

# NG800-LWWtGd2Br2C-OEM

**Automotive Gateway OEM with LTE + WLAN + BT/BLE + ETH + 2x ETH-Auto + 2x CAN + GNSS-DR + IP55**

Modular connectivity platform for OEM telematic products.



## Keyfeatures

<b>Mobile / Cellular</b>	1x LTE, UMTS, GSM
<b>SIM</b>	1x eSIM chip, 1x Micro SIM
<b>WiFi / WLAN</b>	1x Dual-band IEEE 802.11a/b/g/n (Wi-Fi 4), 1x Bluetooth Low Energy
<b>Ethernet</b>	2x Automotive Ethernet, 1x Fast Ethernet
<b>Serial / Fieldbus</b>	2x CAN
<b>Positioning</b>	Multi-GNSS with Dead Reckoning
<b>Operation Temperature</b>	-40 °C to +75 °C
<b>Environment</b>	IP55 dust & water jet protection (IP69K on request)
<b>Software</b>	NetModule OEM Linux OS
<b>Compliance</b>	CE (RED), Vehicle (UNECE-R10, UNECE-R118)
<b>Modularity</b>	Extensions on request

## Product description

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

## Applications

- Emergency Services
- Smart Traffic
- Fleet Management
- Tracking
- Oil & Gas
- Mining
- Agriculture
- eMobility
- Telematics

## Specifications

<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 (with optional Software License) <b>FCC ID</b> XPYTOBYL210
	<b>Region</b>	Europe
	<b>Connectors</b>	2x SMA female
	<b>SIM</b>	1x Micro SIM - 3FF, 1x eSIM Chip (on request)
<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> POR-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 2x Automotive Ethernet - BroadR <b>Ethernet standard</b> 100BASE-T1 (BroadR-Reach) <b>Speed</b> 10/100 Mbps
	<b>Connector</b>	1x CMC-48 header
<b>Positioning</b>	<b>Standard</b>	1x Multi-GNSS with Automotive Dead Reckoning <b>Receiver</b> BeiDou, Galileo, GLONASS, GPS/QZSS 72-channel u-blox M8 engine 3 concurrent GNSS channels Integrated motion sensors <b>Antennas</b> Active or passive <b>Accuracy</b> Up to 2.5 m CEP <b>Sensitivity</b> Up to -160 dBm <b>Services</b> Standalone, assisted GPS 3D Dead Reckoning Data server with JSON, NMEA data stream
	<b>Connector</b>	1x SMA female
<b>Serial, Fieldbus</b>	<b>Protocol</b>	1x RS-232 <b>Protocol</b> EIA-232 <b>Signals</b> TX, RX <b>Signal level</b> High > 5 VDC, low < -5 VDC <b>Bit rate</b> Up to 115 200 Bit/s 2x CAN <b>Protocol</b> Controller Area Network V2.0B (ISO 11898) <b>Signals</b> CANH, CANL <b>Signal level</b> High > 2.75 V, low < 2.0 V <b>Bit rate</b> Up to 1 Mbps <b>Bus access</b> Active - read and write access (Option -Cn) Passive - read access only on request (Option -Cm)
	<b>Connector</b>	1x CMC-48 header
<b>System</b>	<b>Core</b>	1000 MHz single core, 512 MB RAM, 8 GB flash
	<b>Module Slots</b>	1x Extension Module
<b>Software</b>	<b>Features</b>	NetModule Linux Operating System Software support for the hardware board in a Yocto Linux distribution <b>OEM Linux OS Package</b> OpenEmbedded-Core, Yocto Project-specific metadata, BSP layer provided by NetModule, Distro layer provided by NetModule <b>Board Support Package</b> The meta-layer "meta-netmodule-bsp" includes recipes to create Bootloader and Kernel <b>Services</b> Systemd, NetworkManager, ModemManager, Bluez, SocketCan, GPSTd, Hostapt, OSTree Update, NTP, Package Manager (DNF), Python Environment <b>Software Development Kit (SDK)</b> Includes cross-development toolchain, libraries, headers files and further tools.
<b>Power</b>	<b>Input Voltage</b>	12, 24 VDC <b>Nominal voltages</b> 12, 24 VDC <b>Absolute voltages</b> 9 VDC to 36 VDC <b>Power Management</b> Various power modes and wake-up sources (on request)
	<b>Ignition Sense</b>	Yes
	<b>Connector Consumption</b>	1x CMC-48 header 7 W (average), 10 W (max), power down state < 2 mA @ 24 VDC
<b>Mounting</b>		Bracket
<b>Dimensions</b>	<b>W x H x D</b>	Width 200 mm x height 40 mm x depth 120 mm
<b>Weight</b>		520 g
<b>Environment</b>	<b>Operating Temperature</b>	-40°C to +75°C
	<b>Ingress Protection Level</b>	IP55 - protected against dust and water jets from any angle, IP69K (on request)
<b>Certifications</b>	<b>Compliance Domain</b>	CE according to 2014/53/EU (RED), Vehicle according to UNECE-R10, UNECE-R118 Vehicle
<b>Order Code</b>		NG800-LWWtGd2Br2C-OEM

