

# NG800-LWWtGd2Br2Cm

Automotive Gateway with LTE + WLAN + BT/BLE + ETH + 2x ETH-Auto + 2x CAN-passive + GNSS-DR + eUICC + IP69K

Modular automotive gateway for telematics applications.



#### **Keyfeatures**

Mobile / Cellular	1x LTE, UMTS, GSM	
SIM	1x eSIM chip + 1x Micro SIM (on request)	
WiFi / WLAN	1x Dual-band IEEE 802.11a/b/g/n (Wi-Fi 4), 1x Bluetooth Low Energy	
Ethernet	2x Automotive Ethernet, 1x Fast Ethernet	
Serial / Fieldbus	1x RS-232 console, 2x CAN passive (read access only)	
Positioning	Multi-GNSS with Dead Reckoning	
Operation Temperature	-40 °C to +75 °C (+85 °C extended)	
Environment	IP69K dust & high pressure, high temperature water jet protection	
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, eUICC SIM Profile Update, free updates	
Compliance	CE (RED), Vehicle (UNECE-R10, UNECE-R118)	
Modularity	Extensions on request	

### **Product description**

The multifunctional automotive gateway in an IP69K housing is suitable for harsh environments and provides the necessary robust communication between on-board vehicle equipment and cloud applications.

## **Applications**

- Agriculture
- Telematics Fleet Management Emergency ServiceseMobility

- MiningOil & Gas
- Tracking Smart Traffic

## **Specifications**

Mobile / Cellular Standard 1x 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 XPYTOBYL210

Region Europe, Middle East and Africa (EMEA) Connectors

2x FAKRA D-coded male

SIM 1x eSIM Chip, 1x Micro SIM - 3FF (on request)

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

Datarate (max) 144 Mbps 2.4 GHz 2x2 MIMO, 150 Mbps 5 GHz SISO

Modes Client or access point (up to 10 clients)

FCC ID 764-WI 18DBMOD Connector 2x FAKRA I-coded male

Ethernet Standard 1x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps 2x Automotive Ethernet - BroadR Ethernet standard 100BASE-T1 (BroadR-Reach) Speed 10/100 Mbps Connector 1x CMC-48 header Positioning Standard 1x Multi-GNSS with Automotive Dead Reckoning Receiver BeiDou, Galileo, GLONASS, GPS/QZSS 72-channel u-blox M8 engine 3 concurrent GNSS channels Integrated motion sensors Antennas Active or passive Accuracy Up to 2.5 m CEP Sensitivity Up to -160 dBm Services Standalone, assisted GPS 3D Dead Reckoning Data server with JSON, NMEA data stream Connector 1x FAKRA C-coded male 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 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 Bus access Passive - read access (Option -Cm) Active - read and write access only on request (Option -Cn) Connector 1x CMC-48 header System Core 1000 MHz single core, 512 MB RAM, 8 GB flash **Module Slots** 1x Extension Module 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 Wireless LAN Client or Access Point mode, multi client support, multi / hidden SSID, WPA-PSK/WPA2-PSK, WPA-RADIUS, 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, NAPT, masquerading, bridge filtering Licenses GNSS. Enabled service GNSS location service Server with JSON-, NMEA stream eUICC **Enabled services** Remote eUICC SIM profile update with static profile management. Standard According to the remote subscriber provisioning standardized by GSMA in SGP.21 and 22 and validated according to SGP.23. Power Input Voltage 12, 24 VDC Nominal voltages 12, 24 VDC Absolute voltages 9 VDC to 36 VDC Power Management Various power modes and wake-up sources (on request) **Ignition Sense** Connector 1x CMC-48 header Consumption 7 W (average), 10 W (max), power down state < 2 mA @ 24 VDC Mounting Bracket Dimensions WxHxD Width 200 mm x height 40 mm x depth 120 mm

Weight		520 g
Environment	Operating Temperature Ingress Protection Level	-40°C to +75°C IP69K
МТВБ		296'000 h / 33.8 years, according SN29500 at environmental temperature 40 °C
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), Vehicle according to UNECE-R10 and UNECE-R118 Vehicle
Order Code		NG800-LWWtGd2Br2Cm