

# NRM311

Railway Fanless Mobile NVR Surveillance System,  
 Intel® Core™ i7-4650U,  
 Three SIM- card slots, Dual WWAN, GPS, CAN 2.0B,  
 Isolated Power, EN50155



## Why DivioTec?

DivioTec's aim is to transcend the capabilities of the human eye and deliver an entirely new field of view. Our integrative skills and our 20 years of industry experience are constantly driving new innovations.

Our simple, easy-to-use interfaces and our rock-solid security hardware are rapidly earning the respect and confidence of our clients.

We also make a point of listening carefully to our customers' needs, applying what we learn to develop outstanding new products and a culture of exceptional service.

At DivioTec, our experience is your protection.

- Reliable Fanless design
- 4th generation Intel® Core™ dual core i7-4650U, 1.7GHz
- 2xM12 10/100/1000 Ethernet
- Dual removable 2.5" SATA 3.0 SSD/HDD, Raid 0, 1 supported  
1x CFast
- 3 SIM-Card slots(On board x1+ Front panel x2)
- 2 WWAN LANs
- Built-in CAN 2.0B. Optional OBDII function (SAE J1939)
- Intelligent power management:  
 Selectable boot-up & shut-down voltage for low power protection,  
 8-level power on/off delay time by software  
 System wake up /power down event alarm
- EN50155 Certification
- Operating temperatures:  
 -40°C to 70°C (W/Industrial SSD) with air Flow

## Specifications

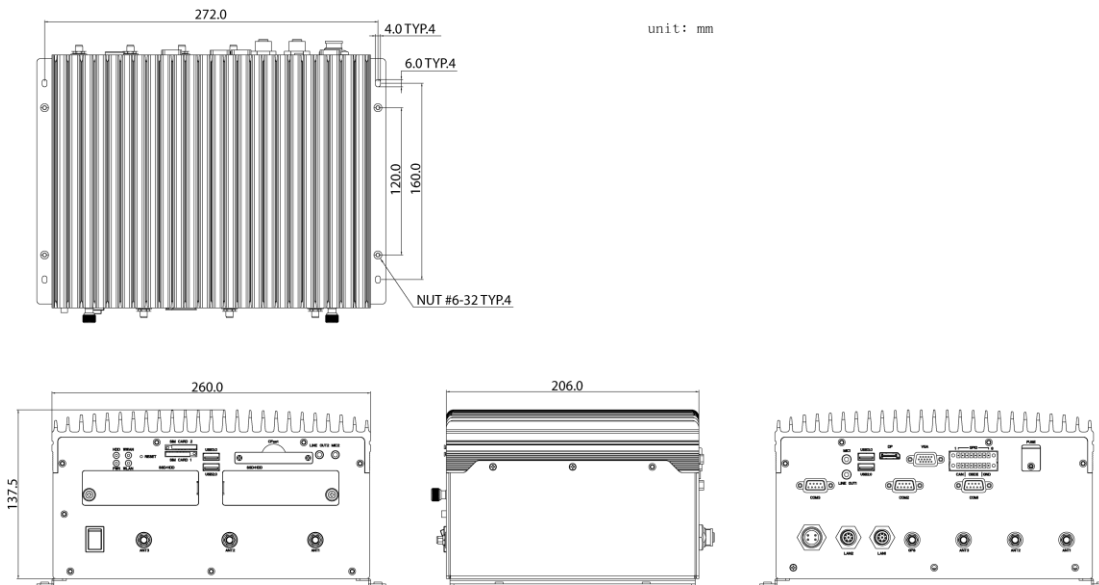
<b>NVR: NRM303</b>	
CPU	4th generation Intel® Core™ dual core i7-4650U, 1.7GHz
Memory	2-channel 204-pin DDR3L SO-DMIM socket support 1333/1600MHz up to 16GB, default with 2GB memory
Storage	2 x 2.5" SATA 3.0 SSD/HDD of trays, lockable storage(optional), Raid 0, 1 supported 1 x CFast slot
Expansion	1 x full size Mini-PCIe socket (USB 2.0), 1 x full size Mini-PCIe socket (USB 2.0 + PCIe) 1 x full size Mini-PCIe socket (USB 2.0+PCIe), 1 x Half size mini-PCIe socket (USB 2.0+PCIe)
Operating System	Support Windows 7, WES7, Windows 8, WES8, Linux kernel 3.X
GPS and On Board Sensor	1 x default U-blox NEO-M8N GNSS module for GPS/Gloness/QZSS/Galileo/Beidou Optional modules with Dead Reckoning available, Built-in G-sensor
I/O Interface-front	4 x LED indicators for power/storage/WLAN/WWAN 1x Power Switch 2x External accessible SATA 3.0 SSD/HDD tray, Raid 0,1 supported 1 x CFast socket with cover 1 x Reset button 1x dual USB type A connectors for 1 x USB 3.0 + 1 x USB 2.0 port output), 1 x direction signal for optional Dead Reckoning, module 2 x externally accessible SIM card sockets (selectable) 3x antenna holes for WWAN/WLAN/BT 1x Phone Jack 3.5mm for Mic-in 1x Phone Jack 3.5mm for Line-out
I/O Interface-rear	1x Circle Type DC input with ignition NRM311-24V: 24VDC(16.8V~31.2V) input with 4KVDC isolation NRM311-36V: 36VDC(25.2V~46.8V) input with 2KVDC isolation NRM311-48V: 48VDC(33.6V~62.4V) input with 4KVDC isolation NRM311-110V: 110VDC(77V~142V) input with 4KVDC isolation 1x Dual USB type A connector for USB3.0 port + USB 2.0 port 2x M12 10/100/1000 Ethernet 1x Phone Jack 3.5mm for 1xMic-in 1x Phone Jack 3.5mm for Line-out with 1.5W output each 1x DB-15 VGA resolution up to 2560x1600@60Hz 1xDP-15, resolution up to 2560x1600@60Hz 2xDB-9 RS-232 1xDB-9 RS-232/422/485(RI/5V/12 Selectable) 1x16-pin terminal block: <ul style="list-style-type: none"> <li>- 1xCAN Bus 2.0B(on board)</li> <li>- 1xOptional CAN/OBDII module (CAN Bus 2.0B or OBDII SAE J1939)</li> <li>- 8xProgrammable GPIO</li> </ul> Digital input: Input voltage(internal type): 5VDC TTL(default), max current: 20mA Input voltage(source type): 3-12VDC Digital output: Output voltage(sink type): 5VDC TTL(default), max current: 20mA Input voltage(source type): 3-18VDC, max current: 150mA 4xAntena hole for WWAN/WLAN/BT/GPS 1x Fuse(15A)

## Specifications

Power Management	<p>Ignition On/Off control</p> <p>Programmable On/Off delay timer</p> <p>System wake up event: Ignition switch/RTC timer ALARM interrupt/Cellular MODEM wakeup signal</p> <p>System wake up condition: Wake up event is triggered, and DC input voltage is greater than UVP threshold</p> <p>Timer delay is only applicable for ignition on</p> <p>System power down condition: Soft off, or Ignition off, or DC input voltage is lower than UVP threshold</p> <p>Timer delay is only applicable for Ignition off</p>
Environment	<p>Operating temperatures: -40°C to 70°C (w/ industrial SSD) with air flow</p> <p>Operating temperatures: -20°C to 45°C (w/ industrial SSD) with air flow</p> <p>Storage temperatures: -40°C to 85°C</p> <p>Relative humidity: 10% to 90% (non-condensing)</p>
Dimension/Weight	260mm (W) x 206mm (D) x 130mm (H) (10.24" x 8.11" x 5.12"), 3.3kg
Certification	<p>CE approval, FCC Class B,</p> <p>EN50155 conformity</p> <ul style="list-style-type: none"> <li>- Ambient Temperature EN50155 TX(-40° ~70°C )</li> <li>- Shock and Vibration IEC61373 class B</li> <li>- Interruptions of voltage supply class S1, S2</li> <li>- Supply change over class C1, C2</li> <li>- EMC EN50121-3-2</li> </ul>
Ordering information	<p>NRM311-24V: 24VDC(16.8V~31.2V) input with 4KVDC isolation</p> <p>NRM311-36V: 36VDC(25.2V~46.8V) input with 2KVDC isolation</p> <p>NRM311-48V: 48VDC(33.6V~62.4V) input with 4KVDC isolation</p> <p>NRM311-110V: 110VDC(77V~142V) input with 4KVDC isolation</p>



## Dimension Drawing



2016-10-01 released  
 Specifications are subject to change without notice.  
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