

NB800-LScSu-G

IIoT-Router mit LTE + ETH + RS-232/485 + DIO + USB + GNSS

Kompakter, modularer Mobilfunk-Router zur Vernetzung von schwer zugänglichen Orten.



Hauptmerkmale

Mobilfunk	1x LTE, UMTS, GSM
SIM	1x Micro SIM / 1x eSIM Chip (auf Anfrage)
Ethernet	1x Fast Ethernet
Ortung	Multi-GNSS
IO	2x Digitale I/O
Serielle / Feldbus	1x RS-232/485
USB	USB 2.0 Host
Betriebstemperatur	-40 °C bis +70 °C
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, freie Updates
Konformität	CE (RED), UKCA (RER), UL/IEC/EN 62368-1, FCC
Modularität	Erweiterungen auf Anfrage

Produktbeschreibung

Der kompakte NB800 ist die kosteneffiziente Lösung für eine robuste Internetverbindung im industriellen Umfeld.

Anwendungen

- Zustandsüberwachung
- Fabrikautomation
- Remote Management
- Smart Buildings
- Intelligentes Beleuchtungsmanagement
- Umweltüberwachung
- Intelligenter Verkehr
- Geldautomaten
- Point of Sale
- Erneuerbare Energien

Spezifikation

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 (mit optionaler Software-Lizenz) FCC ID XPYTOBYL210
	Region	Europe
	Connectors	2x SMA female
	SIM	1x Micro SIM - 3FF / eSIM Chip (auf Anfrage)
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 115'200 Bit/s Protocol EIA-485 Signals A, B Signal level Differential output voltage, loaded 1.5 VDC - 3.6 VDC Bit rate Up to 115'200 Bit/s 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	1 GHz 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), Hardware- und Software Watchdog Remote Management Manage and monitor devices with SNMP V1/V2/V3, Netmodule vendor MIB, telnet, SSH, or HTTP/HTTPS Cellular Networking Multi-SIM / eSIM support (optional license), multi-APN support, signal strength monitoring, dedicated bearers, CSFB/VoLTE calls (optional license) 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 Link Management Link prioritization, link aggregation, load balancing, multipath-TCP, IP-passthrough, link supervision, 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 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 VPN OpenVPN, IPsec (IKEv1 and IKEv2), PPTP, GRE, L2TP, CSD dial-in, Certificate revocation service Firewall Stateful firewall, connection tracking, NAT, NAPT, masquerading, bridge filtering, Adress translation (based on SRC and DST ports) Encryption supporting password protected PKCS12 files, integrated random certificate key generator, "Let's encrypt" certificate, ECC (Certificates with Elliptic Cryptography) Quality of Service Diffserv, SFQ, HTB, Priority-based Queuing, Netflow (Softflow) Programmability SDK Troubleshooting Logging, Ping, Traceroute, Tcpdump, Speed-test
	Licenses	GNSS/GPS Services 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