

NB2800-2LWacAp-GV

Vehicle Router with 2x LTE + WLAN-ac + 2x GbE + GNSS + PTT + Voice + E-Mark

High-performance and modular mobile router for wireless Internet access in vehicles.



Keyfeatures

Mobile / Cellular	2x LTE, UMTS, GSM
SIM	4x Micro SIM
WiFi / WLAN	1x Dual-band IEEE 802.11a/b/g/n/ac, 100 Clients in Access Point Mode
Ethernet	2x Gigabit Ethernet
Voice	1x Voice with Push to Talk
Power	12 VDC to 48 VDC, Ignition Sense
Positioning	Multi-GNSS
Operation Temperature	-25 °C to +70 °C
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, Call Handling, free updates
Compliance	CE (RED), Vehicle (UN ECE R10, UN ECE R118), ITxPT optional
Modularity	Extensions on request

Product description

The NB2800 provides in-vehicle wireless Internet access.

Applications

- Fleet Management
- Passenger Infotainment
- Ticketing
- Telematics
- Voice Communication
- Emergency Services

Specifications

Mobile / Cellular	Standard	2x 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	4x FAKRA D-coded male
	SIM	4x Micro SIM - 3FF
WiFi / WLAN	Standard	1x Dual-band WLAN 2.4/5 GHz a/b/g/n/ac Wireless standard IEEE 802.11a/b/g/n/ac Frequency 2.4/5 GHz Diversity 2x2 MIMO Datarate (max) 300 Mbps (2.4 GHz) / 866 Mbps (5 GHz) Modes Client or access point (up to 100 clients) FCC ID TK4WLE600VX
	Connector	2x FAKRA I-coded male
Ethernet	Standard	2x Gigabit Ethernet Ethernet standard 1000BASE-T, Auto MDIX Speed 10/100/1000 Mbps
	Connector	2x RJ45

Positioning	Standard	<p>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</p>
	Connector	1x FAKRA C-coded male
USB	Standard	1x USB 3.0 Host
	Connector	1x Type A
Serial, Fieldbus	Protocol	<p>1x RS-232 Protocol EIA-232 Signals TX, RX Signal level High > 5 VDC, low < -5 VDC Bit rate Up to 1 Mbps</p>
	Connector	1x Terminal block header 5 mm
Voice Communication	Protocols	<p>1x Push-to-talk (voice + digital I/O) Protocol Voice analog audio interface Signals Line in +/-, line out: +/- Line in 21 kΩ, signal level 1.9 Vpp, 100 Hz- 15 kHz Line out 600 Ω, signal level 3.6 Vpp, 300 Hz- 4 kHz Protocol Digital I/O DI signals +, - DI level Low 0 - 5 VDC, high 7.2 - 60 VDC DO signals Relay outputs with NO, COM (normally open) DO level 0 - 60 VDC/1A DO isolation 100 VDC</p>
	Connector	1x RJ45
System	Core	1.3 GHz dual-core, 1 GB RAM, 4 GB flash
	Module Slots	2x miniPCIe (PCIe + USB), 2x miniPCIe (USB)
Software	Features	<p>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</p>
	Licenses	<p>GNSS Enabled service GNSS location service Server with JSON-, NMEA stream Voice gateway Enabled service Versatile voice gateway for seamless call routing Protocols 2G/3G/4G, POTS, VoIP, PTT (if supported by hardware)</p>
Power	Input Voltage	<p>12, 24, 48 VDC Nominal voltages 12, 24, 48 VDC Absolute voltages 12 VDC to 48 VDC (-25 % / +20 %) Ignition sense Input with delayed shutdown</p>
	Ignition Sense	Yes
	Connector	1x Terminal block header 5 mm
	Consumption	20 W (max)
Mounting		Bracket
Dimensions	W x H x D	Width 164/190 mm x height 58 mm x depth 139.5 mm

Weight		1200 g
Environment	Operating Temperature	-25°C to +70°C
	Ingress Protection Level	IP40
MTBF		200'000 h / 22.8 years, according SN29500 at environmental temperature 40 °C
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), Vehicle according to UN ECE R10, UN ECE R118 Vehicle
Order Code		NB2800-2LWacAp-GV