

NB3800-N2L-G

Bahn-Router mit 1x 5G +2x LTE + 5x ETH + GNSS + EN50155

Mit herausragender 5G Mobilfunktechnik für drahtlosen Internetzugang im Fahrzeug inkl. 5-Port Ethernet Switch.



Hauptmerkmale

Mobilfunk	1x 5G-NR, LTE-A Pro, UMTS 2x LTE, UMTS, GSM
SIM	4x Mini SIM
Ethernet	2x Gigabit Ethernet, 3x Fast Ethernet
Speisung	24 VDC bis 48 VDC
Ortung	Multi-GNSS
Betriebstemperatur	-40 °C bis +70 °C, EN 50155 class OT4/ST0
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, freie Updates
Konformität	CE (RED), Bahn (EN50155, EN45545) , ITxPT optional
Modularität	Erweiterungen auf Anfrage

Produktbeschreibung

Der leistungsstarke NB3800 ist mit seiner Ausstattung, seinen Bahnzulassungen und Schnittstellen zur Bordelektronik z.B. ideal für Fahrgastinformation, Fahrkartensysteme oder auch Mining geeignet.

Anwendungen

- Flottenmanagement
- Mining
- Passagier-Infotainment
- Fahrkartensysteme
- Videoüberwachung
- Telematik

Spezifikation

Mobile / Cellular

Standard

1x Multimode 5G-NR, LTE-A Pro, UMTS
5G - NR n1, n3, n7, n8, n20, n28, n38, n40, n77, n78
4G - LTE-A Pro B1, B3, B7, B8, B20, B28, B38, B40
3G - DC-HSPA+/UMTS B1 (2100), B3 (1800), B8 (900)
5G - NR Modes Sub-6 FDD and TDD
LTE Category Cat. 20 up to 7CA
MIMO 4x4 MIMO in 5G-NR support on n1, n3, n7, n38, n40, n77 and LTE B1, B3, B7, B38, B40
Antenna ports 4
Power Class 23dBm (Power Class 3)
Data rate down / up (max) up to 5.5 Gbps DL / 2.7 Gbps UL
3GPP 4G/5G Rel. 15, 3G HSPA+ Rel. 8
FCC ID RI7FN980
Voice -
Region Europe, Middle East and Africa (EMEA), on request: North America (NA), Asia and Pacific (APAC)
2x Multimode LTE, UMTS, GSM for EMEA
4G - LTE B1, B3, B7, B8, B20, B28A
3G - DC-HSPA+/UMTS B1 (2100), B3 (1800), B8 (900)
2G - GSM/GPRS/EDGE B3 (1800), B8 (900)
Category LTE Cat 4
Antenna ports 2x2 MIMO
Data rate down / up (max) 150 Mbps / 50 Mbps
Voice CSFB, VoLTE
FCC ID tbd
Region Europe, Middle East and Africa (EMEA)
Connectors 8x TNC female
SIM 4x Mini SIM - 2FF

Ethernet	Standard	2x Gigabit Ethernet Ethernet standard 1000BASE-T, Auto MDIX Speed 10/100/1000 Mbps 3x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps
	Connector	2x M12 X-coded female, 3x M12 D-coded female
Positioning	Standard	1x Multi-GNSS Receiver BeiDou, Galileo, GLONASS, GPS Dual-Frequency GNSS gpsOne Gen 9 Antennas Active or passive Tracking Sensitivity Up to -161 dBm Services Standalone, Assisted GPS
	Connector	1x TNC female
USB	Standard	1x USB 2.0 Host
	Connector	1x Type A
Serial, Fieldbus	Protocol	1x RS-232 Protocol EIA-232 Signals TX, RX Signal level High > 5 VDC, low < -5 VDC Bit rate Up to 1 Mbps
	Connector	1x M12 A-coded female
System	Core	1.3 GHz dual core, 1 GB RAM, 4 GB flash
	Module Slots	2x miniPCIe (PCIe + USB), 4x miniPCIe (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, NAT, 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	25 W (max)
Dimensions	W x H x D	Width 167/190 mm x height 121.1 mm x depth 106.5 mm
Weight		1900 g
Environment	Operating Temperature	-40°C to +70°C
	Ingress Protection Level	IP40
MTBF		150'000 h / 17.1 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

NB3800-N2L-G