

QBOX-3000

In-Vehicle Computer with Isolated 9~36V DC Input
and Intel Atom N270 1.6 GHz CPU



- Intel® Atom™ N270 1.6GHz processor
- Wireless communication support 3.5G, WLAN, GPS, GSM/GPRS, Bluetooth
- 9V - 36V DC Power Input with 1500VDC Isolation
- Automatics Recovery Short Circuit Protection
- Smarter Vehicle Power Ignition for variety vehicle
- Support 2 x RS-232 with 5V/12V output
- Support 2 x DI / 2 x DO with Relay 12V / 100mA

Product Overview

The QBOX-3000 is an In-Vehicle Box PC which is ideal for transportation applications. This embedded hardware platform is designed with Intel® Atom N270 1.6GHz Processor which provides with excellent performance enabled by next- generation 45nm Process Technology. The system is supported with Intel® 945GSE / ICH7-M chipset, and DDR2 SO-DIMM up to 2GB. Featured are an

2.5" SATA HDD or 1x SSD, 2 x GbE, 3 x USB 2.0, DVI-I, 2x COMs, Audio ports, GPIO, 2 x Mini-card expansion slots, and 4 antennas for various wireless applications. The QBOX-3000 provides high reliability rugged case not only for great protection from EMI, cold and heat, but also integrated with active cooling design for harsh environment operation which is best for transportation applications.

Technical Information

Construction	
Aluminum Alloy	
CPU	
Intel® Atom N270 1.6 GHz Processor with 533 MHz FSB	
Chipset	
945GSE / ICH7-M	
Memory	
1 x DDRII-533 SO-DIMM Up to 2GB	
Graphics	
Integrated Intel® GMA950 GfX Core in 945GSE MCH	
ATA	
1x Serial ATA Port with 150MB/s HDD Transfer rate	
LAN	
2 x Intel® 82574L Gigabit Ethernet	
Watchdog	
1 ~ 255 Level Reset	
Storage	
1 x 2.5" drive bay for SATA Type Hard Disk Drive/SSD	
I/O	
COM	Support 2 x RS-232 with 5V/12V Output (COM1 with RS-232/422/485)
USB	3 x USB 2.0 Ports
LAN	2 x RJ-45 for GbE
Video	1 x DVI-I female connector for DVI-D and VGA Output
GPIO	Support 2 in and 2 out with Relay 12V/100mA
Audio	Mic-in/Line-out
Expansion	2 x Mini-card slot
Antenna	4 x SMA-type External Antenna Connectors for WLAN/UMTS/GSM/GPRS/GPS/Bluetooth

Power Requirement	
Power Input: 9V-36V DC Power Input with 1500VDC Isolation	
Power Protection: Automatics Recovery Short Circuit Protection	
Power Management: Vehicle Power Ignition for Variety Vehicle	
Power Off Control: Power Off Delay Time Setting by Software, Default: 5 min	
Backup Battery: Internal Battery Kit for 10 Min. Operating (Optional)	
Environment	
Operating Temp: -20°C to 70°C (SSD), ambient w/air	
Storage Temp: -40°C to 80°C	
Relative Humidity: 10~90% (non-condensing)	
Vibration (Random): 2.5g@5~500 Hz with SSD	
Vibration Operating: MIL-STD-810F, Method 514.5, Category 20, Ground-Vehicle-Highway	
Truck Storage: MIL-STD-810F, Method 514.5, Cat. 24, Integrity Test	
Shock: Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers = 40G (11ms), Non-Operating 80G with SSD	
Crash harazd: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment = 100g	
Dimensions	
182 x 167.6 x 35 mm (LxWxH)	
182 x 167.6 x 47 mm (with battery kit)	
Weight	
1406 g	
Mounting	
Wall mount, VESA mount	
Certifications	
CE, FCC	
EN50155	