



Main Features

- High performance processor with Intel® Core™ i7 3517UE/ i5 3610ME
- 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" HDD/ SSD tray with 1Grms vibration
- DC power input with isolated protection
- Support 8 channels POE with IEEE802.3af for optional
- Support dual 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
- Intel® Core™ i5 3610ME 2.7GHz

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

- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

Operating System

- Windows Embedded Standard 7

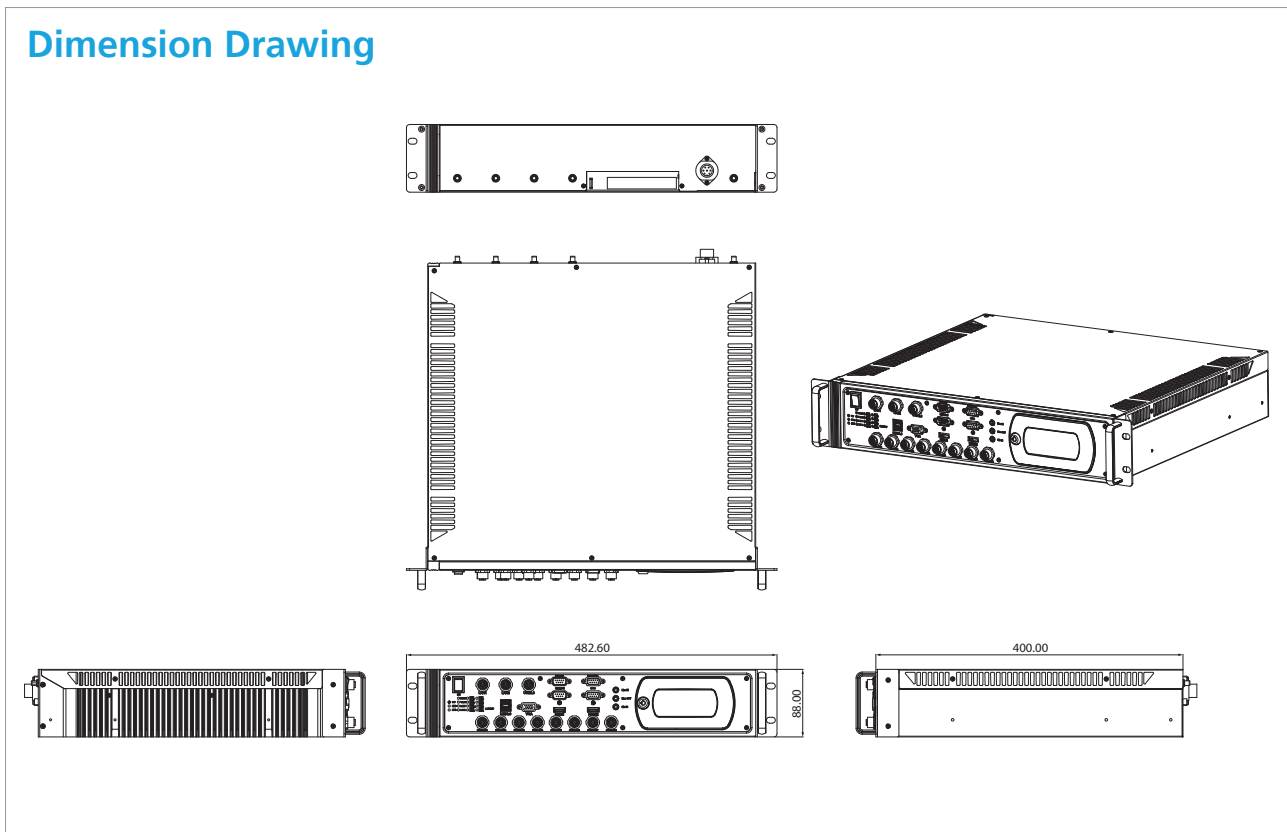
System Dimension

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

Construction

- Sheet metal with heat sink

Dimension Drawing



Environment

- Operating temperatures
Ambient with air: -40°C to 70°C (EN50155 Class TX)
- Storage temperatures: -40°C to 80°C
- 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 5300-AC8 (P/N:10A00530000X0)**
Intel® Core™ i5 3610ME fanless rackmount railway computer with 8-channel PoE and 24VDC isolation power input

The following combinations are also available, please contact NEXCOM Global Service for further information
- **nROK 5500-AC8 (P/N: TBD)**
Intel® Core™ i7 3517UE fanless rackmount railway computer with 8-channel PoE and 24VDC isolation power input
- **nROK 5500-AC (P/N: TBD)**
Intel® Core™ i7 3517UE fanless rackmount railway computer and 24VDC isolation power input

- **nROK 5500-FC (P/N: TBD)**
Intel® Core™ i7 3517UE fanless rackmount railway computer and 110VDC isolation power input
- **nROK 5300-FC8 (P/N: TBD)**
Intel® Core™ i5 3610ME fanless rackmount railway computer with 8-channel PoE and 110VDC isolation power input
- **nROK 5300-FC (P/N: TBD)**
Intel® Core™ i5 3610ME fanless rackmount railway computer and 110VDC isolation power input
- **nROK 5300-AC (P/N: TBD)**
Intel® Core™ i5 3610ME fanless rackmount railway computer and 24VDC isolation power input
- **Optional Accessories**

Part No.	Description
10VK0006013X0	WLAN KIT MINI-PCIe (QCOM Q802XKN5F, W/ANTENNA & CABLE)
10VK0WWAN01X0	WWAN KIT (CINTERION:CM8000(PHS8-P), W/ANTENNA & CABLE)
10VK0006017X0	VTK60-GPS-04 ,GPS Kit (DGM-U2525T,U-BLOX 6 , w/ Cable & Antenna & Bracket)
603LAN0004X00	LAN CABLE FOR nROK5500-F ST:WP-08M2-27 M12 TO USB/RJ-45 CONN : Waterproof L:200mm
603POW0007X00	POWER CABLE FOR nROK5500-F ST:PWE-07BFFA-SL7001 M12 CONN : Waterproof L:200mm
60233SAM16X00	WLAN 2.4G ANTENNA SANAV:41EN01-11B0105-000N
60233SAM17X00	GSM/UMTS/HSDPA ANTENNA SANAV:7-EU-DE0084-EEN-401
60233SAM05X00	GPS ANTENNA ARKNAV: A-130 GPS Antenna 5M SMA180P R1 L3
60233SAM03X00	ANTENNA GSM EDI:201012010221-R5