***Railway Surveillance System***

**IRS-100-ULT3**

# *Features*

-40°C~70°C

* Intel® Skylake ULT processor
* Dual M12 LAN port
* VGA / DVI dual display
* Dual SIM card design
* 24V and 110V DC input (±40%) DC input
* 2 x 2.5" hot-swappable SATA SSD drive bay
* EN 50155

EN 50155

Dual SIM

Dual LAN

Dual HDD

# *Specifications*

|  |  |
| --- | --- |
| **Model Name** | **IRS-100-ULT3** |
| **Chassis** | **Color** | Blue C |
| **Dimensions (WxHxD) (mm)** | 290 x 69 x 225 |
| **System Fan** | Fanless |
| **Chassis Construction** | Extruded aluminum alloy |
| **Motherboard** | **CPU** | Intel® Core™ i5-6300U processor (dual-core, 2.4 GHz, 15W TDP) |
| **Chipset** | SoC |
| **System Memory** | 2 x 260-pin DDR4 SO-DIMM 4GB pre-installed (system max. 32 GB) |
| **Storage** | **Hard Drive** | 2 x 2.5'' SATA 6Gb/s SSD drive bay |
| **CFast/CF Card** | 1 x CFast (SATA 6Gb/s) |
| **mSATA** | 1 x mSATA (SATA 6Gb/s) |
| **Communication** | **WLAN** | PCIe Mini Wi-Fi 802.11 a/b/g/n/ac (optional) |
| **Bluetooth** | BT 4.0/3.0+HS (combo with WLAN optional module) |
| **WWAN** | PCIe Mini WCDMA/HSDPA/HSUPA (optional) |
| **I/O Interfaces** | **USB 3.1 Gen 1** | 2 |
| **USB 2.0** | 1 (M12 connector) |
| **Ethernet** | 2 x M12 connector PCIe GbE by Intel® I211 |
| **COM Port** | 2 x DB-9 RS-232/422/485 (with 1.5 kV isolation) |
| **Digital I/O** | 1 x Terminal block for 8-bit digital I/O (4-bit input/4-bit output, 1.5 kV isolation) |
| **Display** | 1 x VGA, 1 x DVI-D |
| **Resolution** | VGA : Up to 1920 x 1200 @60Hz DVI-D : Up to 1920 x 1200 @60Hz |
| **Audio** | 1 x Line-out, 1 x Mic-in |
| **SIM** | 2 x SIM card slot |
| **Expansions** | **PCIe Mini** | 2 x Full-size PCIe Mini (for WWAN / WLAN module) |
| **Power** | **Power Input** | M12 Connector: 24V and 110V DC input |
| **Consumption** | 24V @ 2A (Intel® i5-6300U with 4 GB DDR4 memory) |
| **Reliability** | **Mounting** | Wall mount |
| **Operating Temperature** | -40°C ~ 70°C with air flow (with industrial SSD/CF), compliant with EN 50155 |
| **Storage Temperature** | -40°C ~ 85°C |
| **Humidity** | 10% ~ 95%, non-condensing |
| **Operating Shock** | Compliant with EN 61373 Category 1 Class B |
| **Operating Vibration** | Compliant with EN 61373 Category 1 Class B |
| **Weight (Net/Gross)** | 3.9 kg / 5.1 kg |
| **Safety/EM C** | CE/FCC, compliant with EN 50155, EN 50121-3-2 |
| **OS** | **Supported OS** | Microsoft® Windows® Embedded 8, Microsoft® Windows® Embedded Standard 7 E |

***Fully Integrated I/O***

***Front view Rear view***

LED Indicators: HDD

VGA

2 x SIM

DC Input

AT/ATX Mode DIO

Bluetooth

DVI

CFast

3G

Wi-Fi

Reset

M12 USB

Wi-Fi

Ground

2 x M12 LAN

Power Switch 2 x 2.5" HDD/SSD Drive Bay

2 x USB 3.1

Gen 1

Audio

***Dimensions (Unit: mm)***

LED Indicators: LAN, SIM 2 x RS-232/422/485

***IRS-100-ULT3***

# *Ordering Information*

|  |  |
| --- | --- |
| **Part No.** | **Description** |
| **IRS-100-ULT3-i5/4G-R10** | Fanless railway system with Intel® Core™ i5-6300U processor (15W), 4GB DDR4 pre-installed memory, two 2.5” SATA SSD bays, VGA, DVI, two M12 GbE LAN |

***Options***

|  |  |  |
| --- | --- | --- |
| **Item** | **Part No.** | **Description** |
| **OS** | IRS-100-ULT3-WES7E64-R10 | OS Image with Windows® Embedded Standard 7 E 64-bit for IRS-100-ULT3, DVD-ROM, RoHS |
| **DC cable** | 32002-009000-100-RS | Power cable, 2000 mm, 16AWG, M12 5-pin female; label: V+, V-, GND; RoHS |
| **USB cable** | 32001-022700-200-RS | USB cable, 2000 mm, 24AWG; (A) Amphenol LTW: M12 5-pin male IP68 (12-05BMMA-SL8001), (B) USB Type A 4-pin female; RoHS |
| **LAN cable** | 32013-003400-100-RS | LAN cable, 1000 mm, 26AWG; (A) METZ: M12 plug 8-pin (MNF881A315-001), (B) RJ-45 8P8C plug; RoHS |
| **Audio cable** | 32007-005400-100-RS | Audio cable, 1200 mm, 28AWG; A) Amphenol LTW: M12 5-pin male (12-05BMMA-SL8001), (B) DC stereo jack: 3.5mm\*2; RoHS |
| **Wireless Kit** | IRS-100-WIFI-KIT02-R10 | 1T1R Wi-Fi module kit for embedded system, IEEE802.11a/b/g/n/ac Wi-Fi with Bluetooth 4.0/3.0+HS, 1 x Wi-Fi module, 2 x antennas, 2 x cables RoHS |
| **WWAN Kit** | IRS-100-3G-KIT02-R10 | 3G module kit for embedded system, F260, 1 x 3G module, 1 x antenna , 2 x cables, RoHs |

***Packing List***

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Part No.** | **Qty** | **Description** |
| **Wall Mount Kit** | 41020-0474C2-00-RS | 2 | Wall mount bracket |
| **Screw Pack** | 44015-030061-RS | 16 | Screw pack |