




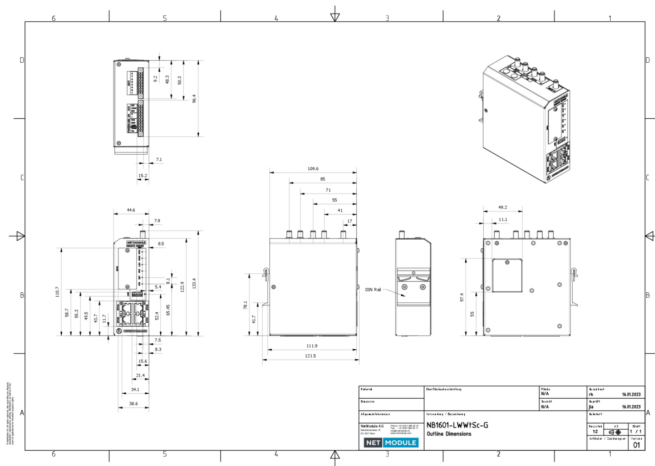
Product: [NB1601-LjSc-G](#) 

Industrial Router with ETH, LTE, GNSS, Serial, DI/O

Product Description

Modular Wireless Router with 4-port Ethernet switch to connect remote locations. With: LTE, Global Positioning (GNSS, GPS), Serial Port, Digital Input/Output

Technical Drawing



Technical Specifications

Product Overview

| | |
|-------|---|
| Name: | NB1601-LjSc-G |
| WAN: | IPv4; IPv6; IP Passthrough; DynDNS Client; PPPoE; |

Product Life Cycle

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|-------------|-------------------------------|
| Life Cycle: | Active - Product is available |
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General Information

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| Scope of delivery: | Device, General safety instructions, 2x Terminal block 3.5mm |
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More Interfaces

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| USB interface: | 1 x USB 2.0 socket to connect an approved USB storage device, USB Type A socket |
| SIM Cards: | 2x Micro SIM (3FF) slot |
| Local Management and Device Replacement: | Management via Web (HTTPS); Command Line Interface (CLI) over SSH/Serial/Web; SNMP v1/v2c/v3; Discovery via LLDP, CDP, FDP, SONMP, EDP, IRDP |
| Ethernet Connector Type: | 4x Fast Ethernet (100 Base-TX, Auto MDIX, 10/100 Mbps, RJ45) |
| Power Supply: | 10-pin terminal block (connector included) |
| Serial: | 1x RS-232; Signals TX, RX; Up to 115kBit/s; RS-485 combo (software switchable); 120 Ω for RS-485 configurable by software |
| GPS (global positioning system): | Multi-GNSS, Receiver BeiDou, Galileo, GLONASS, GPS/QZSS, ublox MAX-M10S engine, 4 concurrent GNSS systems, Bands: L1C/A, E1-B/C, L10F, B1I, Augmentation: SBAS EGNOS, GAGAN, MSAS, WAAS, BDSBAS QZSS L1S (SLAS), Antennas: active or passive, Sensitivity: Down to -167 dBm, CEP (Circular Error Probability) ≤2.5m, Services: Standalone, assisted GPS, GNSS Stream NMEA or JSON, 1x SMA female |
| CPU: | 1 GHz single core |
| Memory: | 512 MB RAM |

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| Storage: | 4 GB flash |
| Signaling contact: | 2x Digital I/O; Low 0-3 VDC; High 9-32 VDC; Isolation 1'500 VDC; Relay output with NO, NC, COM (normally open, normally closed) on Terminal block header 3.5mm (screw locking); +2 additional Digital I/O (4 total) |
| LEDs: | 6 LEDs + Ethernet LEDs (Speed, Activity) |
| Reset Function: | Pin-hole push button for reboot and factory reset |

Radio technology

Modules

| Description | 2G | 3G | 4G | MIMO | Antenna Connector |
|-------------|---|--|---|----------|-------------------|
| Module 1 | GSM/GPRS/EDGE Bands: B2 (1900), B3 (1800), B5 (850), B8 (900) Bands 2014/53/EU (RED): B3 (1800), B8 (900) | DC-HSPA+/UMTS Bands: B1, B2, B5, B8 Bands 2014/53/EU (RED): B1, B8 | LTE Cat. 4 B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28, B38, B39, B40, B41 Bands for 2014/53/EU (RED): B1, B3, B7, B8, B20, B28, B38, B40 | 2x2 MIMO | 2x SMA female |

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| Load Balance: | Link Prioritization and Aggregation; Load Balancing; Diffserv; SFQ; HTB; Priority based Queuing |
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Power requirements

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| Operating Voltage: | 12-24 VDC (±20%) |
| Power Consumption: | 7 W average, 10 W maximum |

Diagnostics features

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| Alarm and event actions: | Email; SMS |
| Monitoring: | Watchdogs (Hard- and Software); Link Supervision; MQTT Broker |

Security features

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| Multipoint VPN: | VXLAN, CSD dial-in, OpenVPN, IPSec, GRE, L2TP, PPTP, IKEv1/v2 |
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Service

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| Other services: | DNS Cache; |
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Software

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| Firmware Storage: | Fail-safe update (FOTA); Software Update via USB, HTTP(s) (push), FTP (pull), SFTP (pull), TFTP (pull) |
| Radius Server: | External Radius Server Management User Authentication |
| Software features: | Software Development Kit (SDK); |
| Software Version: | 5.0 (updates free of charge) |
| Operating system: | NRSW (NetModule Router Software) |
| Switching: | VLAN (802.1Q) |
| Redundancy: | Multipath TCP, VRRP (Virtual Router Redundancy Protocol), RSTP (Rapid Spanning Tree Protocol) |
| Diagnostics: | Netflow (Sofflow), Ping, Traceroute, Tcpdump, Speed Test |
| Configuration: | DHCP Client and Server |
| Security: | Certificate Management (SCEP Client, Signing Requests), Certificate formats: PKCS12, PKCS7, PEM/DER, RSA/Ed25519 (OpenSSH/Dropbear), "Let's encrypt" support, Elliptic Curve Certificates (ECC), 802.1x for LAN, Stateful Firewall, Connection Tracking, Bridge Filtering |
| Time synchronisation: | NTP Client and Server, SNTP Server |
| Routing: | Destination, Policy, Multipath, OSPF, BGP, Multicast, TCP-MSS Clamping, NAT, NAPT, Masquerading |
| Management Software: | Compatible with "Connectivity Suite" |
| Cellular Functions: | Signal Strength Monitoring |

Ambient conditions

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|--------------------------------------|-----------------------------|
| Air Pressure (Operation): | Up to 4000m above sea level |
| Degree of Protection when Installed: | IP40 |
| Operating temperature: | -40-+70 °C |
| Relative humidity (non-condensing): | 0-95 % |

Mechanical construction

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|---------------------|---------------------------------|
| Dimensions (WxHxD): | 45 mm x 124/134 mm x 110/121 mm |
| Weight: | 450 g |
| Housing Material: | brushed aluminium |
| Mount Type: | DIN Rail 35 mm |
| Mating Side: | from the front |
| Labeling: | Type label on side |

Approvals

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|---|--|
| Basis Standard: | CE according to 2014/53/EU (RED), UKCA (RER), FCC, PTCRB, AT&T |
| Safety of industrial control equipment: | EN 62368-1, IEC 62368-1, UL 62368-1 |
| Transportation: | E-Mark ECE R10, Fire Safety ECE R118 |
| UK Regulation Compliance: | UKCA Mark |
| Suitability - Indoor: | Yes |

Reliability

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| Guarantee: | 5 years |
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History

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| Update and Revision: | Revision Number: 0.6 Revision Date: 06-25-2026 |
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Variants

| Item # | Type |
|-----------|---------------|
| 942998643 | NB1601-LjSc-G |

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