nROK 5500

Main Features

- High performance processor with Intel® Core™ i7 3517UE
- Fanless and rugged design
- Support ignition signal for delay-time control
- Support software base RAID 0/ 1/ 5/ 10
- Isolation RS-232/ 422/ 485 and GPIO for optional

- Four Removable 2.5" SSD tray with 1Grms vibration
- DC power input with isolated protection
- Support 8 channels POE with IEEE802.3af for optional
- Support one PCI express x8 expansion slot for optional
- Certified by EN50155 with TX grade temperature standard

Product Overview

nROK series is targeted for the rolling stock market with special design scheme to meet the criteria of installation in the vehicle on the rolling stock. They pass numerous environmental tests and are compliant EN50155 standard. Rapid transit system, metropolitan rail, commuter rail, high speed rail, tram, and train will make the best use of nROK.

nROK 5500 series also offer the powerful computing platform with rack mount form factor to install in the cabinet. It is packed with the eight PoE LAN ports and multiple storage bays with SATA interface and RAID capability for large media program. I/O connections are securely fixed with locks, averting system breakdown caused by loose ends. Wireless communication design is reserved to supports GPS function and WiFi and WWAN connection.

Specifications

CPU
- Intel® Core™ i7 3517UE 1.7GHz

Main Chipset
- Intel® QM77 chipsets

Memory
- 2GB DDR3 1333MHz SODIMM with ECC (up to 16GB)

Expansion
- 2 x Mini-PCIe socket (PCIe + USB) for WLAN option
- 1 x Mini-PCIe socket (USB) for 3.5G module option
- 1 x GPS or GPS with dead reckoning option

I/O Interface-Front
- 7 x LED for power, storage, WWAN, WLAN, GPS, LAN1 and LAN2
- Power on/ off switch
- The system rest button
- 2 x 10/ 100/ 1000 Ethernet with M12 connector and support iAMT8.0
- 8 x 10/100/1000 PoE LAN with M12 connector and support IEEE802.3af (Optional with LED, LAN hub switch, Max 60W)
- 2 x USB 3.0 type A connector
- 2 x USB 2.0 with M12 connector
- 1 x DB15 VGA connector
- 2 x HDMI connector
- 2 x DB9 RS-232 connector (Isolation optional)
- 1 x DB9 RS-422/ 485 connector (Isolation optional)

- 1 x DB9 female connector for 4GPI and 4GPO connector (Isolation optional)
  Digital Input (source type: 0~30V)
  Digital Output (sink type: 20mA max)
- 1 x Line-in, 1 x Line-out, 1 x Mic-in

I/O Interface-Rear
- Power DC Input
- 5 x Antenna holes for WWAN/ WLAN/ GPS/ BT

Expandable Storage
- 4 x 2.5" SATA SSD removable tray

Power Management
- Status of ignition check by software
- Setting 8 level on/off delay time by software

Operating System
- Windows Embedded Standard 7

System Dimension
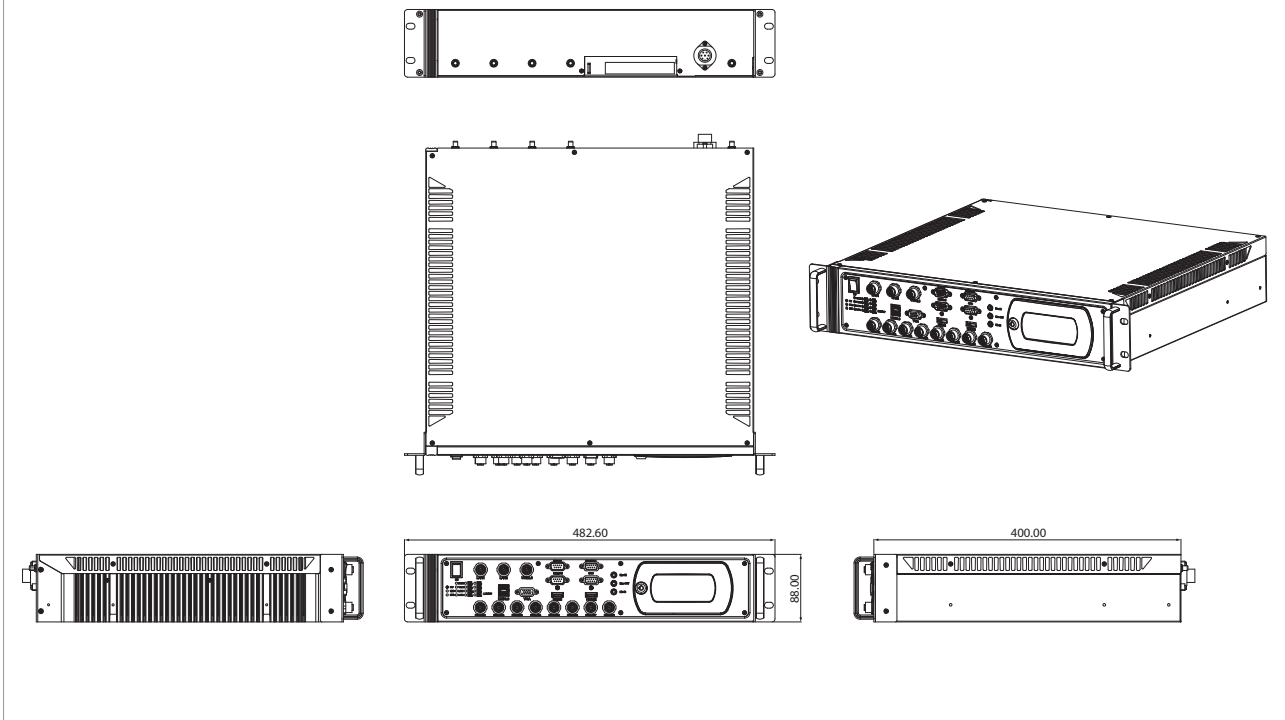- 482.6mm (W) x 400mm (D) x 88mm (H) (19" x 15.75" x 3.46")

Construction
- Sheet metal with heat sink

Environment
- Operating temperatures
  Ambient with air: -40°C to 70°C (EN50155 Class TX)
- Storage temperatures: -40°C to 80°C

NEXCOM

Dimension Drawing

482.60

88.00

400.00

- Damp heat test: 55°C, 95% RH (non-operating, EN 50155)
- Relative humidity: 0% to 90% (non-condensing)
- Vibration (random) :
  Compliance with EN61373 Category 1 Class B
- Shock:
  Compliance with EN61373 Category 1 Class B

Ingress Protection
- IP40 rating

Standards/ Certifications
- CE
- FCC Class A
- Compliance with EN50155

Ordering Information

- **nROK 5500-FC8 (P/N:10A00550000X0)**

  Intel® Core™ i7 3517UE fanless rackmount railway computer with 8-channel PoE and 110VDC isolation power input

- **nROK 5500-F (P/N: TBD)**

  Intel® Core™ i7 3517UE fanless rackmount railway computer and 110VDC isolation power input

- **Optional Accessories**

Part No.	Description	Released
10VK0006013X0	WLAN Kits QCOM Q802XKN5F, W/ANTENNA & CABLE	Available
10VK0WWAN01X0	WWAN Kits CINTERION:CM8000(PHS8-P), W/ANTENNA & CABLE	Available
10VK0006017X0	GPS Kits DGM-U2525T,U-BLOX 6 , w/ Cable & Antenna & Bracket	Available
B000000126X00	PCIe Expansion Kits One PCI-E x 8 expansion kits	Available
603LAN0011X00	M12(8P) Connector	Available
603LAN0010X00	M12(8P) to LAN Cable	Available
603USB0011X00	M12(8P) to USB Cable	Available
TBD	M12(4P) Connector	TBD
TBD	M12(4P) to LAN Cable	TBD
TBD	M12(4P) to USB Cable	TBD
603POW0007X00	Circle Type(7P) Connector	Available
603POW0001X00	Circle Type(7P) Power Cable	Available
60233SAM03X00	Antenna(Internal) ANTENNA GSM EDI:201012010221-RS	Available
60233SAM16X00	Antenna(WLAN) WLAN 2.4G, SANAV:41EN01-11B0105-000N	Available
60233SAM17X00	Antenna(WWAN) GSM/UMTS/HSDPA	Available
60233SAM05X00	Antenna(GPS) ARKNAV: A-130 GPS Antenna 5M SMA180P	Available

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