

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

Mobile / Cellular	1x LTE, UMTS, GSM
SIM	1x eSIM chip, 1x Micro SIM
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	2x CAN
Positioning	Multi-GNSS with Dead Reckoning
Operation Temperature	-40 °C to +75 °C
Environment	IP55 dust & water jet protection (IP69K on request)
Software	NetModule OEM Linux OS
Compliance	CE (RED), Vehicle (UNECE-R10, UNECE-R118)
Modularity	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

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 Data rate down / up (max) 150 Mbps / 50 Mbps Voice CSFB (with optional Software License) FCC ID XPYTOBYL210
	Region	Europe
	Connectors	2x SMA female
	SIM	1x Micro SIM - 3FF, 1x eSIM Chip (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 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 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 SMA female
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 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 Active - read and write access (Option -Cn) Passive - read access only on request (Option -Cm)
	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 Linux Operating System Software support for the hardware board in a Yocto Linux distribution OEM Linux OS Package OpenEmbedded-Core, Yocto Project-specific metadata, BSP layer provided by NetModule, Distro layer provided by NetModule Board Support Package The meta-layer "meta-netmodule-bsp" includes recipes to create Bootloader and Kernel Services Systemd, NetworkManager, ModemManager, Bluez, SocketCan, GPSTd, Hostapt, OSTree Update, NTP, Package Manager (DNF), Python Environment Software Development Kit (SDK) Includes cross-development toolchain, libraries, headers files and further tools.
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	Yes
	Connector Consumption	1x CMC-48 header 7 W (average), 10 W (max), power down state < 2 mA @ 24 VDC
Mounting		Bracket
Dimensions	W x H x D	Width 200 mm x height 40 mm x depth 120 mm
Weight		520 g
Environment	Operating Temperature	-40°C to +75°C
	Ingress Protection Level	IP55 - protected against dust and water jets from any angle, IP69K (on request)
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), Vehicle according to UNECE-R10, UNECE-R118 Vehicle
Order Code		NG800-LWWtGd2Br2C-OEM

