MRC 2100-E

Rugged Fan-less Tablet PC with Intel® Atom™ Processor/Daylight Readable Display/Touch Screen/WiFi/Bluetooth/GPS

Main Features

- Intel® Atom™ CPU 1.1GHz and 1.6GHz (2W~2.4W)
- Built-in WiFi 802.11/b/g/n/ Bluetooth module/ GPS
- Built-in 3.5G, CDMA module (Optional)
- Daylight Readable Display
- Built-in 1D Leaser Barcode Scanner or RFID (Optional)

- 1 x Navigation Key and 4 x Programmable Function Key
- Battery life longer than 4~8 hours
- Rugged Design- Meets Multiple MIL Specs Passing
- GPS Support RF Passing to External Antenna Through Vehicle Docking Station

Product Overview

The MRC 2100-E is designed for mobile workers requiring real-time information who cannot access desktop-pc or laptop. The IP-54 rating rugged design makes the durable MRC 2100-E suitable for use in even harsh environments. The build-in 802.11b/g/n & bluetooth modules provide excellent mobility. With the powerful 3.5G mobile broadband engine, the MRC 2100-E can benefit users by efficiently utilizing existing broadband whilst expanding service coverage. For logistic and warehouse management applications the MRC 2100-E is equipped with a built-in barcode scanner and RFID interface. Onboard GPS and sunlight readable LCD make the MRC 2100-E ideal for outdoor applications. Applications including but not limited to - asset management, building automation, mobile CRM, meter reading, on-site troubleshooting, AVL/GIS/mapping, field data collection, plant operations, quality control, WIP tracking, surveillance/inspection, surveying, mobile POS, shelf labeling, fleet management, marine navigation, shipping/receiving, health care services, etc.

Specifications

CPU Support

- Intel® Atom™ processor 1.1 GHz and 1.6 GHz with 512 KB on-die L2 cache, 400MHz/ 533MHz FSB (2W~2.4W)

Chipset

- Intel® System Controller Hub US15W (single chip integrated graphics and I/O controller)

Main Memory

- 1 x 200-pin DDR2 SO-DIMM socket, up to 2 GB SDRAM

Storage

- 1 x SSD (ZIF Type) PATA interface
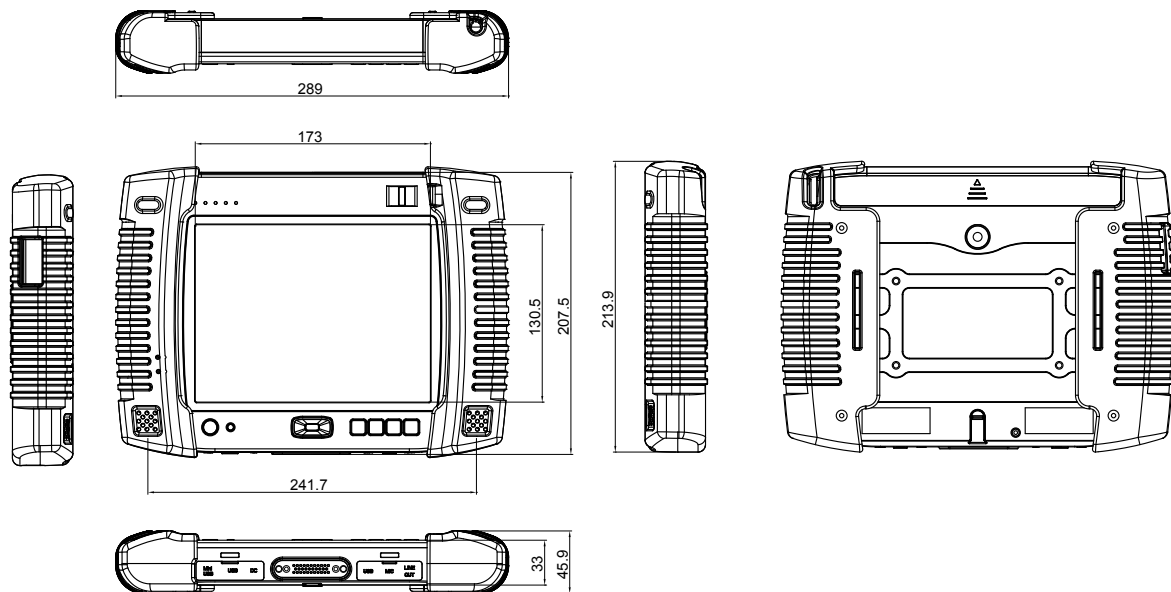- 1 x 1.8" HDD (8mm ZIF) PATA interface (Optional)

Audio

- ALC888-VC2-GR HD Codec
- AC '97 Compatible
- 1 x external MIC-in and 1 x external Line-out

Display

- Intel® System Controller Hub US15W ultra low power controller integrated with 2D & 3D HW accelerator and high definition hardware video decode engine, UMA up to 256 MB
- Internal LVDS display port and SDVO expansion port
- Supports dual independent display (LVDS + SDVO)
- LVDS: supports IGD to communicate directly to an on-board flat panel display, panel support 800x600 SVGA 18bit TFT LCD, or 1024 x 768 resolution via driver support (virtual mode)
- Touch Screen: Analog Resistive 4 wire daylight readable touch screen
- Ambient light sensor for LCD backlight control

Dimension Drawing

I/O

- 2 x External USB 2.0 port ; 1 x Mini USB (Client)
- 1 x Bluetooth Module V 2.0 + EDR
- 1 x Finger Printer Sensor
- 1 x PATA ZIF Connector for SSD or 1.8" HDD
- 1 x MIC-in / Line-out
- 1 x 2.0 M CMOS Camera
- 1 x 19V DC power input
- 1 x 3.5G Module (optional)
- 1 x WiFi Module
- 1 x GPS Module
- 1 x 32-pin PoGo connector for docking station
- 1 x RFID Module (optional)
- 1 x Barcode scanner (optional)

I/O Interface-Front

- Power on/off Status (Blue LED on power switch)
- Battery Status (Green LED : Battery Discharged / Glows Orange: charging / fully charged : Battery LED turn off)
- Battery Low (Battery LED : Glows Green and Power LED Glows Blue)
- Wireless on/off LED (Orange LED on Wireless on/off switch ,Glows Orange is being accessed)
- Hard Disk Drive Status (Green LED: Glows Green HDD is being accessed)
- 4 x Programmable function keys
- Navigation key
- Power ON/OFF switch
- Wireless ON/OFF switch
- Camera Snap Shot button
- Barcode Scanner button

Expansion

- Bus Interface: SDVO and USB 2.0
- Docking Connector:
  2 x USB 2.0
  1 x RS-232
  1 x Mini card socket
  1 x LAN 10/100 base-T port
  DC-in 9-36V power input

Power Input

- Power Input Voltage: DC 19V/3.42A
- Power Output: 65W (Max)
- Internal Battery: Rechargeable 3 Cell (3S1P) Lithium Ion Smart Battery Pack(2600 mAh @ 11.1V, 28.86W/hr) Over Charge Protection, Over Discharge Protection, Over Current and Output Short

Dimensions

- 289 mm (W) x 214 mm (H) x 46 mm (D) with Rubber
  280 mm (W) x 205 mm (H) x 37 mm (D) without Rubber
- Weight: 1.65 Kg with Rubber; 1.35 Kg without Rubber

Construction

- Plastic – upper and lower housing (ABS + PC)
- Color: Black (1 color for top cover and bottom Logo position - silk screen on surface)

Environment

- **Operating Temp: -20°C to 50°C**
  Tested MIL-STD-810F methods 501.4, 502.4
- **Storage Temp: -30°C to 60°C**
  Tested MIL-STD-810F methods 501.4, 502.4
- **Thermal Shock: -20°C to 50°C**
  Tested MIL-STD-810F method 503.4
- **Rel. Humidity: 0 to 95%**
  Tested MIL-STD-810F method 507.4
- **Vibration 5G PTP at 5~500Hz**
  Tested MIL-STD-810F method 514.5C-3 (Highway truck)
- **Transit Shock: 4 feet drop, polywood, all surfaces, edges and corners (26drops)**
  Tested MIL-STD-810F method 516.5
- **Mechanical Shock: 20g, 11ms, Terminal Sawtooth, Operating 40g, 11ms, Terminal Sawtooth, Non-Operating**
  Tested MIL-STD-810F method 516.5
- **Crash Shock: 75g, 11ms, Terminal Sawtooth**
  Tested MIL-STD-810F method 516.5
- **Rain: Drip Proof, 7 gal/ft2/hr**
- **Compliance: MIL-STD-810F and IP54**

Certifications

- CE approval
- FCC Class B

Ordering Information

- **MRC 2100-E51H (P/N:10U00210007X0)**
  8.4" Fan-less Ruggidized Tablet PC
  with Intel® Atom™ 1.1GHz Processor/60GB HDD/1GB Memory/Daylight Readable Touch Screen/GPS/WiFi/Bluetooth
- **MRC 2100-E51S8 (P/N:10U00210008X0)**
  8.4" Fan-less Ruggidized Tablet PC
  with Intel® Atom™ 1.1GHz Processor/8GB SSD/1GB Memory/Daylight Readable Touch Screen/GPS/WiFi/Bluetooth
- **MRC 2100-E53 (P/N:10U00210009X0)**
  8.4" Fan-less Ruggidized Tablet PC
  with Intel® Atom™ 1.6GHz Processor/8GB SSD/1GB Memory/Daylight Readable Touch Screen/GPS/WiFi/Bluetooth
- **Optional Accessary Ordering Information for MRC 2100-E**
  1D Laser Barcode scanner-Opticon (P/N:88U00210004X0)
  3.5G GSM Module: Sierra MC8775V (P/N:88U00210005X0)
  RFID Module: HF type 13.56MHz (P/N:88U00210003X0)
  Carry case (P/N:6019900015X00)
  Spare Battery Pack (3S1P) (P/N:4ZTSS26301X00)
  Vehicle cigarette adaptor charger (P/N:7400065007X00)
  External battery for extra hours (P/N:4ZTTG08401X00)
  Windows Vista (P/N:6014400749X00)
  Windows XP Pro for Embedded (P/N:6014400748X00)
  Windows XP embedded (P/N:6014400798X00)
  MRC 2100 Power Adapter (P/N:7400065005X00)
  POWER CABLE (US) (P/N:60233POW38X00)
  POWER CABLE (EU) (P/N:60233POW39X00)
  POWER CABLE (UK) (P/N:60233POW40X00)

Carry case

Vehicle cigarette adaptor charger

Spare battery pack

External battery for extra hours