

NB800-LWWtSu2C-E

IIoT Router with LTE + WLAN + BT/BLE + ETH + USB + 2x CAN + E-Mark

Compact and modular mobile IIoT router to connect special vehicles.



Keyfeatures

| | |
|------------------------------|--|
| Mobile / Cellular | 1x LTE, UMTS, GSM |
| SIM | 1x Micro SIM |
| WiFi / WLAN | 1x Dual-band IEEE 802.11a/b/g/n (Wi-Fi 4), 1x Bluetooth Low Energy |
| Ethernet | 1x Fast Ethernet |
| Serial / Fieldbus | 2x CAN active (read and write) |
| USB | USB 2.0 Host |
| Operation Temperature | -40 °C to +70 °C |
| Software | Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates |
| Compliance | CE (RED), Vehicle (UN ECE R10, UN ECE R118) |
| Modularity | Extensions on request |

Product description

The compact NB800 is the cost-effective solution for a robust on-board Internet connection in vehicles.

Applications

- Passenger Infotainment
- eMobility
- Agriculture
- Fleet Management
- Telematics

Specifications

| | | |
|--------------------------|--|---|
| Mobile / Cellular | Standard | 1x Multimode LTE, UMTS, GSM for EMEA 4G - LTE B1 (2100), B2 (1900), B3 (1800), B4 (AWS), B5 (850), B7 (2600), B8 (900), B20 (800DD) 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 Data rate down / up (max) 150 Mbps / 50 Mbps Voice GSM |
| | Region Connectors SIM | Europe 2x SMA female 1x Micro SIM - 3FF |
| WiFi / WLAN | Standard | 1x Dual-band WLAN 2.4/5 GHz a/b/g/n (Wi-Fi 4) + BT 4.2 combo Wireless standard IEEE 802.11a/b/g/n (Wi-Fi 4) Bluetooth 4.2, Bluetooth Low Energy Frequency 2.4/5 GHz Antenna ports 2x2 MIMO Data rate (max) 144 Mbps 2.4 GHz 2x2 MIMO, 150 Mbps 5 GHz SISO Modes Client or access point (up to 10 clients) FCC ID POR-WL18DBMOD |
| | Connector | 2x SMA female |
| Ethernet | Standard | 1x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps |
| | Connector | 1x RJ45 |
| USB | Standard | 1x USB 2.0 Host |
| | Connector | 1x Type A |

| | | |
|-------------------------|---------------------------------|--|
| Serial, Fieldbus | Protocol | 2x CAN Protocol Controller Area Network V2.0B (ISO 11898) Signals CANH, CANL Signal level High > 2.75 V, low < 2.0 V Bit rate Up to 1 Mbps Termination 120 Ω configurable by software Bus access Active - read and write access Module CAN Shield |
| | Connector | 1x Terminal block header 3.5 mm |
| System | Core | 600 MHz single core, 512 MB RAM, 4 GB flash |
| | Module Slots | 1x Shield |
| Software | Features | <p>NetModule Router Software (supported features depending on product variant)</p> <p>Package The standard software package includes an intuitive user interface, covering all modern routing protocols and enables efficient mass deployment.</p> <p>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</p> <p>Remote Management Manage and monitor devices with SNMP V1/V2/V3, Netmodule vendor MIB, telnet, SSH, or HTTP/HTTPS</p> <p>Cellular Networking Multi-SIM / eSIM support (optional license), multi-APN support, signal strength monitoring, dedicated bearers, CSFB/VoLTE calls (optional license)</p> <p>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</p> <p>Link Management Link prioritization, link aggregation, load balancing, multipath-TCP, IP-passthrough, link supervision,</p> <p>Services DHCP Client/Server, DNS Caching Server, Email, SMS Service, NTP Client/Server, SNMP 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</p> <p>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</p> <p>VPN OpenVPN, IPsec (IKEv1 and IKEv2), PPTP, GRE, L2TP, CSD dial-in, Certificate revocation service</p> <p>Firewall Stateful firewall, connection tracking, NAT, NAPT, masquerading, bridge filtering, Adress translation (based on SRC and DST ports)</p> <p>Encryption supporting password protected PKCS12 files, integrated random certificate key generator, "Let's encrypt" certificate, ECC (Certificates with Elliptic Cryptography)</p> <p>Quality of Service Diffserv, SFQ, HTB, Priority-based Queuing, Netflow (Softflow)</p> <p>Programmability SDK</p> <p>Troubleshooting Logging, Ping, Traceroute, Tcpdump, Speed-test</p> |
| Power | Input Voltage | 12, 24 VDC Nominal voltages 12, 24 VDC Absolute voltages 12 VDC to 24 VDC (-20 % / +20 %) |
| | Connector | 1x Terminal block header 3.5 mm |
| | Consumption | 5 W (average), 10 W (max) |
| Mounting | | Bracket |
| Dimensions | W x H x D | Width 85/111 mm x height 32 mm x depth 110 mm |
| Weight | | 250 g |
| Environment | Operating Temperature | -40°C to +70°C |
| | Ingress Protection Level | IP40 |
| MTBF | | 340'000 h / 38.8 years, according SN29500 at environmental temperature 40 °C |
| Certifications | Compliance Domain | CE according to 2014/53/EU (RED), 2011/65/EU (RoHS), Vehicle according to UN ECE R10, UN ECE R118 Vehicle |
| Order Code | | NB800-LWWtSu2C-E |