

NB800-LScSu-G

IIoT-Router with LTE + 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 MFF2 (on request)
Ethernet	1x Fast Ethernet
Positioning	Multi-GNSS
IO	2x Digital I/O
Serial / Fieldbus	1x RS-232/485
USB	USB 2.0 Host
Operation Temperature	-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
- Factory Automation
- Remote Management
- Smart Buildings
- Intelligent Lighting Management
- Environmental Monitoring
- Smart Traffic
- ATMs
- Point of Sale
- Renewable Energy

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 XPTYOBYL210
	Region Connectors SIM	Europe, Middle East and Africa (EMEA) 2x SMA female 1x Micro SIM - 3FF, 1x eSIM - MFF2 (on request)
Ethernet	Standard	1x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps
	Connector	1x RJ45

Positioning	Standard	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
	Connector	1x SMA female
USB	Standard	1x USB 2.0 Host
	Connector	1x Type A
Serial, Fieldbus	Protocol	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
	Connector	1x Terminal block header 3.5 mm
IOs	Type	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
	Connector	1x Terminal block header 3.5 mm
System	Core	600 MHz single core, 512 MB RAM, 4 GB flash, HW Rev. B02
	Module Slots	1x Shield
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 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
	Licenses	GNSS Enabled service GNSS location service Server with JSON-, NMEA stream
Power	Input Voltage	12, 24 VDC Nominal voltages 12, 24 VDC Absolute voltages 12 VDC to 24 VDC (-20 % / +20 %)
	Connector Consumption	1x Terminal block header 3.5 mm 5 W (average), 10 W (max)
Mounting		Bracket
Dimensions	W x H x D	Width 85/111 mm x height 32 mm x depth 110 mm
Weight		250 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-LScSu-G
