

NB2800-2Lp2WacDf-GVi

Vehicle Router with 2x LTE-A Pro + 2x WLAN-ac + 2x GbE +1TB SSD + GNSS + E-Mark

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



Keyfeatures

Mobile / Cellular	2x LTE-A Pro, UMTS	
SIM	4x Micro SIM	
WiFi / WLAN	1x Dual-Band IEEE 802.11a/b/g/n/ac (Wi-Fi 5), 100 Clients in Access Point Mode	
Ethernet	2x Gigabit Ethernet	
Power	12 VDC to 48 VDC, Ignition Sense	
Extended Storage	1TB SSD	
Positioning	Multi-GNSS	
Operation Temperature	-25 °C to +55 °C	
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates	
Compliance	CE (RED), Vehicle (UNECE-R10, UNECE-R118), ITxPT optional	
Modularity	ularity Extensions on request	

Product description

The NB2800 provides in-vehicle wireless Internet access.

Applications

- Passenger Infotainment
- CCTV
 Ticketing
- Smart Traffic
- Emergency Services

Specifications

 Mobile / Cellular
 Standard
 2x Multimode LTE-A Pro, UMTS

4G - LTE Advanced Pro B1, B3, B7, B8, B20, B28, B38, B40

3G - DC-HSPA+/UMTS B1, B8 Category LTE Cat 12 Antenna ports 2x2 MIMO

Data rate down / up (max) 600 Mbps / 150 Mbps

3GPP 4G Rel. 12 / 3G DC-HSPA+

Voice -

FCC ID RI7LN92

Region Europe, Middle East and Africa (EMEA), on request: North America (NA), Asia and Pacific (APAC)

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 Connectors
 4x FAKRA D-coded male

 SIM
 4x Micro SIM - 3FF

WiFi / WLAN 2.4/5 GHz a/b/g/n/ac (Wi-Fi 5)

Wireless standard IEEE 802.11a/b/g/n/ac (Wi-Fi 5)

Frequency 2.4/5 GHz Diversity 2x2 MIMO

Data rate (max) 300 Mbps (2.4 GHz) / 866 Mbps (5 GHz)

Modes Client or access point (up to 100 clients)

FCC ID TK4WLE600VX 4x FAKRA I-coded male

Ethernet Standard 2x Gigabit Ethernet

Connector

Ethernet standard 1000BASE-T, Auto MDIX

Speed 10/100/1000 Mbps

Connector 2x RJ45

Positioning Standard 1x Multi-GNSS Receiver BeiDou, Galileo, GLONASS, GPS gpsOne Gen 9 Antennas Active or passive Sensitivity Up to -161 dBm Services Standalone Connector 1x FAKRA C-coded male USB Standard 1x USB 3.0 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 115 200 Bit/s Connector 1x Terminal block header 5 mm **Extended Storage** 1 TB SSD Capacity 1 TB Technology SSD Data Application data such as logs, media content, ... System Core 1.3 GHz dual-core, 1 GB RAM, 4 GB flash **Module Slots** 2x miniPCle (PCle + USB), 2x miniPCle (USB) Software **Features** NetModule Router Software (supported features depending on product variant) Package The standard software package includes an intuitive user interface, covering all modern routing protocols and enables General Fail-safe update (FOTA), upgrade via USB, HTTP(S), (S)FTP or TFTP, remote CLI & WebGUI, RADIUS authentication, Simple Certificate Enrollment Protocol (SCEP), Hardware- und Software Watchdog Remote Management Manage and monitor devices with SNMP V1/V2/V3, Netmodule vendor MIB, telnet, SSH, or HTTP/HTTPS Cellular Networking Multi-SIM / eSIM support (optional license), multi-APN support, signal strength monitoring, dedicated bearers, CSFB/VoLTE calls (optional license) Wireless LAN Access Point, Client Mode, Mesh Point or Dual Modes (Mesh Access Point / Access Point - Client), WLAN Pseudo-Bridge Client Mode: Multiple Client SSID Profile, Encryption: Open, WEP, WPA1/2/3-Personal, WPA1/2/3-Enterprise. Fast Roaming: Fast BSS Transition (802.11r), PreAuthentication, Protected Management Frames (802.11w) AP Mode: Multi-SSIDs (up to 8) Encryption: Open WPA1/2/3-Personal, WPA1/2/3-Enterprise Fast Roaming: Fast BSS Transition (802.11r), PreAuthentication, DFS support Protected Management Frames (802.11w) Client Tracking, Band Steering, Hide SSID broadcasting, Isolate Clients, Accounting, Short guard Intervall Mesh Mode (802.11s); Encryption; None, SAE, Gateway announcements Link Management Link prioritization, link aggregation, load balancing, multipath-TCP, IP-passthrough, link supervision, Services DHCP Client/Server, DNS Caching Server, Email, SMS Service, NTP Client/Server, SNTP Server, DynDNS, SSH Server, SNMP Agent, HTTP/HTTPS/FTP Server, IPv6 for WAN, 802.1x over Ethernet, MQTT Broker Voice Gateway (SIP, Call Routing, Audio with optional license) Coovachilli Hotspot Routing Destination, policy, multipath, mobile-IP, OSPF, BGP, multicast, TCP-MSS clamping, bridging discovery protocols LLDP, CDP, SONMP, EDP, FDP, IRDP, VRRP, STP/RSTP, VRRP, VLAN, PPPoE, VXLAN VPN OpenVPN, IPsec (IKEv1 and IKEv2), PPTP, GRE, L2TP, CSD dial-in, Certificate revocation service Firewall Stateful firewall, connection tracking, NAT, NAPT, masquerading, bridge filtering, Adress translation (based on SRC and DST ports) Encryption supporting password protected PKCS12 files, integrated random certificate key generator, "Let's encrypt" certificate, ECC (Certificates with Elliptic Cryptography) Quality of Service Diffserv, SFQ, HTB, Priority-based Queuing, Netflow (Softflow) **Programmability SDK** Troubleshooting Logging, Ping, Traceroute, Tcpdump, Speed-test Licenses Enabled service GNSS location service Server with ISON-. NMEA stream Power Input Voltage 12, 24, 48 VDC Nominal voltages 12, 24, 48 VDC **Absolute voltages** 12 VDC to 48 VDC (-25 % / +25 %) Ignition sense Input with delayed shutdown **Ignition Sense** Yes Connector 1x Terminal block header 5 mm Consumption 20 W (max) Mounting Bracket Dimensions WxHxD Width 164/190 mm x height 58 mm x depth 139.5 mm Weight 800 a

Environment	Operating Temperature Ingress Protection Level	-25°C to +55°C IP40
MTBF		230'000 h / 26.3 years, according SN29500 at environmental temperature 40 °C
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), Vehicle according to UNECE-R10, UNECE-R118 Vehicle
Order Code		NB2800-2Lp2WacDf-GVi