ICEFIRE

10.4" Mobile Clinic Assistant

TAIWAN EXCELLENCE 2012

- 10.4" TFT XGA LCD
- Intel® Atom™ D525 dual core platform
- Powered by Windows ® Embedded Standard 7 P
- Dual-mode input
  (Digitizer + Multi-Resistive Touch)
- Dual hot swappable battery
- 1D/2D barcode reader, RFID reader, smart card reader and fingerprint reader
- Bluetooth, Wi-Fi, 3.75G wireless

3.75G/HSUPA | **Bluetooth** | **Wi-Fi** | **RFID** | **Camera**

Touchscreen | **Digitizer Screen** | **Fanless** | **1D Barcode Scanner** | **2D Barcode Scanner** | **Fingerprint Reader** | **SCR** | **7** | **Intel Intelligent Systems Alliance** | **One Key Recovery** iEi symantec.

Mobile Clinic Assistant Applications

Retrieve patient data at bedside for optimal point-of-care treatment.

Instant access to patient medical history for real-time diagnosis.

Accurately capture and record patient symptoms during an emergency.

Increase productivity and decrease opportunities for error through documentation directly at point-of-care.

1 IEIMobile Solutions

2 Automation Panel Solutions
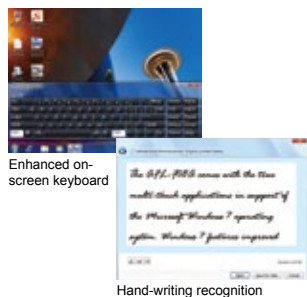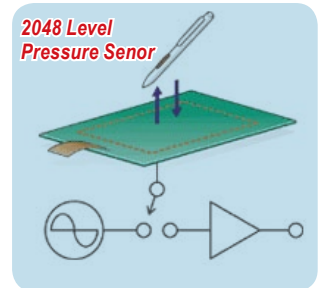
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4 Optional Peripherals

Dual-Mode Input

Along with Windows® 7 digitizer support and dual-mode input support, the ICEFIRE features both WACOM digitizer and traditional resistive touch input with auto-sensing and auto-switching. When a digitizer pen moves close to the screen of the ICEFIRE, the digitizer automatically takes effect and switches off resistive touch input mode.

The digitizer is a more accurate and sensitive input method that can detect stylus pressure, speed, and angle. This feature is suitable for a clinician to note patient's vital signs. Another key benefit of the digitizer is to prevent mis-touch. A clinician can use the digitizer pen to write accurate prescriptions without the worry of input errors. The working principles of the EMR® digitizer are as follows:

■ The tablet surface incorporates a sensor board that detects the pen's movement.
■ Weak energy is induced in the pen's resonant circuit by a magnetic field generated by the sensor board surface.
■ The pen's resonant circuit then makes use of this energy to return a magnetic signal to the sensor board surface.

2048 Level Pressure Senor

Enhanced on-screen keyboard

Hand-writing recognition

Dual input modes combined with acceleration keys make computing flexible and convenient for healthcare staff working in many different applications.

The ICEFIRE also provides Windows® 7 featured multi-touch, gesture, and hand-writing recognition.

Digitizer Mode
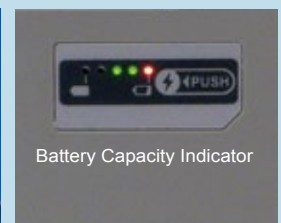
Resistive Touch Mode

Multi-Touch Support

Dual Battery Pack

Each battery pack, with medical-grade certifications, provides 11.1 V 1880 mAh capacity and supports a hot swappable function. When one battery is removed, the system automatically switches power consumption to the other battery. With an additional battery pack and the hot swappable feature, the ICEFIRE ensures non-stop point-of-care, 24 hours a day, every day.

Each battery pack has capacity indicators. Besides these visual indicators, operating systems like Windows® 7 will also display information of available batteries and capacity on the desktop.

The ICEFIRE consumes the battery with lower power capacity first. When charging, the ICEFIRE charges the battery with higher power capacity first then the other.

Battery Capacity Indicator

Security and Access Control

Combined with Windows® 7 Embedded security management feature, the built-in fingerprint reader allows hospitals to control access priorities.

The optional USB interface smart card reader supports identity verification and makes the ICEFIRE an ideal access control device for transaction-based medical cloud-computing systems.

Optional Smart Card Reader (SCR)

Fingerprint Reader

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Ergonomic Design

IP64 Compliant and Easy-to-Clean Plastic Housing

Ergonomic Handlebar and Hinge Stand

Handle design for easy carry   Ergonomic Grip Handle   Desk-mount stand for ease of use

Medical-grade Certification Approved

EN 60601-1
EN 60950

IEC

Antibacterial Housing

Slim and Lightweight Design

1.8 kg with Battery

2.54cm

Flexible Installation Design

Power/Battery charging LED

DC power input   1 x RS-232   1 x VGA output   USB

The ICEFIRE Docking Station (ICEFIRE-DS) provides power to one docked ICEFIRE and two plug-in battery packs simultaneously.

WOW (Workstation on Wheels) Installation

The combination of ICEFIRE and ICEFIRE Docking Station is an ideal solution for a healthcare cart:

■ Desktop, swing arm, or VESA mounting options

■ Expanded I/O connects to peripherals such as keyboard/ mouse, printer, barcode scanner, or medical equipments

■ Easy to draw out and draw back

■ Convenient bedside healthcare

■ Power and battery options support uninterrupted point-of-care

Wall Mount Installation

Wall-mount Installation

ICEFIRE Car Dock (Rugged Docking Station)

With a metal snap on design, the ICEFIRE car dock is made to withstand harsh vehicle environments such as strong vibrations.

Part No. : ICEFIRE-T10A-DSRG-R10

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ICEFIRE-ET

Enterprise Tablet PC

- 10.4" TFT 350 cd/m² XGA LCD with multi resistive touch
- Intel® Atom™ D525 dual core 1.8 GHz platform
- Powered by Windows® Embedded Standard 7 P
- 3-megapixel camera with LED flash
- Bluetooth, Wi-Fi, Ethernet LAN
- Dual hot swappable battery
- Optional docking station / smart card reader

Bluetooth | Wi-Fi | Touchscreen | Camera | Fingerprint Reader | SCR | intel Intelligent Systems Alliance
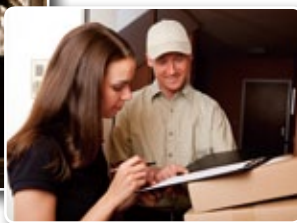
Applications

Enterprise Mobility

Using mobile devices helps save your time and increases productivity. The right technology enables the flow of information between handheld devices used by your workers and your core business systems. The ICEFIRE-ET utilizes wireless local area networks (WLANs) and management software to increase the data transfer speed and optimize your working mobility in logistics and warehousing environments.

Inspection

The ICEFIRE-ET is most suitable for inspection applications. It features an ergonomic and light weight design that is easy to carry around on-the-job. It also offers exceptional functions that allow information to be stored in real-time and help businesses to provide transparent inspection and accurate information.

Logistics and Warehouse

Enhancing on-duty staff work force and mobility, the tablet PC brings more efficiency to the workplace. All data and information are saved in the ICEFIRE-ET and can be transferred via wireless communication providing real-time responses without any loss.

ICEFIRE 2

10.4" Mobile Clinic Assistant

- 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 with GPS
- 1D/2D barcode reader, 13.56MHz RFID reader
- Dual-mode input (Digitizer + Multi-Resistive 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

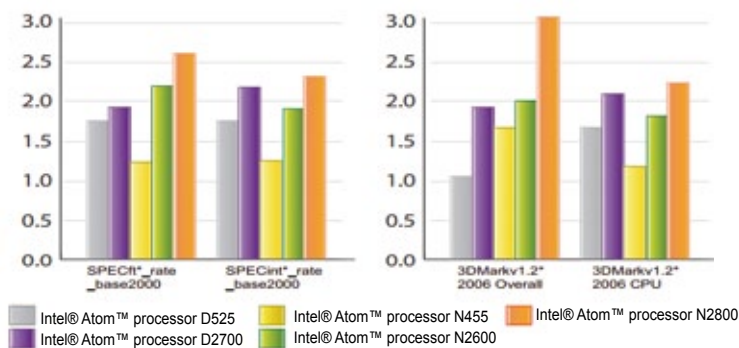# High Performance, Low Power Consumption CPU for Fanless Design

The new generation Intel® Atom™ N2800 processor provides reduced power consumption with high performance suitable for mobile devices in industrial computing. Benefits include:

- Display options include two digital ports supporting extra LVDS/HDMI/VGA interface
- Two times improved graphics with two HD video support
- Faster memory up to DDR3 1066
- Support fan-less design

Processor Performance

Graphics Performance

- Intel® Atom™ processor D525
- Intel® Atom™ processor D2700
- Intel® Atom™ processor N455
- Intel® Atom™ processor N2600
- Intel® Atom™ processor N2800

CPU Specification Comparison

	ICEFIRE	ICEFIRE2	
Core Functionality	1.67 GHz (N455) 1.8 GHz (D525)	1.6 GHz (N2600) 1.85 GHz (N2800)	
Process Technology / Packing Size	45-nm / 22x22	32-nm / 22x22	
Graphics Base Frequency	200 MHz (N455) 400 MHz (D525)	400 MHz (N2600) 640 MHz (N2800)	
Memory Technology	DDR3 667 (N455) DDR3 800 (D525)	DDR3 800 (N2600) DDR3 1066 (N2800)	
Max Memory Capacity	2GB (N455) 4GB (D525)	2GB (N2600) 4GB (N2800)	
CPU / TDP	D525 / 13W	N2600 / 3.5W	N2800 / 6.5W
Chipset / TDP	ICH8M / 2.4W	NM10 / 1.5W	NM10 / 1.5W
Power kit / TDP	Power / 7W	Power / 3W	Power / 3W
Total	22.4W	8W	11W

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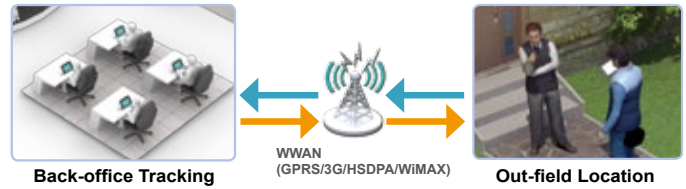Automation Panel Solutions

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Optional Peripherals

GPS Application : Position & Location

Together with wireless network technology (such as 3G), the built-in GPS tracks the exact location of the ICEFIRE users:

■ Users can be located on a map to reference his/her own location in relation to other landmarks. With location based services, mobile workers can locate important destinations such as gas stations and customers in an unknown territory.

■ Location information obtained from the GPS can be transmitted to the backend office through wireless broadband connectivity, allowing employees to be tracked while they are on the move.

Back-office Tracking

WWAN (GPRS/3G/HSDPA/WiMAX)

Out-field Location

mSATA Storage

mSATA SSD leverages the speed and reliability of the SATA interface, providing high-performance and cost-effective storage for smaller devices and enabling more compact integration into a wide variety of applications. Compared to the traditional HDD and CF card storage, mSATA has the following advantages:

■ Fast re-write capability
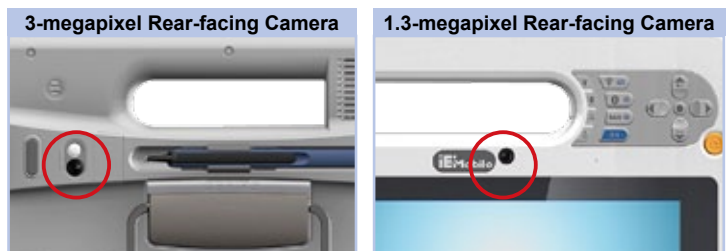■ Able to withstand vigorous vibrations
■ Small in size

Flexible Module Expansion Slot

Open Cover

Located at the back of the ICEFIRE 2, the module expansion slot is designed for easy and fast exchange of a variety of modules, including RFID readers. This design brings functional versatility to the ICEFIRE 2 to serve a diverse range of applications.

Integrated Dual Camera

3-megapixel Rear-facing Camera **1.3-megapixel Rear-facing Camera**

The ICEFIRE 2 is integrated with two camera, one on the front and one on the rear. The 3-megapixel rear-facing camera can be utilized for photographic and video documentation purposes. The 1.3-megapixel front-facing camera enables unified video communications wirelessly.

LED torch on/off
RFID on/off
Barcode scanner on/off

Function keys
Fingerprint scanner
Status LED
Navigation keys
3-megapixel camera
Digitizer pen holder

USB
Power on/off button with power LED
Barcode scanner

1.3 megapixels camera
Camera button
LED torch

Power in
RFID antenna
Battery 1
Battery 2
Removable cover

Docking connector

Daily Patient Record Case Study

Background

A major Taiwan-based hospital with the second largest patient flow in the country has been changing its paper-based recording system into electronic recording systems. With 1,096 beds, approximately 4,000 outpatient visits per day and a bed occupancy rate of 85%, emergency response and after patient care are the most important services provided by this hospital.
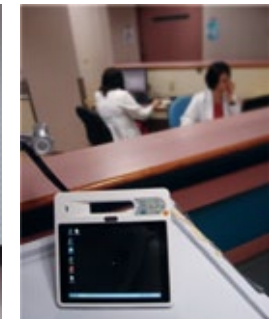
Challenge

Previously, nurses relied on desktop computers and paper records to monitor patients' daily health information such as food intake, body temperature, and output. Daily records were recorded on a notebook located at each patients' bedside. Nurses found this paper-based method to be inconvenient as the records were easily misplaced or lost. Furthermore, hand written information were often misunderstood or hard to read.

The hospital realized it was time to improve its daily patient recording system with an electronic-based system. The institution was in search for a mobile computing solution to enhance nursing efficiency and accuracy.

Solution

The ICEFIRE 10.4" Mobile Clinic Assistant offers a mobile platform in which nurses can input and store patient information instantly. The built-in hand writing recognition function and the digitizer technology allow nurses to easily write on the tablet surface without mis-touch. In addition, the barcode and RFID readers are very helpful when it comes to identifying patient and medication. The tablet PC can be connected to the hospital's medical database through Wi-Fi, and patient records can be updated or retrieved safely and efficiently.

Benefits

● 10.4" screen for easy viewing and operation.
● Dual-mode input with digitizer technology and resistive touch for hand writing recognition and mis-touch prevention.
● Built-in 1D/2D barcode and 13.56MHz RFID reader for automatic identification.
● Dual hot swap battery for increased device operation time.
● Ergonomic design for easy carry and easy use.

Flexible Installation Design

Release the Stand

Lock the Stand

Secure the Holder

Secure the holder onto the top of the docking station by inserting four retention screws

Move the stand downward. Slide the two latches again to lock the stand into place

Mounting with Docking Station

The optional docking station of the ICEFIRE2-T10 can be installed on any VESA compliant mounting device. The VESA mount retention screw holes of the docking station are shown in 483H746HFigure 3-13. Follow the instructions in the user manual of the mounting device to mount the docking station securely.

100mm x 100mm VESA Mount

VESA Mounting Retention Screw Holes (Docking Station)

Selection Guide

Model		ICEFIRE			ICEFIRE 2		
		ICEFIRE-T10A-HU/2G-32S-R11	ICEFIRE-T10A-TR/2G-32S-R10	ICEFIRE-T10A-ET/2G-32S-R10	ICEFIRE2-T10-HU-R10	ICEFIRE2-T10-TR-R10	ICEFIRE2-T10-ET-R10
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.					
	Touch Screen	Resistive Support Multi-touch and Gesture					
	Digitizer	256 levels @ full scale pressure resolution	N/A	N/A	2048 levels@ full scale pressure resolution	N/A	N/A
System	CPU	1.8GHz Intel® Atom™ D525			1.86GHz Intel® Atom™ N2800		
	Chipset	Intel® ICH8M			Intel® NM10		
	Operating System	Microsoft® Windows® Embedded Standard 7 P (WS7P)			Microsoft® Windows® Embedded Standard 7 P (WS7P)		
	Memory	1333MHz 2GB DDR3 SDRAM			1333MHz 4GB DDR3 SDRAM		
	Storage	32GB SSD			mSATA 8G SLC		
Communication	Wireless LAN	Wi-Fi 802.11a/b/g/n			Wi-Fi 802.11b/g/n		
	Bluetooth	Bluetooth V2.1+ EDR (Class 2)			Bluetooth V3.0 + EDR (Class 2)		
	Modem	WCDMA/HSUPA	N/A	N/A	WCDMA/HSUPA	N/A	N/A
	GPS	N/A	N/A	N/A	Option	Option	Option
Data Collection	Camera	3-megapixel and LED Light			1.3-megapixel CMOS camera (Front) / 3-megapixel CMOS camera (Rear)		
	Barcode	1D/2D Imager Scan Engine	N/A		1D/2D Imager Scan Engine		N/A
	RFID	13.56 MHz RFID supports ISO15693 and ISO14443A/B compliant		N/A	13.56 MHz RFID supports ISO 15693 and 14443A/B compliant		N/A
Fingerprint Reader		Yes	Yes	N/A	Yes	Yes	N/A
Indicators & Buttons	LED Indicators	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status LED		Power/ Wi-Fi/Bluetooth/ Battery Status/	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	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 2.0			1 x USB 3.0		
	LAN	1 x 10/100 Mbps			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	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, Medical-grade Class B EN 60601-1/ EN60950	CE/FCC, Medical-grade Class B EN 60601-1/ EN60950	CE/FCC	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	1.7 kg	1.7 kg	1.6 kg

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4 Optional Peripherals

Ordering Information

Part No.	Description
ICEFIRE: Intel® Atom™ D525 CPU with Windows® Embedded Standard 7	
ICEFIRE-T10A-HU/2G-32S-R11	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Multi-Touch and Digitizer Dual Mode, 2GB DDR3 RAM, HSUPA, 802.11a/b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3-megapixel Camera, LED Torch, 32GB SSD, WS7P RoHS
ICEFIRE-T10A-TR/2G-32S-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Resistive Multi-Touch, 2GB DDR3 RAM, 802.11a/b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3-megapixel Rear Camera, LED Torch, 32GB SSD, WS7P, RoHS
ICEFIRE-T10A-ET/2G-32S-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Resistive Multi-Touch, 2GB DDR3 RAM, 802.11a/b/g/n Wireless, Bluetooth, 32GB SSD, WS7P RoHS
ICEFIRE 2: Intel® Atom™ N2800 CPU with Windows® Embedded Standard 7	
ICEFIRE2-T10-HU-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, 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-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Resistive 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-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Resistive Multi-Touch, 4GB DDR3 RAM, 802.11b/g/n Wireless, Bluetooth, 8GB mSATA, WS7P RoHS

Model Variations

Part No.	Digitizer	Touch	Wireless	Bluetooth	3.75G	GPS	Barcode	RFID	Fingerprint Reader	Storage
ICEFIRE: Intel® Atom™ D525 CPU with Windows® Embedded Standard 7										
ICEFIRE-T10A-HU/2G-32S-R11	Digitizer	Resistive Multi-touch	802.11a/b/g/n	Ver. 2.1+EDR, Class 2	Qualcomm	N/A	1D/2D	RFID	Yes	32G SSD
ICEFIRE-T10A-TR/2G-32S-R10	N/A	Resistive Multi-touch	802.11a/b/g/n	Ver. 2.1+EDR, Class 2	N/A	N/A	1D/2D	RFID	Yes	32G SSD
ICEFIRE-T10A-ET/2G-32S-R10	N/A	Resistive Multi-touch	802.11a/b/g/n	Ver. 2.1+EDR, Class 2	N/A	N/A	N/A	N/A	N/A	32G SSD
ICEFIRE 2: Intel® Atom™ N2800 CPU with Windows® Embedded Standard 7										
ICEFIRE2-T10-HU-R10	Digitizer	Resistive Multi-touch	802.11b/g/n	Ver. 3.0+EDR Class 2	Qualcomm	Option	1D/2D	RFID	Yes	8G mSATA
ICEFIRE2-T10-TR-R10	N/A	Resistive Multi-touch	802.11b/g/n	Ver. 3.0+EDR Class 2	N/A	Option	1D/2D	RFID	Yes	8G mSATA
ICEFIRE2-T10-ET-R10	N/A	Resistive Multi-touch	802.11b/g/n	Ver. 3.0+EDR Class 2	N/A	Option	N/A	N/A	N/A	8G mSATA

Packing List

Item	Part No.	HU	TR	ET
Digitizer Pen	7Z000-SU5E10S06AU00X-RS	●		
Stylus	43125-0002C0-00-RS		●	●
Battery Pack	31603-000016-RS	●	●	
Battery Pack-B	31603-000020-RS			●
Medical-grade Power Adapter (12V/60W)	63040-010060-020-RS	●	●	
Non-Medical-grade Power Adapter (12V/60W)	63040-010060-030-RS			●
User's Manual CD	7B000-000552-RS	●	●	●

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

Optional Accessory List

Item	Part No.	Description
Docking Station	ICEFIRE-T10A-DSNM-R10	ICEFIRE Docking Station Without Docking Adapter, Normal type
	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
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-SU5E10S06AU00X-RS	Digitizer Sensor Pen
Stylus	43125-0002C0-00-RS	Touch Pen
Carrying Case	7Z000-ICEFIRET10APOUCH-RS	Black, leather protective bag with shoulder strap

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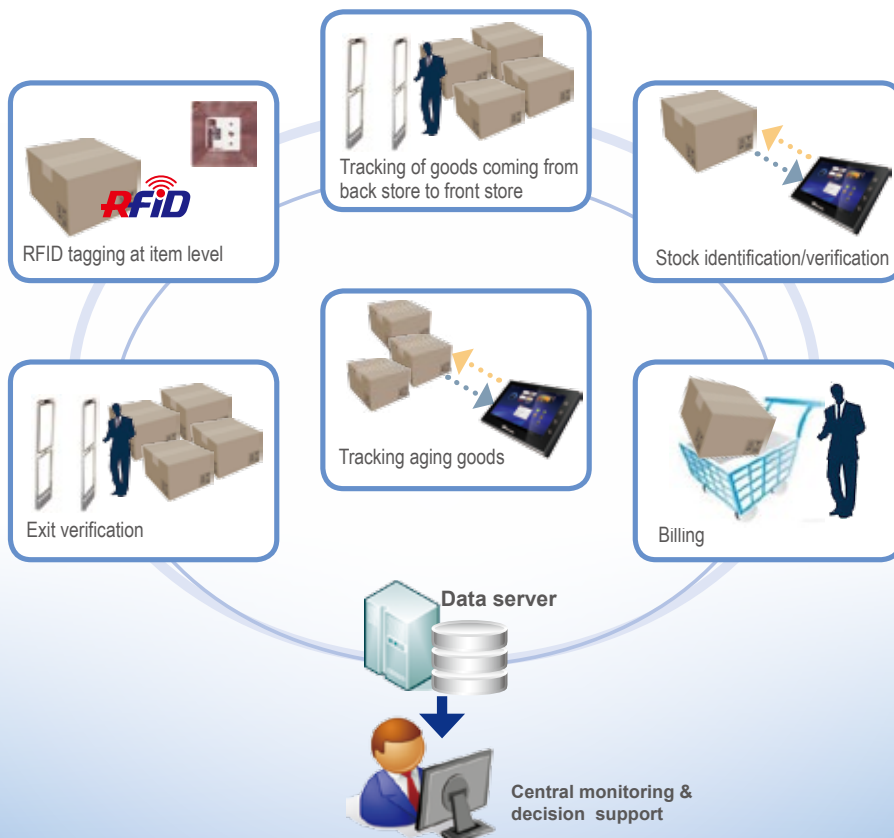
4 Optional Peripherals

ICECARE-05

New

Pocket Mobile Field Assistant

- 5" 350 cd/m² TFT LCD with projected capacitive touchscreen
- Texas Instruments Sitara™ ARM® Cortex™-A8 CPU
- Powered by Android 4.1.2 OS
- Bluetooth and Wi-Fi
- 5-megapixel CMOS camera
- Optional HF / UHF RFID reader

Cortex Intelligent Processors by ARM®

TEXAS INSTRUMENTS

Bluetooth | Wi-Fi | Camera | Touchscreen | RFID | UHF | ANDROID

Retail and Warehouse Management Applications

The ICECARE-05 is designed for applications in the retail industry. Pocket sized consumer-grade mobile devices are not designed to withstand drops and often fall short on battery life. However, with its industrial-grade design, the ICECARE-05 offers prolonged operation time and enhanced durability to users in the vertical industry.

RFID tagging at item level

Tracking of goods coming from back store to front store

Stock identification/verification

Tracking aging goods

Exit verification

Billing

Data server

Central monitoring & decision support

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The Industry's Lightest Android Tablet with Rugged Design

The ICECARE-05 is the industry's lightest Android tablet PC with a rugged design. Weighing less than 300 grams, the ICECARE-05 is designed with an IP 64 rating, 1.2M drop survival, and wide operating temperatures.

IP 64 Rating
Dust tight and protected against water splashed against the component from any direction.

Operating Temperature -10°C ~ 50°C
It can be operated under a wide range of temperatures.

1.2M Drop Test
Passed the 1.2M drop test on all sides 26 times.

Storage Temperature -20°C ~ 60°C
It can be stored under extreme temperatures.

Protective cover over:
1 x Micro USB
1 x microSD

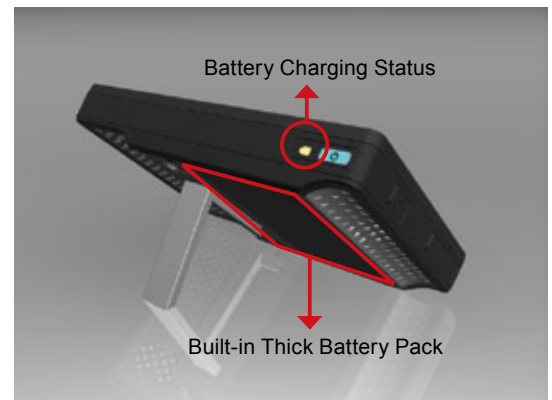The ICECARE-05 is surrounded by black rubber protecting it from water and dust intrusions and drops.

Enhanced Operating Time

In order to increase device operating time and meet the requirements of long work hours, the ICECARE-05 is built in a thick battery pack with an extended operating time of 8 hours.

Battery Pack	Details	*Operating Time (Hrs)
Thick Battery	3600mAh	8 Hrs (Normal Usage)

* Under normal usage when 3G/GPS/UHF functions are turned off.

Battery Charging Status

Built-in Thick Battery Pack

Optional Advanced RFID Technology

The RFID (Radio-Frequency Identification) technology utilizes frequencies ranging from 125KHz to 2.45GHz. The ICECARE-05 features an optional HF or UHF RFID reader.

HF RFID Reader
The 13.56MHz RFID reader is suitable for item identification in warehouse.

UHF RFID Reader
The optional UHF RFID reader, which operates within 840MHz to 960MHz, is excellent for multiple item identification and tracking applications.

- HF RFID: short reading distance, single item identification
- UHF RFID: long reading distance, multiple item identification

1 IEIMobile Solutions

2 Automation Panel Solutions

3 PACSmate Medical Solutions

4 Optional Peripherals

Power Button

Headphone

Micro USB

microSD Card Slot

RFID Reader   5-Megapixel Camera

iEiMobile

Stand

Specifications

Model	ICECARE-05	
Display	LCD Size	5" TFT LCD
	Brightness (cd/m²)	350
	Max. Resolution	800 (H) x 480 (V)
	Viewing Angle	70/70/50/70 Deg.
	Touch Screen	Projected capacitive type
System	CPU	TI Sitara™ AM3715 1GHz
	Operating System	Android 4.1.2
	Memory	4GB eMMC Flash + 512MB SDRAM
Communication	Wireless LAN	802.11a/b/g/n
	Bluetooth	Bluetooth 4.0
Data Collection	RFID	13.56MHz RFID reader (optional) UHF RFID reader (optional)
	Camera	5-megapixel camera
Indicators & Keys	LED Indicators	Power on LED (Blue)/ Sleep (Red)
		Charging LED (Orange)/ Full (Green)
	Keys	Power on / off switch
		4 x Function key (Home/Menu/Back/Search)

I/O Interface		
I/O Interface	Audio	1 x Headset
		1 x 0.5W speaker
	Expansions	1 x Micro USB Client
		1 x microSD (up to 32G)
Power	Power Adapter	5V/2.1A/10.2W
	Battery	3.7V 3600mAh
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Humidity	5%~95%, non-condensing
	IP Protection	IP 64
	Drop Survival	1.2m
Pysical Characteristics	Dimensions (LxWxH) (mm)	139 x 99.3 x 22.8
	Weight	297g

Packing List

Item	Part No.	Q'ty
Adapter	63040-330010-000-RS	1
Cable	32001-008501-100-RS	1
Earphone	30900-000003-RS	1

Ordering Information

Part No.	Description
ICECARE-05-HF-R10	5" TFT-LCD tablet with TI Sitara™ AM3715 CPU, Wi-Fi/Bluetooth, HF RFID, 5-megapixel camera, Android 4.1.2 OS, RoHS
ICECARE-05-ET-R10	5" TFT-LCD tablet with TI Sitara™ AM3715 CPU, Wi-Fi/Bluetooth, 5-megapixel camera, Android 4.1.2 OS, RoHS
ICECARE-05-UHF-R10	5" TFT-LCD tablet with TI Sitara™ AM3715 CPU, Wi-Fi/Bluetooth, UHF RFID, 5-megapixel camera, Android 4.1.2 OS, RoHS

Model Variations

Part No.	Touch	Wireless	Bluetooth	3.75G	GPS	HF RFID	UHF RFID
ICECARE-05-HF-R10	Capacitive touch	802.11a/b/g/n	Ver. 4.0	N/A	N/A	Yes	N/A
ICECARE-05-ET-R10	Capacitive touch	802.11a/b/g/n	Ver. 4.0	N/A	N/A	N/A	N/A
ICECARE-05-UHF-R10	Capacitive touch	802.11a/b/g/n	Ver. 4.0	N/A	N/A	N/A	Yes

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4 Optional Peripherals

AVL-3000

Advanced Auto Data Server

- ■ **Intel® Atom™ N2600 1.6GHz CPU**
- ■ **Powered by Windows® Embedded Standard 7 E (WES7E)**
- ■ **Built-in 2.5" 16 GB SATA SSD**
- ■ **Built-in Wi-Fi, Bluetooth, HSUPA, and GPS**
- ■ **Built-in VGA Output and NTSC/PAL/SECAM Video Capture**
- ■ **Supports On-Board Diagnostics (OBD)**
- ■ **Optional Dual SIM**
- ■ **Optional UHF RFID reader module**

| 3.75G/HSUPA | Wi-Fi | Bluetooth | GPS | Power Management | Video Capture | UHF | 7 |

Advanced Auto Data Server with Upgraded Tracking and Surveillance Function

The AVL-3000 comes integrated with a remote on-line and real time diagnostic system for vehicles via HSUPA/GPRS/GSM, Global Position System (GPS) and On-Board Diagnostics System (OBD) technologies.

The AVL-3000 provides video/audio capture and recording functions. With the codec solution, the AVL-3000 offers enhanced data streaming performance. Optional functions include UHF RFID Readers for a wide range of industrial and commercial applications, including supply chain management, asset tracking, authentication and access control. These complete advanced functions make an Auto Data Server suitable for accurate vehicle tracking, security, monitoring, and data collection.

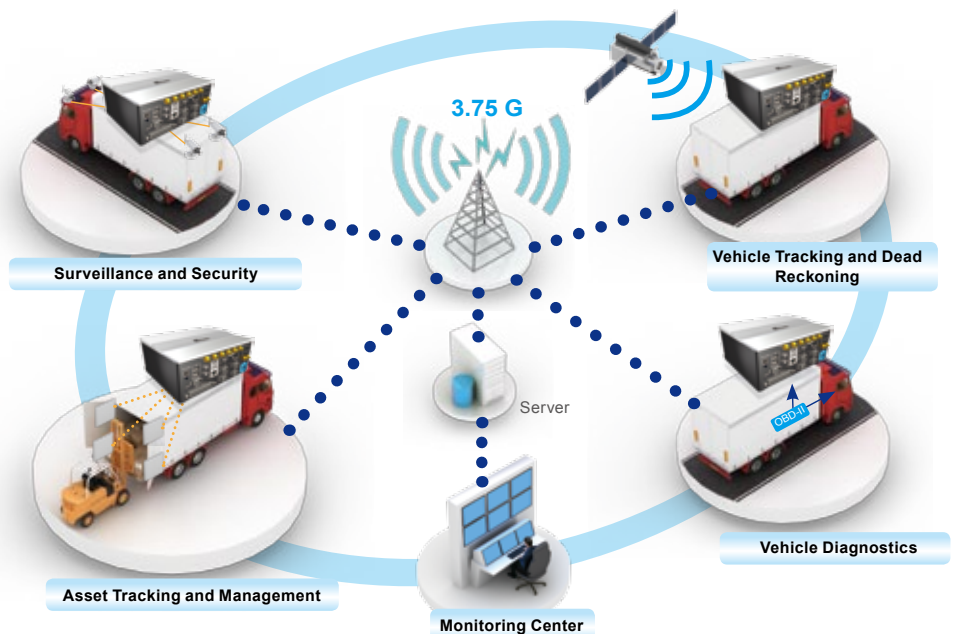**1** IEIMobile Solutions

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4 Optional Peripherals

	AVL-2000	AVL-3000
CPU	eMenlow	Cedarview
	Z510 1.1 GHz	N2800 (optional) N2600
OS	Windows® XP Embedded	Windows® 7 Embedded
Memory	DDR2 533MHz (2 GB max.)	DDR3 1066MHz

3.75 G

Surveillance and Security

Vehicle Tracking and Dead Reckoning

Server

Asset Tracking and Management

Monitoring Center

Vehicle Diagnostics

Extended Connectivity

▌Multi-Channel Real Time Video and Audio Capture Applications

The AVL-3000, featuring multi-channel real time video and audio capture capabilities, is desinged to meet the requirements of modern security systems in the transportation industry. It can reduce loss and damage to goods and assets while increasing the safety of drivers at the same time. The AVL-3000 SDK contains a library of four active channels video demo program, allowing quick and easy customization of audio/video preview and capture applications.

Key Features

- Internal 4-channel video decoder and audio ADC
- High quality proprietary fast video locking system for non-real-time application
- Supports 4-channel D1 video plus 1-channel audio simultaneously with independent channel control
- Dynamic synchronization: video processing; multiple video format output supports Y422, Y420, IYUI/Y411, Y41P, RGB555 and RGB565
- Dual support for Direct Show and Direct Draw
- Accepts all NTSC(M/N/4.43) / PAL(B/D/G/H/I/ K/L/M/N/60) / SECAM standards with auto detection

Hardware Compression Card

The hardware compression card is a specialized hardware that can process video and audio information and enable the system to run smoothly at the same time. It decreases loading on the CPU and offers a stable solution for high-end vehicle tracking and monitoring applications.

Interface	PCI-104	
Video Input	4 x pin	
Display Video Resolution	NTSC 352 x 240 @30fps	PAL 352 x 288 @25fps
Recording Video Format	H.264 Baseline Profile	
Recording Video Resolution	NTSC 720 x 480 @30fps (Max.)	PAL 720 x 576 @25fps (Max.)

UHF RFID Readers

The AVL-3000 extends the benefits of UHF RFID technology to in-vehicle applications via the long range UHF RFID readers which are ISO 18000-6C standard complaint and suitable for industrial warehouse management. It can be used in any harsh environment or temperature. It also supports error-free read performance in vehicles. The non line-of-sight tag reading is effectively used in item level identification, warehouse logistics, and security access management. The AVL-3000 SDK contains libraries to read, write, lock and kill RFID tags, which can be easily integrated into software applications.

Key Features

- High gain, high performance
- Easy installation
- UV resistance
- IP 65 waterproof and dustproof
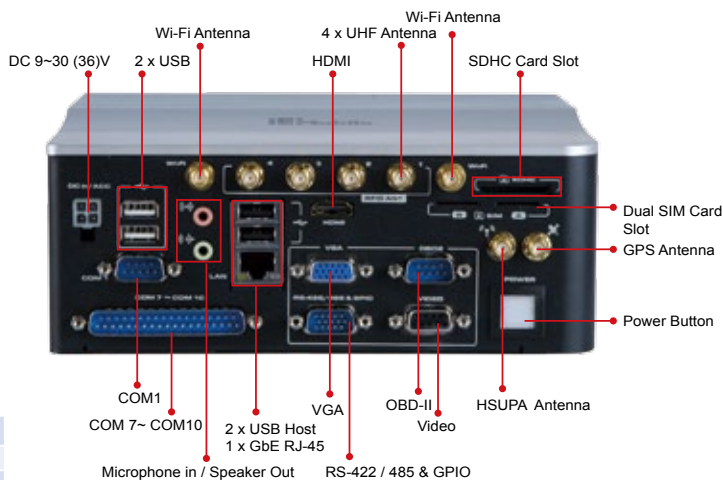- Pole mount & wall mount available

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4 Optional Peripherals

Wi-Fi Antenna
Wi-Fi Antenna
4 x UHF Antenna
DC 9~30 (36)V
2 x USB
HDMI
SDHC Card Slot

- Dual SIM Card Slot
- GPS Antenna
- Power Button

COM1
COM 7~ COM10
2 x USB Host
1 x GbE RJ-45
VGA
OBD-II
Video
HSUPA Antenna
Microphone in / Speaker Out
RS-422 / 485 & GPIO

Specifications

Model		AVL-3000
System	CPU	Intel® Atom™ N2600 1.6GHz processor
	Chipset	Intel® NM10
	Operating System	Windows® Embedded Standard 7 E (WES7E)
	Memory	2GB 800 MHz DDR3
	Storagy	1 x Built-in 16GB 2.5" SATA SSD
		1 x SDXC Slot for data storage
Communication	Wireless LAN	802.11b/g/n
	Bluetooth	Bluetooth V2.0+EDR (class I)
	3.75G	HSUPA/UMTS-800/850/900/1900/2100 MHz
		Quad-band EDGE/GPRS
		GSM-850/900/1800/1900 MHz
		Dual-band EV-DO/CDMA
	GPS	GPS
		Supports single module dual SIM
Data Collection	RFID	Read-Write Capable ISO18000-6C UHF module ETSI/FCC
Multimedia	Audio	1 x MIC IN 1 x Line-out
	Camera	4 x Channel camera D1 120FPS
LED Indicator		1 x Power LED
Power	Power Input	Cigarette lighter power cable DC 9~30 (36)V
	Vehicle Power	ACC Power Cable
I/O Interface		4 x USB
		1 x OBD-II
		6 x COM port: DB-9 (COM1), RS-422/485 (COM4, 4-PIN), DB-37 (COM7~COM10)
		1 x GbE RJ-45 LAN
		1 x VGA support up to 1920 x 1200
		4 x VIDEO IN
		1 x 8-bit Digital I/O (selectable by software) 4 x DI 4 x DO
		1 X RJ-11 3.5G Voice
		1 x HDMI
Environment	Operating Temperature	-20°C~70°C
	Storage Temperature	-30°C ~80°C
	Humidity	5%~95%, non-condensing
	Drop Survival	ISO 16754
	Certification	CE/FCC/e-Mark
Physical Characteristics	Dimensions (LxWxH) (mm)	200 x 150 x 76
	Weight	2kg

Ordering Information

Part No.	Description
AVL-3000-N26-R10	Vehicle PC Box with Intel® Atom™ N2600 1.6GHz CPU, WES7E OS, 2GB SDRAM, 16GB 2.5" SSD, 802.11b/g/n Wireless, HSUPA, OBD-II, GPS, RoHS
AVL-3000-N26-HC-R20	In Vehicle PC Box with Intel® Atom™ Cedarview-M N2600 1.6GHz CPU, 2GB SDRAM, GbE LAN, 802.11b/g/n Wireless, Bluetooth, Qualcomm HSUPA, GPS, OBD-II, 4CH UHF RFID, 4CH HW compression Video Capture, RoHS

Packing List

Item	Part Number	Quantity
GPS/3.75G Integrate Antenna	32506-000100-100-RS	1
Wi-Fi Antenna	32505-000400-100-RS	2
ACC Power Cable	32002-001900-100-RS	1
User Manual CD-ROM	7B000-000568-RS	1
IEI One Key Recovery CD	IEI-7B000-000478-RS	1

Optional Accessory List

Item	Part Number
Cigarette Lighter Power Cable	32002-001800-100-RS
RS-232 Cable	32005-000200-200-RS
Capture Cable	32007-001400-100-RS
OBD-II Cable	32025-000300-100-RS
J1939 Cable	32025-000400-100-RS
UHF RFID Antenna w/Cable (PATCH Antenna 915MHZ)	AVL-2000PLUS-FCC01-R10
UHF RFID Antenna w/Cable (PATCH Antenna 867.5MHZ)	AVL-2000PLUS-ETSI01-R10
Power Adapter	IVIPOWER-4PIN-R10

ACC Power Cable

Wi-Fi Antenna

J1939 Cable

Cigarette Lighter Power Cable

Power Adapter

GPS / 3.75G Integrate Antenna

Capture Cable

OBD-II Cable

RS-232 Cable

UHF RFID Cable

UHF RFID Antenna