

# NB800-LWWtSu2Cm-GE

Fahrzeug-Router mit LTE + WLAN + BT/BLE + ETH + USB + 2x CAN-passiv + GNSS + E-Mark

Kompakter, modularer Mobilfunk-Router zur Vernetzung von Spezialfahrzeugen.



## Hauptmerkmale

<b>Mobilfunk</b>	1x LTE, UMTS, GSM
<b>SIM</b>	1x Micro SIM / 1x eSIM Chip (auf Anfrage)
<b>WiFi / WLAN</b>	1x Dual-band IEEE 802.11a/b/g/n (Wi-Fi 4), 1x Bluetooth Low Energy
<b>Ethernet</b>	1x Fast Ethernet
<b>Serielle / Feldbus</b>	2x CAN passiv (Lesezugriff)
<b>USB</b>	USB 2.0 Host
<b>Ortung</b>	Multi-GNSS
<b>Betriebstemperatur</b>	-40 °C bis +70 °C
<b>Software</b>	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, freie Updates
<b>Konformität</b>	CE (RED), Fahrzeug (UNECE-R10, UNECE-R118)
<b>Modularität</b>	Erweiterungen auf Anfrage

## Produktbeschreibung

Der kompakte NB800 ist die kostengünstige Lösung für eine robuste bordeigene Internetverbindung in Fahrzeugen.

## Anwendungen

- Blaulichtsorganisationen
- Intelligenter Verkehr
- Flottenmanagement
- Landwirtschaft
- eMobility
- Telematik

## Spezifikation

<b>Mobile / Cellular</b>	<b>Standard</b>	1x Multimode LTE, UMTS, GSM for EMEA <b>4G - LTE</b> B1 (2100), B3 (1800), B5 (850), B7 (2600), B8 (900), B20 (800) <b>3G - DC-HSPA+/UMTS</b> B1 (2100), B2 (1900), B5 (850), B8 (900) <b>2G - GSM/GPRS/EDGE</b> B2 (1900), B3 (1800), B5 (850), B8 (900) <b>Category</b> LTE Cat 4 <b>Antenna ports</b> 2x2 MIMO <b>Data rate down / up (max)</b> 150 Mbps / 50 Mbps <b>Voice</b> CSFB <b>FCC ID</b> XPTYOBYL210
	<b>Region</b> <b>Connectors</b> <b>SIM</b>	Europe, Middle East and Africa (EMEA) 2x SMA female 1x Micro SIM - 3FF / eSIM Chip (auf Anfrage)

<b>WiFi / WLAN</b>	<b>Standard</b>	1x Dual-band WLAN 2.4/5 GHz a/b/g/n (Wi-Fi 4) + BT 4.2 combo <b>Wireless standard</b> IEEE 802.11a/b/g/n (Wi-Fi 4) Bluetooth 4.2, Bluetooth Low Energy <b>Frequency</b> 2.4/5 GHz <b>Antenna ports</b> 2x2 MIMO <b>Data rate (max)</b> 144 Mbps 2.4 GHz 2x2 MIMO, 150 Mbps 5 GHz SISO <b>Modes</b> Client or access point (up to 10 clients) <b>FCC ID</b> Z64-WL18DBMOD
	<b>Connector</b>	2x SMA female

<b>Ethernet</b>	<b>Standard</b>	1x Fast Ethernet <b>Ethernet standard</b> 100BASE-TX, Auto MDIX <b>Speed</b> 10/100 Mbps
	<b>Connector</b>	1x RJ45

<b>Positioning</b>	<b>Standard</b>	<p>1x Multi-GNSS  <b>Receiver</b> BeiDou, Galileo, GLONASS, GPS/QZSS  72-channel u-blox M8 engine  3 concurrent GNSS channels  <b>Antennas</b> Active or passive  <b>Accuracy</b> Up to 2.5 m CEP  <b>Sensitivity</b> Up to -167 dBm  <b>Services</b> Standalone, Assisted GPS  Data server with JSON, NMEA data stream</p>
	<b>Connector</b>	1x SMA female
<b>USB</b>	<b>Standard</b>	1x USB 2.0 Host
	<b>Connector</b>	1x Type A
<b>Serial, Fieldbus</b>	<b>Protocol</b>	<p>2x CAN  <b>Protocol</b> Controller Area Network V2.0B (ISO 11898)  <b>Signals</b> CANH, CANL  <b>Signal level</b> High &gt; 2.75 V, low &lt; 2.0 V  <b>Bit rate</b> Up to 1 Mbps  <b>Termination</b> No internal bus termination  <b>Bus access</b> Passive - read access only  <b>Module</b> CAN shield</p>
	<b>Connector</b>	1x Terminal block header 3.5 mm
<b>System</b>	<b>Core</b>	1 GHz single core, 512 MB RAM, 4 GB flash, HW Rev. B02
	<b>Module Slots</b>	1x Shield
<b>Software</b>	<b>Features</b>	<p>NetModule Router Software  <b>Package</b> The standard software package includes an intuitive user interface, covering all modern routing protocols and enables efficient mass deployment.  <b>General</b> Fail-safe update (FOTA), upgrade via USB, HTTP(S), (S)FTP or TFTP, remote CLI &amp; WebGUI, RADIUS authentication, Simple Certificate Enrollment Protocol (SCEP), Hardware- und Software Watchdog  <b>Remote Management</b> Manage and monitor devices with SNMP V1/V2/V3, Netmodule vendor MIB, telnet, SSH, or HTTP/HTTPS  <b>Cellular Networking</b> Multi-SIM / soft-SIM support, multi-APN support, signal strength monitoring, dedicated bearers, CSFB/VoLTE calls  <b>Wireless LAN</b> 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  <b>Link Management</b> Link prioritization, link aggregation, load balancing, multipath-TCP, IP-passthrough, link supervision,  <b>Services</b> 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) Coovachilli Hotspot  <b>Routing</b> 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  <b>VPN</b> OpenVPN, IPsec (IKEv1 and IKEv2), PPTP, GRE, L2TP, CSD dial-in, Certificate revocation service  <b>Firewall</b> Stateful firewall, connection tracking, NAT, NAPT, masquerading, bridge filtering, Adress translation (based on SRC and DST ports)  <b>Encryption</b> supporting password protected PKCS12 files, integrated random certificate key generator, "Let's encrypt" certificate, ECC (Certificates with Elliptic Cryptography)  <b>Quality of Service</b> Diffserv, SFQ, HTB, Priority-based Queuing, Netflow (Softflow)  <b>Programmability</b> SDK  <b>Troubleshooting</b> Logging, Ping, Traceroute, Tcpdump, Speed-test</p>
	<b>Licenses</b>	<p>GNSS  <b>Enabled service</b> GNSS location service  Server with JSON-, NMEA stream</p>
<b>Power</b>	<b>Input Voltage</b>	<p>12, 24 VDC  <b>Nominal voltages</b> 12, 24 VDC  <b>Absolute voltages</b> 12 VDC to 24 VDC (-20 % / +20 %)</p>
	<b>Connector</b>	1x Terminal block header 3.5 mm
	<b>Consumption</b>	5 W (average), 10 W (max)
<b>Mounting</b>		Bracket
<b>Dimensions</b>	<b>W x H x D</b>	Width 85/111 mm x height 32 mm x depth 110 mm
<b>Weight</b>		220 g

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<b>Environment</b>	<b>Operating Temperature</b> <b>Ingress Protection Level</b>	-40°C to +70°C IP40
<b>MTBF</b>		340'000 h / 38.8 years, according SN29500 at environmental temperature 40 °C
<b>Certifications</b>	<b>Compliance Domain</b>	CE according to 2014/53/EU (RED), 2011/65/EU (RoHS), Vehicle according to UNECE-R10, UNECE-R118 Vehicle
<b>Order Code</b>		NB800-LWWtSu2Cm-GE

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