCD with capacitive touch
- Intel® Celeron® 1007U or Intel® Core™ i7-3517UE platform
- Powered by Windows® Embedded Standard 7 P
- Bluetooth, Wi-Fi, 3.75G wireless with GPS
- 1D/2D barcode reader, 13.56MHz RFID reader
- 1.3-megapixel CMOS front camera and
  5-megapixel CMOS rear camera
- Built-in hot-swappable battery
- Optional Windows 8 operating system

3.75G/HSUPA | Bluetooth | Wi-Fi | Camera | IP65 | IP64 | Touchscreen | Fanless | RFID | Hardness 7H | 1D Barcode Scanner | 2D Barcode Scanner

Specifications

Model		ICEROCK3
Display	LCD Size	10.1" TFT LCD
	Brightness (cd/m²)	350
	Max. Resolution (HxV)	1280 x 800
	Viewing Angle	85/85/85/85 Deg.
	Touchscreen	Projected capacitive type
System	CPU	Intel® Celeron® 1007U or Intel® Core™ i7-3517UE
	Chipset	Intel® HM76
	Operating System	Windows® Embedded Standard 7 P
	Memory	4.0 GB DDR3 SDRAM on board and optional 4.0 GB DDR3 SDRAM SO-DIMM
	Storage	32GB MLC mSATA
Communication	Wireless LAN	Wi-Fi 802.11b/g/n
	Bluetooth	Bluetooth 3.0
	Modem	UMTS/HSUPA Band 1, 2, 4, 5, 6, 8
	GPS	GPS with internal antenna
Data Collection	RFID	13.56MHz RFID supports ISO 14443A/B (MIFARE®, FeliCa™)
	Barcode	1D/2D imager scan engine
	Camera	1.3-megapixel front camera 5-megapixel rear camera
Indicators & Buttons	Keys	1 x Power button 2 x Hot keys 1 x iMenu
	LED Indicators	Battery charging/peripheral device/storage/wireless device
I/O Interface	Audio	1 x Headphone 1 x Mic-in
		2 x 1 W speakers
	Expansions	3 x USB 3.0 1 x SIM card slot 1 x Micro HDMI
Power	Power Adapter	Input AC: 100~240V Output DC: 19V / 3A
	Battery	40 W standard battery pack 40 W optional battery pack
Environment	Operating Temperature	0°C~40°C
	Storage Temperature	-20°C~60°C
	Humidity	5%~95%, non-condensing
	Drop Survival	1.2M
	Environmental Protection	Front panel: IP65 Back side: IP64
Physical	Dimensions (LxWxH) (mm)	297 x 234 x 32
	Weight	1.9 kg

Barcode Reader

RFID Reader   1.3-Megapixel CMOS Camera

5-megapixel CMOS Camera

Barcode Trigger

USB 3.0
USB 3.0
microSD
Micro HDMI
Headphone/ Mic-in
SIM Card Slot

Function Keys

USB Host

VESA 75 x 75   Battery

Model Variations

Part No.	CPU	Touch	IPS	RAM	Wireless	Bluetooth	Barcode	RFID	3.75G	GPS	5M Camera	2nd Battery
ICEROCK3-T10-HU-R11	Celeron 1007U	Capacitive touch	Yes	8GB	802.11 b/g/n	Ver. 3.0	Yes	Yes	Yes	Yes	Yes	Yes
ICEROCK3-T10-ETC-R11	Celeron 1007U	Capacitive touch	Yes	4GB	802.11 b/g/n	Ver. 3.0	N/A	Yes	N/A	N/A	N/A	N/A
ICEROCK3-T10-HUI-R11	i7-3517UE	Capacitive touch	Yes	8GB	802.11 b/g/n	Ver. 3.0	Yes	Yes	Yes	Yes	Yes	Yes

Optional Accessory List

Item	Part No.	Description
Charging Bay	ICEROCK3-CR01-R10	Independent charging bay for ICEROCK3 (with interlocking design)
Combo Card Reader	ICEROCK3-3IN1-R10	Smart card reader, magnetic stripe reader, fingerprint reader combo add-on module
Carrying Case	7Z000-ICEROCK3-10POUCH	Protective bag with shoulder strap

Combo Card Reader   Carrying Case   Charging Bay

Ordering Information

Part No.	Description
ICEROCK3-T10-HU-R11	Intel® Celeron® 1007U CPU, capacitive touch, IPS panel, 8GB RAM, 32G SSD, 802.11 b/g/n&BT, RFID, 1.3M/5M camera, 2nd battery, GPS, barcode, 3.75G, WS7P, RoHs
ICEROCK3-T10-ETC-R11	Intel® Celeron® 1007U CPU, capacitive touch, IPS panel, 4GB RAM, 32G SSD, 802.11 b/g/n&BT, RFID, 1.3M camera,WS7P, RoHs
ICEROCK3-T10-HUI-R11	Intel® i7-3517UE CPU, capacitive touch, IPS panel, 8GB RAM, 32G SSD, 802.11 b/g/n&BT, 3.75G, RFID, 1.3M/5M camera, 2nd battery, GPS, barcode, WS7P, RoHS

1
IEIMobile Solutions

2
Automation Panel Solutions

3
Healthcare Panel PC Solution

4
Industrial System

5
ORing Network Communication

6
Automation Control

7
Optional Peripherals

ICECARE-10W

Mobile Sales Assistant

Microsoft Azure **Certified**

Features

- 10.1" TFT LCD with capacitive touch
- Intel® Celeron® 1007U or Intel® Core™ i7-3517UE platform
- Powered by Windows® Embedded Standard 7
- Built-in Bluetooth and Wi-Fi
- Built-in smart card reader and magnetic stripe card reader
- 1D/2D barcode reader, 13.56MHz RFID reader
- Optional Windows® 8 operating system

Bluetooth | Wi-Fi | Touchscreen | RFID | 1D Barcode Scanner | SCR | MSR

Specifications

Model		ICECARE-10W
Display	LCD Size	10.1" TFT LCD
	Brightness (cd/m²)	350
	Max. Resolution (HxV)	1280 x 800
	Viewing Angle	85/85/85/85 Deg.
	Touchscreen	Capacitive type
System	CPU	Intel® Celeron® 1007U or Intel® Core™ i7-3517UE platform
	OS	Windows Embedded Standard 7
	Memory	On-board 4GB DDR3
	Storage	Built-in 32GB mSATA
Communication	Wireless LAN	802.11b/g/n
	Bluetooth	Bluetooth 3.0
Data Collection	Barcode	1D/2D imager scan engine
	RFID	13.56MHz RFID supports ISO 14443A/B (MIFARE®, FeliCa™)
Indicators & Buttons	Keys	1 x Power button 1 x IEI menu
	LED Indicators	Battery Charging/Peripheral Device/Storage/Wireless
I/O Interface	Audio	1 x 1.5W Speaker
	USB	2 x USB 2.0
	Audio	1 x Audio/Mic-in
	Micro HDMI	1 x Micro HDMI
	Expansions	Smart card reader
		Magnetic stripe reader
Power	Power Adapter	Input AC: 100~240V Output DC: 19V / 2.1A
	Battery	14.8V 3500mAh, 51.8WH
	Power Consumption	19V@2.12A (with Intel i7-3517UE CPU and one 4GB DDR3 memory)
Environment	Operating Temperature	0°C~40°C
	Storage Temperature	-20°C~60°C
	Humidity	5%~95%, non-condensing
	Environmental Protection	IP 54 compliant front panel
Physical	Dimensions (LxWxH) (mm)	290 x 206.5 x 22.5
	Weight	1.1 kg

Power

DC-in

2 x USB 2.0

HDMI

Audio/Mic-in

Menu

Status LED

Magnetic Stripe Card Reader

Barcode Reader (2D)

RFID Reader

Smart Card Reader
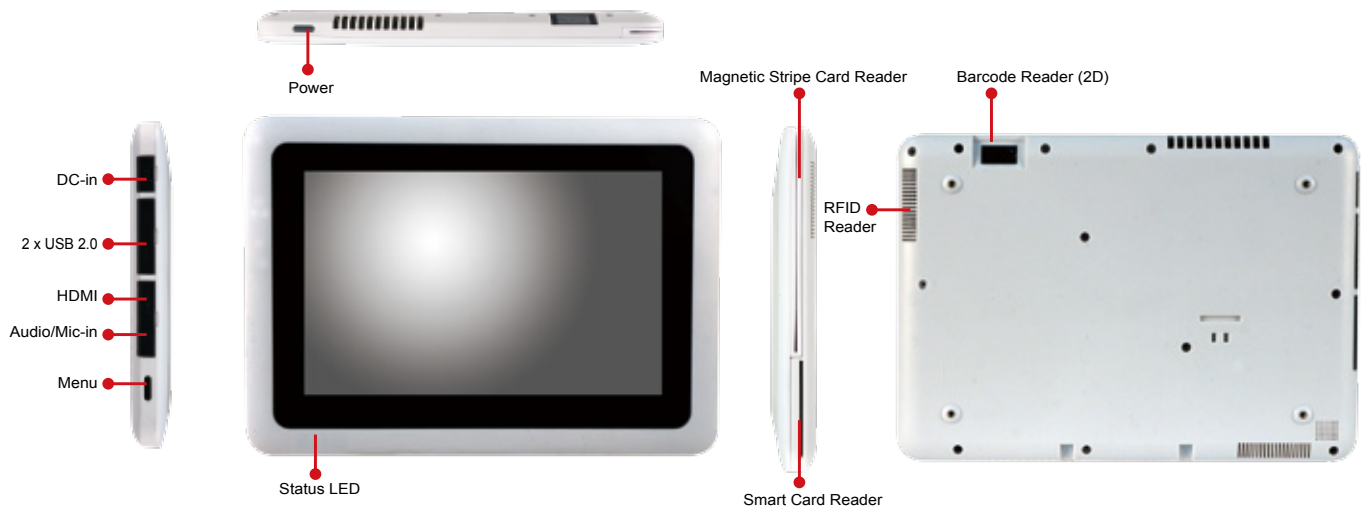
Model Variations

Part No.	Touch	IPS	RAM	Wireless	Bluetooth	MSR	SCR	Barcode	RFID
ICECARE-10W-CE-R10	Projected Capacitive	Yes	4GB	802.11 b/g/n	Ver. 3.0	Yes	Yes	Yes	Yes
ICECARE-10W-CE-ET-R10	Projected Capacitive	Yes	4GB	802.11 b/g/n	Ver. 3.0	N/A	N/A	N/A	Yes
ICECARE-10W-I7-R10	Projected Capacitive	Yes	4GB	802.11 b/g/n	Ver. 3.0	Yes	Yes	Yes	Yes
ICECARE-10W-I7-ET-R10	Projected Capacitive	Yes	4GB	802.15 b/g/n	Ver. 3.0	N/A	N/A	N/A	Yes

Optional Accessory List

Item	Part No.	Description
Cradle	ICECARE-10W-CR01-R10	ICECARE-10W charging cradle
Protective Rubber	ICECARE-10W-PR01-R10	ICECARE-10W protective rubber
Carrying Case	7Z000-ICECARE-10W-R10POUCH	Protective bag with shoulder strap

Cradle

Protective Rubber

Carrying Case
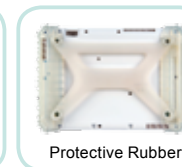
Ordering Information

Part No.	Description
ICECARE-10W-CE-R10	Intel® Celeron® 1007U CPU, capacitive touch, IPS panel, 4GB RAM, 32G SSD, 802.11 b/g/n, BT, 1D/2D barcode, MSR, SCR, RFID, WS7P, RoHs
ICECARE-10W-CE-ET-R10	Intel® Celeron® 1007U CPU, capacitive touch, IPS panel, 4GB RAM, 32G SSD, 802.11 b/g/n, BT, RFID, WS7P, RoHs
ICECARE-10W-I7-R10	Intel® Core I7-3517UE 1.7GHz CPU, capacitive touch, IPS panel, 4GB RAM, 32G SSD, 802.11 b/g/n, BT, 1D/2D barcode, MSR, SCR, RFID, WS7P, RoHs
ICECARE-10W-I7-ET-R10	Intel® Core I7-3517UE 1.7GHz CPU, capacitive touch, IPS panel, 4GB RAM, 32G SSD, 802.11 b/g/n, BT, RFID, WS7P, RoHs

Retail Store Management
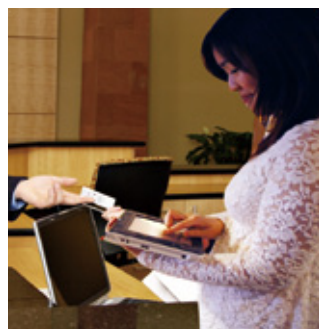
Hotel Registration System

Restaurant Table Order Management

Production Line Management

ICEFIRE 2

10.4" Mobile Clinic Assistant

Features

- 10.4" TFT XGA LCD
- Intel® Atom™ N2800 1.86GHz processor
- Powered by Windows® Embedded Standard 7 P
- Built-in 8GB mSATA storage
- Bluetooth, Wi-Fi, 3.75G wireless
- 1D/2D barcode reader, 13.56MHz RFID reader
- Dual-mode input (digitizer + capacitive touch)
- Dual hot-swappable battery
- Dual Camera:
  1.3-megapixel front camera
  3.0-megapixel rear camera

3.75G/HSUPA | Bluetooth | Wi-Fi | Touchscreen | Digitizer Screen | Camera | RFID | 1D Barcode Scanner | 2D Barcode Scanner

Specifications

Model		ICEFIRE2-T10-HU-R11	ICEFIRE2-T10-TR-R11	ICEFIRE2-T10-ET-R11
Display	LCD Size	10.4" TFT LCD		
	Brightness (cd/m²)	350 cd/m²		
	Max Resolution	1024 x 768 pixels XGA		
	Viewing Angle	88/88/88/88 Deg.		
	Touchscreen	Projected Capacitive		
	Digitizer	2048 levels@ full scale pressure resolution	N/A	N/A
System	CPU	1.86GHz Intel® Atom™ N2800		
	Chipset	Intel® NM10		
	Operating System	Microsoft® Windows® Embedded Standard 7 P (WS7P)		
	Memory	1333MHz 4GB DDR3 SDRAM		
	Storage	mSATA 8G SLC		
Communication	Wireless LAN	Wi-Fi 802.11b/g/n		
	Bluetooth	Bluetooth 3.0 + EDR (Class 2)		
	Modem	WCDMA/HSUPA	N/A	N/A
Data Collection	Barcode	1D/2D Imager Scan Engine		N/A
	RFID	13.56 MHz RFID supports ISO 15693 and 14443A/B compliant		N/A
Fingerprint Reader		Yes	Yes	N/A
Indicators & Buttons	LED Indicators	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status LED		Power/ Wi-Fi/Bluetooth/ Battery Status
	Keys	5-way navigation key/ Barcode Scanner/RFID/LED Torch/Camera/Wi-Fi/ Bluetooth/SAS/Function Key		5-way navigation key//Camera/ Wi-Fi/ Bluetooth/ SAS/Function Key
I/O Interface	USB	1 x USB 3.0		
	LAN	1 x 10/100/1000 Mbps		
	Audio	1 x 2W Speaker, 1 x Mic in		
	LED Torch	1 x LED Torch	1 x LED Torch	N/A
Power	Power Adapter	12V @ 5A @ 60W		
	Docking Power Adapter	19V @ 4.74A @ 90W		
	Battery	Dual 11.1V 1880mAh Li-ion Battery		
Environment	Operating Temperature	0ºC to +40ºC		
	Storage Temperature	-10ºC to +60ºC		
	Humidity	5%~95% non-condensing		
	Drop Survival	90 cm		
	Environmental Protection	IP 64 compliant front panel		
	Certifications	CE/FCC	CE/FCC	CE/FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	270 x 265 x 29		
	Weight	1.7 kg	1.7 kg	1.6 kg

LED Torch On/Off
RFID On/Off
Barcode Scanner On/Off

Function Keys
Fingerprint Scanner
Status LED
Navigation Keys

USB

Power On/Off Button with Power LED

Barcode Scanner

1.3 megapixels camera
Camera button

LED Torch

Power In

RFID Antenna

Docking Connector

Speaker   GbE LAN   Digitizer Pen

3-megapixel Camera with Light

2 x Battery Packs

mSATA Module Access Panel
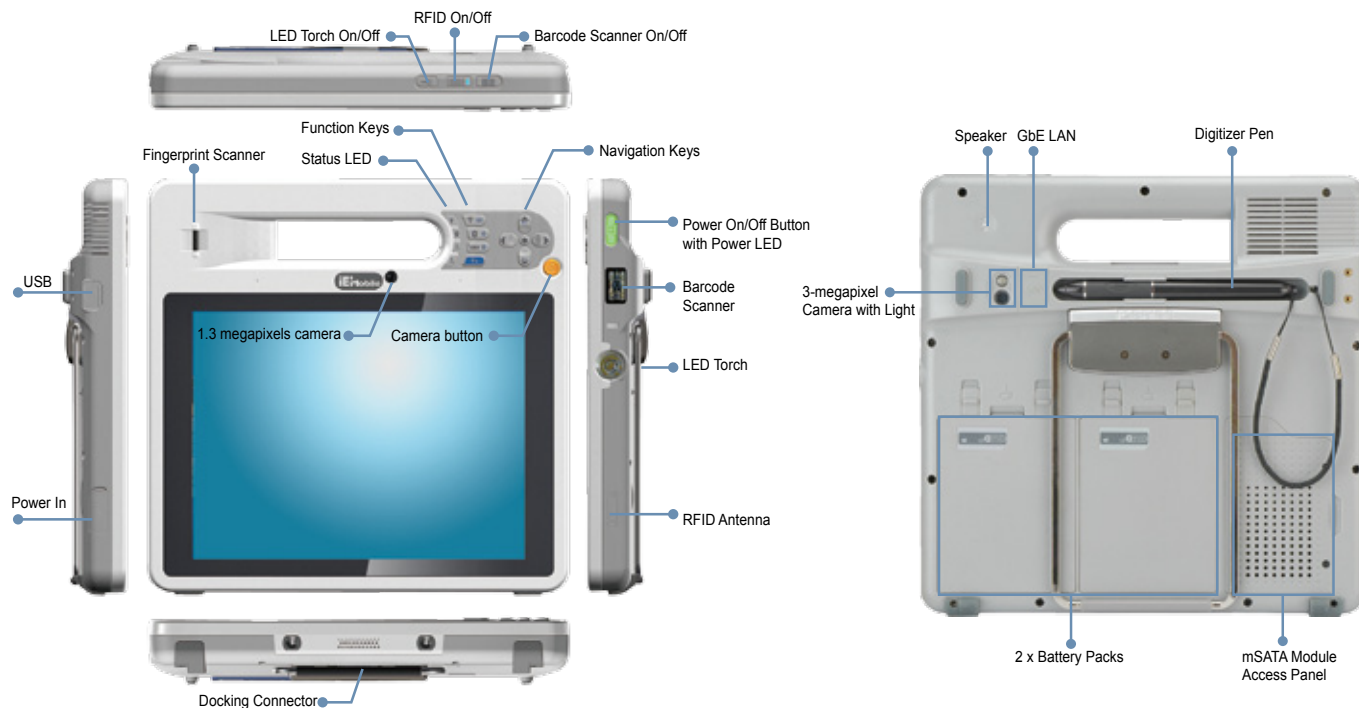
Packing List

Item	Part No.	HU	TR	ET
Digitizer Pen	7Z000-UP7110E63C1-RS	•		
Battery Pack	31603-000016-RS	•	•	
Battery Pack-B	31603-000020-RS			•
Non-Medical-grade Power Adapter (12V/60W)	63040-010090-100-RS	•	•	•
User's Manual CD	7B000-000552-RS	•	•	•

Carrying Case | Docking Station | Smart Card Reader | 19V Power Adapter | 12V Power Adapter | Battery Pack | Digitizer Pen

Optional Accessory List

Item	Part No.	Description
Docking Station	ICEFIRE-T10A-DSRG-R10	ICEFIRE docking station without docking adapter, rugged type
Docking Station Power Adapter	19B00-000288-00-RS	Standard power adapter for docking station
	19B00-000289-00-RS	Medical grade power adapter for docking station
	63040-290090-010-RS	Car cigarette power adapter for docking station
Medical-grade Power Adapter (12V/60W)	63040-010060-020-RS	
Smart Card Reader	ICEFIRE-T10A-SCR01-R10	USB 2.0 (Full Speed) smart card reader complies with ISO7816-1,2,3 for ICEFIRE-T10A
Battery Pack	31603-000016-RS	11.1V 1880 mAh battery
Battery Pack-B	31603-000020-RS	11.1V 1880 mAh battery, black
Digitizer Pen	7Z000-UP7110E63C1-RS	Digitizer sensor pen
Carrying Case	7Z000-ICEFIRET10APOUCH-RS	Black, leather protective bag with shoulder strap

Ordering Information

Part No.	Description
ICEFIRE 2: Intel® Atom™ N2800 CPU with Windows® Embedded Standard 7	
ICEFIRE2-T10-HU-R11	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Capacitive Multi-Touch and Digitizer Dual Mode, 4GB DDR3 RAM, HSUPA, 802.11b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3M Pixel Rear Camera, 1.3-megapixel Front Camera, LED Torch, 8GB mSATA, WS7P RoHS
ICEFIRE2-T10-TR-R11	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Capacitive Multi-Touch, 4GB DDR3 RAM, 802.11b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3-megapixel Rear Camera, 1.3-megapixel Front Camera, LED Torch, 8GB mSATA, WS7P, RoHS
ICEFIRE2-T10-ET-R11	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Capacitive Multi-Touch, 4GB DDR3 RAM, 802.11b/g/n Wireless, Bluetooth, 8GB mSATA, WS7P RoHS

MODAT-532

Mobile Data Collector

New

Features

- Stylish rugged design and ultra-light industrial Android mobile device
- Quad-Core Cortex A53 64bit 1.5GHz Processor
- 5.3" display PDA
- Optional
  GSM 850/900/1800/1900
  WCDMA 2100/1900/850/900
  4G LTE
  FDD (Band 1,2,3,7,8,20)
  TDD (Band 38,39,40,41)
- Micro USB port and microSD card slot (max. 32 GB) for maximum connectivity
- Android 5.0 OS
- 1D/2D imager scan engine
- NFC (device to device communication, card reader).

| Camera | Wi-Fi | Bluetooth | NFC | GPS | 1D Barcode Scanner | 2D Barcode Scanner | ANDROID |

Specifications

Model		MODAT-532A-QA53-R10	MODAT-532A-QA53-ET-R10
Display	LCD size	5.3"	
	Brightness (cd/m²)	350 cd/m²	
	Max. Resolution	540(H) x 960(V)	
	Viewing Angle	80/80/80/80 Deg.	
	Touchscreen	5-point capacitive	
System	CPU	Quad-core Cortex A53 64bit 1.5GHz	
	Operating System	Android 5.0	
	Memory	16GB eMMC 2G LPDDR2	
	Storage	microSD slot up tp 32GB	
Communication	Wi-Fi	802.11a/b/g/n	
	Bluetooth	4.0 LE	
	Modem (Optional)	GSM (800, 900, 1800, 1900) WCDMA (2100, 1900, 850, 900) 4G FDD(Band1,2,3,7,8,20), TDD(38,39,40,41)	
	GPS	GPS / Glonass	
Data Collection	NFC	Yes	
	Barcode	1D/2D imager scan engine	N/A
	Camera	13-megapixel AF rear camera	
Indicators & Buttons	LED Indicators	Green/Red	
I/O Interface	Audio	1x 0.5W Speaker 1x Headset / Mic-in	
	USB	1x High-speed Micro USB 2.0 Host	
Power	Power Adapter	5V/3A	
	Battery	3900 mAh	
Enviroments	Operating Temperature	-10°C ~ 50°C	
	Storage Temperature	-20°C ~ 60°C	
	Humidity	10% ~ 95%, non condensing	
	Drop Survival	1.5m	
	Environmental Protection	IP 67	
Physical	Dimensions (L x W x H)	160.9 mm x 85.4 mm x 28.85 mm	
	Weight	386 g	

Sidebar

1 IEIMobile Solutions

2 Automation Panel Solutions

3 Healthcare Panel PC Solution

4 Industrial System

5 ORing Network Communication

6 Automation Control

7 Optional Peripherals

1D/2D Barcode

Earphone

Receiver

Scan Key

Battery Cover

Straps

Microphone

6-pin Connector

Power Key

Micro USB Port

2nd Microphone

LED Flashlight

13-megapixel camera

Speaker

Optional Accessory List

Item	Part No.	Description
Cradle	MODAT-531A-CR01-R10	MODAT-531 charging cradle
MODAT-531 Standard Pouch	7Z000-MODAT531APOUCH	MODAT-531A pouch, black

Cradle

Standard Pouch

Packing List

Item	Part No.	Q'ty
USB Cable	32001-014300-100-RS	1
AC-DC Adapter	63040-480015-001-RS	1
Hand Strap	46035-000300-RS	1

Cradle Specification

Model		Ram Mount
I/O Interface	DC Input	1 x Micro USB Jack
Power	Power Supply	5V/3A
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Humidity	10% ~ 95% non condensing
Physical Characteristics	Dimensions (LxWxH) (mm)	115.0 x 66.0 x 50.4
	Weight	194 g

Ordering Information

Part No.	Description
MODAT-532A-QA53-R10	5.3" 350 cd/m², Capacitance Touch, Android 5.0 PDA with Quad Cortex-A53 1.5GHz, 802.11 a/b/g/n WiFi, 4.0 LE Bluetooth, GSM(3G, LTE), GPS, FM, 13M pixel camera, 1D/2D barcode, 2GB LPDDR3, 16GB eMMC, NFC, RoHS
MODAT-532A-QA53-ET-R10	5.3" 350 cd/m², Capacitance Touch, Android 5.0 PDA with Quad Cortex-A53 1.5GHz, 802.11 a/b/g/n WiFi, 4.0 LE Bluetooth, GSM(3G, LTE), GPS, FM, 13M pixel camera, 2GB LPDDR3, 16GB eMMC, NFC, RoHS

Enterprise PDA Mobility Management Solution

- Stylish rugged IP67 design and ultra-light industrial PDA mobile device with Android 5.0 OS system
- MODAT-532 NFC (Near field communication) can be used as mobile terminal which allows your association to identify users
- Enhancing on-duty staff work force and mobility, all data and information captured by MODAT-532 can be transferred via wireless communication providing real-time response without any lost.
- Quad-Core Cortex A53 64bit 1.5GHz Processor, 5.3" mobile PDA phone
- GSM 850/900/1800/1900
- Optional GSM 850/900/1800/1900
- Optional WCDMA (2100,1900,850,900) 4G LTE FDD(Band1,2,3,7,8,20), TDD(38,39,40,41)

HF RFID TAG

Intelligent HF RFID Sensor Tag/Data Logger

Features

- Support temperature, vibration, ambient light, humidity, GPS data logging
- All-in-one design: built-in HF RFID sensor, data logger and USB 2.0
- Maximum storage: 10 million of data logging.
- 13.56 MHz RFID, ISO15693 RF air protocol
- Design for long term data recording
- Fast and efficient wireless RFID for reading out the instant data
- Support time-stamp
- Configurable duration from 1 second to 12 hour for one record

Specifications

Model Number	RFID-TP-D-ST-R10	RFID-VB-D-ST-R10	RFID-AL-D-ST-R10	RFID-HT-D-ST-R10	RFID-GPS-D-ST-R10	RFID-STP-D-ST-R10	RFID-TP-N-ST-R10
Function	Temperature sensor tag plus data logger	Vibration sensor tag plus data logger	Ambient light sensor Ttag plus data logger	Humidity and temperature sensor tag plus data logger	GPS sensor tag plus data logger	Slim RFID temperature sensor plus data logger	RFID temperature sensor tag
Application	Frozen food Environment monitor	Transportation quality Machine abnormality	Environment monitor	Environment monitor	Transportation tracking	Frozen food Environment monitor	Frozen food Environment monitor
Data Logger	Yes	Yes	Yes	Yes	Yes	Yes	No
Normal Used Range	From -20°C to 60°C	From -20°C to 60°C	From -20°C to 60°C	From -20°C to 60°C	From -20°C to 60°C	From -20°C to 60°C	From -20°C to 60°C
Accuracy	0.5°C (max) from 0°C to +65°C 1.0°C (max) from −40°C to +125°C	Full scale ±8g Output data rate 50Hz Max. resolution 3.9mg	Full scale 16000 LUX Resolution ±4 LUX	Relative Humidity ±2%, From 0% to 100% Temperature ±0.2°C (-40°C to 125°C)	<3m	0.5°C (max) from 0°C to +65°C 1.0°C (max) from −40°C to +125°C	0.5°C (max) from 0°C to +65°C 1.0°C (max) from - 40°C to +125°C
Max Storage	134,217,724 points (4GB)	134,217,724 points (4GB)	134,217,724 points (4GB)	134,217,724 points (4GB)	67,108,862 points (4GB)	3423 points (107KB)	1 point
Time Stamp	Yes	Yes	Yes	Yes	Yes	Yes	No
Record Interval	1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr	50/sec	1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr	1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr	1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr	1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr	NA
Indicator (LED)	Short flash once: recording Short flash twice: error message						Short flash once: recording NA
PC Interface	USB 2.0 mass storage device						NA
RFID	ISO 15693, 13.56 MHz	ISO 15693, 13.56 MHz	ISO 15693, 13.56 MHz	ISO 15693, 13.56 MHz	ISO 15693, 13.56 MHz	ISO 15693,13.56 MHz	ISO 15693,13.56 MHz
Power Supply	4.0 to 5.5 VDC	4.0 to 5.5 VDC	4.0 to 5.5 VDC	4.0 to 5.5 VDC	4.0 to 5.5 VDC	4.0 to 5.5 VDC	NA
Battery	Battery pack AA by 4	Battery pack AA by 4	Battery pack AA by 4	Battery pack AA by 4	Battery pack AA by 4	20mAh film battery inside	N/A
Water Proof	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Cerification	FCC CLASS A	FCC CLASS A	FCC Class A	FCC Class A	FCC Class A	FCC Class A	FCC Class A
Dimensions (L x W x H)	12 cm x 8 cm x 3 cm	12 cm x 8 cm x 3 cm	12 cm x 8 cm x 3 cm	12 cm x 8 cm x 3 cm	12 cm x 8 cm x 3 cm	9.2 cm x 6.6 cm x 0.2 cm	9.2 cm x 6.6 cm x 0.1 cm
Working hours	23 days based on 500mAh battery record every second.	1 day based on 500mAh battery.	37 days based on 500mAh battery record every second.	9 days based on 500mAh battery record every second.	1 day based on 500mAh battery record every second.	0.5 day based on build-in battery record every second.	N/A

HF RFID Sensor Tag Plus Data Logger

The HF RFID tag series is designed for long-term temperature, vibration, ambient light, humidity and GPS recording. It uses an SD card as a mass storage media which can continually store 134 million points (four gigabytes for a file) of temperature when using continuous power (such as using USB power adapters). If continuous power is not available, it can use a one time battery case or a rechargeable battery bank which may support one week to one month recording depending on the recording duration and the type of the battery. The recording period can be configured from one second to twelve hours for one recording event. Recording data is easily to be read from the USB port. The data stored on a file is called "RECORD. TXT", which is auto-generated and can be opened by Notepad or Excel directly.

▌ Configure the Device

Before using this device, the user has to setup the recording interval and synchronize the computer clock to the device. After finishing the data collection, use a USB cable to connect with a tablet or a laptop to read and analyze the data.

Setup the recording interval

Read out data

Data analysis

Check Highest & Lowest Temperature During Delivery

RFID Temperature Sensor Tag

Recording temperature

Shipment

Recording temperature

Transportation

Collected data

MODAT-532
Handy reader Reading temperature data

Arrival

• This device implements a real-time clock which supports time-stamp function, and the user can use a RFID reader to read the highest and lowest temperature when the product is delivered from the starting point.

Use the **MODAT-532** or any **ISO15693** RFID reader to read the temperature to ensure the perishable product is not spoiled during delivery.

MODAT Series

RFID Temperature Tag

Applications and Industries

Data loggers are used in a wide variety of industries, especially in restaurants, catering, transportation and medical/vaccine storage. Basically, anywhere temperature is a critical factor in storage or transportation of goods, a temperature logger is useful.

The RFID sensor tags are ideal for keeping track of the following applications:

• Dry ice storage and transportation
• Food fridges and freezers
• Human organ transport
• Blood storage
• Frozen foods transportation
• Medical storage

• Environment monitor
• GPS tracking
• Machine abnormality

Medical Storage   **Human Organ**   **Blood Bag**

Environment Monitor   **Frozen Food**   **GPS Tracking**

Vaccines, drugs and clinical trials products need to be shipped within a prescribed temperature range to maintain their efficacy as well as food to maintain its freshness.

The benefits of applying RFID and sensors to perishable goods include improved food and drugs safety, longer vaccines and drug efficacy, more efficient product recalls, reduced costs due to less spoilage, lower inventories, more efficient logistics, and improved customer service.

Temperature logger provides a complete temperature exposure of your perishables record during transport. This technology is helpful for cold chain control and predicts the remaining life of goods.

The RFID sensor tags can be read and configured using a standard ISO15693 compliant RFID reader without the needs of special commands or devices. Tests performed demonstrate that combined RFID and sensor technology applied to the cold chain results in an optimization of quality, an increase in supply chain management efficiency as well as increased savings due to less waste production.

Ordering Information

Part No.	Description
RFID-TP-D-ST-R10	Temperature sensor tag, data logger, 4GB storage, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-VB-D-ST-R10	Vibration sensor tag, data logger, ±3.9mg accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-AL-D-ST-R10	Ambient light sensor tag, data logger, 4GB storage, ±4 LUX accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-HT-D-ST-R10	Humidity and temperature sensor tag, data logger, 4GB storage, relative humidity ±2%, temperature ±0.2°C, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-GPS-D-ST-R10	GPS sensor tag, data logger, 4GB storage, <3m accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-STP-D-ST-R10	Slim temperature sensor tag, data logger, 107KB storage, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS
RFID-TP-N-ST-R10	Passive temperature sensor tag, data logger, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, RoHS

Optional Accessory List

Item	Part No.	Description
Adapter power	63040-290013-000-RS	Adapter Power, Powertron, PA1015-050SIB260, PA1015-050SIB260-838 V0, Vin:90~264VAC, 13W, Erp(NO LOAD 0.3W),Wall Mount/Switchover plug, Vout:5VDC, USB, CCL, RoHS
Power bank	31603-000042-RS	Battery Pack, Li Ion, T-GEE, 5811-TCTWMX312A, Maxcell, NA, 6200mAH, 3.8V, 1S2P, CCL, RoHS
RFID tag reader	RFID-ST-RD-R10	RFID Sensor Tag Reader, 128x64 OLED, 107KB Storage, 13.56MHz, ISO15693, USB 2.0 interface, 650mAh.

Adapter power   **Power bank**   **RFID tag reader**

IMATELLIGENT

Multipurpose Alarm System

New

Features

- Support WiFi 802.11 b/g/n
- Weight limitation from 20kg to 120kg
- Support real time monitor and receive notice from mobile phone
- Support Android & iOS
- Support LIFX smart bulb
- Built-in battery 1800mAh

Wi-Fi | Smart Battery | Smart Bulb | 120kg Up to 120kg | ANDROID

Specifications

Model	IMATELLIGENT-R10
CPU	32-bit RISC MCU
RAM	256 MB
USB	1 x Micro USB 2.0
Wireless	Wi-Fi 802.11 b/g/n
Sensor	Trigger time: 0.3 sec after stepping on
	Weight limitation from 20kg to 120kg
	Support LIFX smart bulb
OS	RTOS
Battery	1800mAh
Power Input	5V DC input
	1 x On/Off switch
Operation Environment	Working Temperature : 0°C ~ 40°C
	Storage Temperature : - 10°C ~ 60°C
	Humidity : 5% ~ 90%RH (no-condensing)
Dimensions (WxHxD) (mm)	540 x 340 x 14

Ordering Information

Part No.	Description
IMATELLIGENT-R10	32-bit RISC MCU; one Micro USB 2.0; Wireless 802.11b/g/n; 1800 mAh battery; RTOS
SIMATELLIGENT-ET-R10	32-bit RISC MCU; one Micro USB 2.0; Wireless 802.11b/g/n; RTOS

Device Connection

- Velcro Area
- Power Switch
- Micro USB Port
- Sensor Area
- Wireless Router
- Mobile Device **MODAT-532A**
- IMATELLIGENT
- Smart Bulb

Software Structure

LIFX Bulb	IMATELLIGENT	IEI Cloud	Cell Phone
Switch	Get Status	JSON / VM	**APP**
	Battery Status		APK Receive & control message
		Dash Board	Cloud Setup • Create Account • Group • Bundle or delete device
ON OFF	Setup • Initialization • Smart link • Turn on time • Message log	Storage	SMELCare Setup • Initialization • Smart link • Turn on time • LIFX Bulb bundle

Main Menu

Add Device
Follow instructions to connect your i-mat and this phone via Wi-Fi.

Add Device

Add Device
Please enter SSID & password for AP.
AP ID: IEI AP
AP Password: 58646649
OK

Mat Setup

Light 1
IP Address: 192.168.1.25
Switch ON
OK

Smart Bulb Setup

Notices
2016/09/05 Front Door Open
2016/09/04 Front Door Open
2016/09/03 Front Door Open
2016/09/02 Front Door Open
2016/09/01 Front Door Open
2016/08/31 Front Door Open
2016/08/30 Front Door Open
2016/08/29 Front Door Open
2016/08/28 Front Door Open
2016/08/27 Front Door Open

Notice

540

[R10]

340

16.30

IMATELLIGENT
Dimensions (Unit: mm)