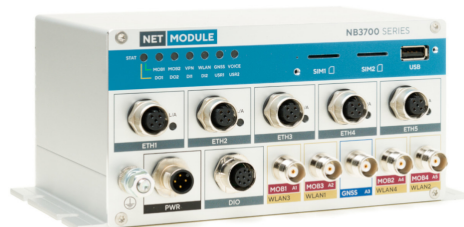


NB3701-L-G

Railway Router with LTE + 5x ETH + GNSS + EN50155

Proven multi-service onboard router for light rail and railways.



Keyfeatures

Mobile / Cellular	1x LTE, UMTS, GSM
SIM	2x Mini SIM
Ethernet	5x Fast Ethernet
IO	4x Digital I/O
Speisung	24 VDC to 48 VDC
Positioning	Multi-GNSS
Temperature Range	-40 °C to +70 °C, EN 50155 class OT4/ST0
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates
Compliance	CE (RED), Railway (EN50155, EN45545)
Modularity	Extensions on request

Product description

The NB3701 is the compact router for railways and other applications where similarly high demands are placed on the hardware. It is the right device for fleet management or telematics.

Applications

- Smart Traffic
- Fleet Management
- Tracking
- Passenger Infotainment
- Ticketing
- Telematics
- CCTV

Specifications

Mobile / Cellular	Standard	1x Multimode LTE, UMTS, GSM for EMEA 4G - LTE B1 (2100), B3 (1800), B5 (850), B7 (2600), B8 (900), B20 (800) 3G - DC-HSPA+/UMTS B1 (2100), B2 (1900), B5 (850), B8 (900) 2G - GSM/GPRS/EDGE B2 (1900), B3 (1800), B5 (850), B8 (900) Category LTE Cat 4 Antenna ports 2x2 MIMO Datarate down / up (max) 150 Mbps / 50 Mbps Voice CSFB FCC ID XPTYOBYL210
	Region	Europe, Middle East and Africa (EMEA)
	Connectors	2x TNC female
SIM		2x Mini SIM - 2FF
Ethernet	Standard	5x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps
	Connector	5x M12 D-coded female
Positioning	Standard	1x Multi-GNSS Receiver BeiDou, Galileo, GLONASS, GPS/QZSS 72-channel u-blox M8 engine 3 concurrent GNSS channels Antennas Active or passive Accuracy Up to 2.5 m CEP Sensitivity Up to -167 dBm Services Standalone, Assisted GPS Data server with JSON, NMEA data stream
	Connector	1x TNC female

USB	Standard Connector	1x USB 2.0 Host 1x Type A
I/Os	Type	4x Digital I/O Signals 2x DI, 2x DO DI signals +, - DI level Low: 0 - 5 VDC, high: 7.2 - 40 VDC DO signals Relay outputs with NO, NC, COM (normally open, normally closed) DO level 0 - 60 VDC/1A, maximum switching capacity: 60 W Isolation 1'500 VDC
	Connector	1x M12 A-coded female
System	Core Module Slots	1.3 GHz dual-core, 1 GB RAM, 4 GB flash 2x miniPCIe (PCIe + USB)
Software	Features	NetModule Router Software Package The standard software package includes an intuitive user interface, covering all modern routing protocols and enables efficient mass deployment. General Fail-safe update (FOTA), upgrade via USB, HTTP(S), (S)FTP or TFTP, remote CLI & WebGUI, RADIUS authentication, Simple Certificate Enrollment Protocol (SCEP), logging Remote Management Manage and monitor devices with SNMP, telnet, SSH, or HTTP/HTTPS Cellular Networking Multi-SIM / soft-SIM support, multi-APN support, signal strength monitoring, dedicated bearers, GSM/CSFB calls Wireless LAN Client or Access Point mode, multi client support, multi / hidden SSID, WPA-PSK/WPA2-PSK, WPA-RADIUS, WPA-EAP-TLS, IEEE 802.11w, RADIUS accounting, CAPWAP Link Management Link prioritisation, link aggregation, load balancing, multipath-TCP, IP-passthrough, link supervision Network Services DHCP Client, DNS server, email, SMS service, NTP Client, NTP server, DynDNS, SSH server, SNMP agent, HTTP/HTTPS/FTP server, voice gateway, SIP call routing, coovachilli hotspot Routing Destination, policy, multipath, mobile-IP, OSPF, BGP, TCP-MSS clamping, STP/RSTP, bridging, LLDP, CDP, SONMP, EDP, FDP, IRDP, VRRP, VLAN, PPPoE VPN OpenVPN, IPsec, PPTP, GRE, CSD dial-in Firewall Stateful firewall, connection tracking, NATP, masquerading, bridge filtering
	Licenses	GNSS Enabled service GNSS location service Server with JSON-, NMEA stream
Power	Input Voltage	24, 48 VDC Nominal voltages 24, 48 VDC Absolute voltages 24 VDC to 48 VDC (-30 % / +30 %) Galvanic isolation 1500 VDC Standard EN 50155 class S2/C1
	Connector	1x M12 A-coded male
	Consumption	15 W (max)
Mounting		Bracket
Dimensions	W x H x D	Width 165/190 mm x height 85 mm x depth 104 mm
Weight		1400 g
Environment	Operating Temperature	-40°C to +70°C
	Ingress Protection Level	IP40
MTBF		210'000 h / 24 years, according SN29500 at environmental temperature 40 °C
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), 2011/65/EU (RoHS), Railway according to EN 50155 class OT4/ST0, EN 45545 Railway
Order Code		NB3701-L-G