

NG800-LjWWtGd2Br2CnHc

Automotive Gateway mit LTE-WW + WLAN + BLE + ETH + 2x ETH-Auto + 2x CAN-aktiv + GNSS-DR + eUICC + IP55

Modularer automotive Gateway für Telematik-Anwendungen



Hauptmerkmale

Mobilfunk	1x LTE, UMTS, GSM
SIM	1x eSIM Chip, 1x Micro SIM (auf Anfrage)
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
Serielle / Feldbus	1x RS-232 Konsole, 2x CAN aktive (Lese- und Schreibzugriff)
Ortung	Multi-GNSS mit Dead Reckoning
Betriebstemperatur	-40 °C bis +75 °C
Umwelt	IP55 Schutz gegen Staub und Wasser, Vibration und Schock (ISO 16750-3)
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, eUICC SIM Profile Update, freie Updates
Konformität	CE (RED), Fahrzeug (UNECE-R10, UNECE-R118)
Modularität	Erweiterungen auf Anfrage

Produktbeschreibung

Das multifunktionale automotive Gateway im IP55-Gehäuse eignet sich für raue Umgebungen und bietet die notwendige robuste Kommunikation zwischen On-Board-Fahrzeugausstattung und Cloud-Anwendungen.

Anwendungen

- Landwirtschaft
- Telematik
- Flottenmanagement
- Blaulichtorganisationen
- eMobility
- Mining
- Öl & Gas
- Nachverfolgung
- Intelligenter Verkehr

Spezifikation

Mobile / Cellular

Standard

1x Multimode LTE, UMTS, GSM, data only
4G - LTE B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28, B38, B39, B40, B41
 2014/53/EU (RED): B1, B3, B7, B8, B20, B28, B38, B40
3G - DC-HSPA+/UMTS B1, B2, B5, B8
 2014/53/EU (RED): B1, B8
2G - GSM/GPRS/EDGE B2 (1900), B3 (1800), B5 (850), B8 (900)
 2014/53/EU (RED): B3 (1800), B8 (900)
Category LTE Cat 4
Antenna ports 2x2 MIMO
Data rate down / up (max) 150 Mbps / 50 Mbps
Voice -
 Data only
FCC ID XPYUBX21BE01
Region Europe, Middle East and Africa (EMEA), North America (NA), Asia and Pacific (APAC)
 Europe
Connectors
 2x FAKRA D-coded male
SIM
 1x eSIM Chip, 1x Micro SIM - 3FF (auf Anfrage)

WiFi / WLAN	Standard	<p>1x Dual-band WLAN 2.4/5 GHz a/b/g/n (Wi-Fi 4) + BT 4.2 combo</p> <p>Wireless standard IEEE 802.11a/b/g/n (Wi-Fi 4)</p> <p>Bluetooth 4.2, Bluetooth Low Energy</p> <p>Frequency 2.4/5 GHz</p> <p>Antenna ports 2x2 MIMO</p> <p>Data rate (max) 144 Mbps 2.4 GHz 2x2 MIMO, 150 Mbps 5 GHz SISO</p> <p>Modes Client or access point (up to 10 clients)</p> <p>FCC ID POR-WL18DBMOD</p>
	Connector	2x FAKRA I-coded male
Ethernet	Standard	<p>1x Fast Ethernet</p> <p>Ethernet standard 100BASE-TX, Auto MDIX</p> <p>Speed 10/100 Mbps</p> <p>2x Automotive Ethernet - BroadR</p> <p>Ethernet standard 100BASE-T1 (BroadR-Reach)</p> <p>Speed 10/100 Mbps</p>
	Connector	1x CMC-48 header
Positioning	Standard	<p>1x Multi-GNSS with Automotive Dead Reckoning</p> <p>Receiver BeiDou, Galileo, GLONASS, GPS/QZSS</p> <p>72-channel u-blox M8 engine</p> <p>3 concurrent GNSS channels</p> <p>Integrated motion sensors</p> <p>Antennas Active or passive</p> <p>Accuracy Up to 2.5 m CEP</p> <p>Sensitivity Up to -160 dBm</p> <p>Services Standalone, assisted GPS</p> <p>3D Dead Reckoning</p> <p>Data server with JSON, NMEA data stream</p>
	Connector	1x FAKRA C-coded male
Serial, Fieldbus	Protocol	<p>1x RS-232</p> <p>Protocol EIA-232</p> <p>Signals TX, RX</p> <p>Signal level High > 5 VDC, low < -5 VDC</p> <p>Bit rate Up to 115 200 Bit/s</p> <p>2x CAN-active</p> <p>Protocol Controller Area Network V2.0B (ISO 11898)</p> <p>Signals CANH, CANL</p> <p>Signal level High > 2.75 V, low < 2.0 V</p> <p>Bit rate Up to 1 Mbps</p> <p>Bus access Active - read and write access</p>
	Connector	1x CMC-48 header
System	Core	1000 MHz single core, 512 MB RAM, 8 GB flash
	Module Slots	1x Extension Module

Software	Features	<p>NetModule Router Software</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>
	Licenses	<p>GNSS/GPS,</p> <p>Services Server with JSON-, NMEA stream</p> <p>eUICC</p> <p>Enabled services Remote eUICC SIM profile update with static profile management.</p> <p>Standard According to the remote subscriber provisioning standardized by GSMA in SGP.21 and 22 and validated according to SGP.23.</p>
Power	Input Voltage	<p>12, 24 VDC</p> <p>Nominal voltages 12, 24 VDC</p> <p>Absolute voltages 9 VDC to 36 VDC</p> <p>Power Management Various power modes and wake-up sources (on request)</p>
	Ignition Sense Connector Consumption	<p>Ja</p> <p>1x CMC-48 header</p> <p>7 W (average), 10 W (max), power down state < 2 mA @ 24 VDC</p>
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 - Schutz gegen Staub und Wasser, Vibration und Schock
	Vibration	ISO 16750-3 (road vehicles), IEC 60068-2-64 (24 h)
	Shock	ISO 16750-3 (road vehicles), IEC 60068-2-27 (60 shocks)
MTBF		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-LjWWtGd2Br2CnHc