

NB800-LWWtScSu-G

IIoT Router with LTE + WLAN + BT/BLE + ETH + RS-232/485 + DIO + USB + GNSS

Compact and modular mobile router to connect remote locations.



Keyfeatures

Mobile / Cellular	1x LTE, UMTS, GSM
SIM	1x Micro SIM / 1x eSIM chip (on request)
WiFi / WLAN	1x Dual-band IEEE 802.11a/b/g/n (Wi-Fi 4), 1x Bluetooth Low Energy
Ethernet	1x Fast Ethernet
Positioning	Multi-GNSS
IO	2x Digital I/O
Serial / Fieldbus	1x RS-232/485
USB	USB 2.0 Host
Operation Range	-40 °C to +70 °C
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates
Compliance	CE (RED)
Modularity	Extensions on request

Product description

The compact NB800 is the cost-effective solution for a robust Internet connection in an industrial environment.

Applications

- Condition Monitoring
- Tracking
- Industrial Security
- Remote Management
- Smart Buildings
- Point of Sale
- Digital Signage
- Intelligent Lighting Management

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 FCC ID XPYTOBYL210
	Region Connectors SIM	Europe, Middle East and Africa (EMEA) 2x SMA female 1x Micro SIM - 3FF / 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 Z64-WL18DBMOD
	Connector	2x SMA female
Ethernet	Standard	1x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps
	Connector	1x RJ45

Positioning	Standard	<p>1x Multi-GNSS Receiver BeiDou, Galileo, GLONASS, GPS/QZSS 72-channel u-blox M8 engine 3 concurrent GNSS channels Antennas Active or passive Accuracy Up to 2.5 m CEP Sensitivity Up to -167 dBm Services Standalone, Assisted GPS Data server with JSON, NMEA data stream</p>
	Connector	1x SMA female
USB	Standard	1x USB 2.0 Host
	Connector	1x Type A
Serial, Fieldbus	Protocol	<p>1x RS-232/485 combo (software switchable) Protocol EIA-232 Signals TX, RX Signal level High > 5 VDC, low < -5 VDC Bit rate Up to 1 Mbps Protocol EIA-485 Signals A, B Signal level Differential output voltage, loaded 1.5 VDC - 3.6 VDC Bit rate Up to 1 Mbps Termination 120 Ω for RS-485 configurable by software</p>
	Connector	1x Terminal block header 3.5 mm
IOs	Type	<p>2x Digital I/O Signals 1x DI, 1x DO DI signals +, - DI level Low: 0 - 3 VDC, high: 9 - 32 VDC DO signals Relay outputs with NO, NC, COM (normally open, normally closed) DO level 0 - 32 VDC/1A Isolation 1'500 VDC Module COM-I/O shield</p>
	Connector	1x Terminal block header 3.5 mm
System	Core	1 GHz single core, 512 MB RAM, 4 GB flash, HW Rev. B02
	Module Slots	1x Shield
Software	Features	<p>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 calls Wireless LAN Client or Access Point mode, multi client support, multi / hidden SSID, WPA-PSK/WPA2-PSK, WPA-RADIUS, WPA-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, NAT, masquerading, bridge filtering</p>
	Licenses	<p>GNSS Enabled service GNSS location service Server with JSON-, NMEA stream</p>
Power	Input Voltage	<p>12, 24 VDC Nominal voltages 12, 24 VDC Absolute voltages 12 VDC to 24 VDC (-20 % / +20 %)</p>
	Connector Consumption	<p>1x Terminal block header 3.5 mm 5 W (average), 10 W (max)</p>
Mounting		Bracket
Dimensions	W x H x D	Width 85/111 mm x height 32 mm x depth 110 mm
Weight		220 g

Environment	Operating Temperature Ingress Protection Level	-40°C to +70°C IP40
MTBF		340'000 h / 38.8 years, according SN29500 at environmental temperature 40 °C
Certifications	Compliance Domain	CE according to 2014/53/EU (RED), 2011/65/EU (RoHS) Industrial
Order Code		NB800-LWWtScSu-G
