

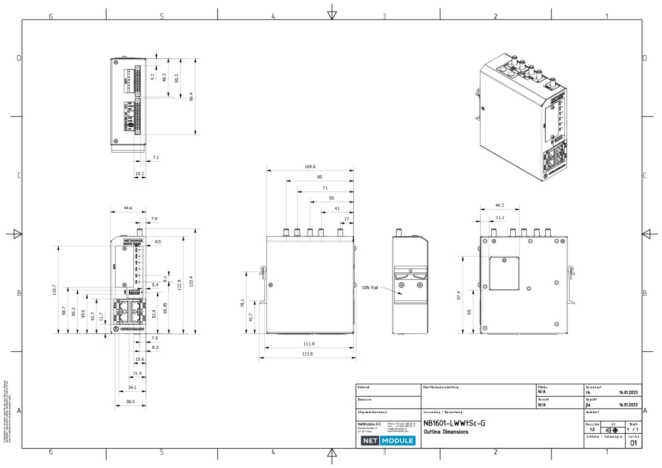
Product: NB1601-LWWt-G

Industrial Router with ETH, LTE, WLAN, BT/BLE, GNSS

Product Description

Modular Wireless Router with 4-port Ethernet switch to connect remote locations. With: LTE, WLAN, Bluetooth and Bluetooth Low Energy (LE), Global Positioning (GNSS, GPS)

Technical Drawing



Technical Specifications

Product Overview

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

Product Life Cycle

Life Cycle:	Active - Product is available

General Information

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

More Interfaces

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
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, L1OF, 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

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)
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	Additional Radio Features	Radio Protocol	Frequency Band	Access Point Functionality	Client / STA Functionality
Module 1	B2 (1900), B3 (1800), B5 (850), B8 (900)	B1 (2100), B2 (1900), B5 (850), B8 (900)	LTE Cat. 4 Max 150 Mbps down, 50 Mbps up Bands: B1 (2100), B3 (1800), B5 (850), B7 (2600), B8 (900), B20 (800)	2x2 MIMO	2x SMA female	Voice: CSFB				
Module 4				2x2 MIMO	2x SMA female		802.11 a/b/g/n (Wi-Fi 4), Bluetooth 4.2, Bluetooth Low Energy (BLE)	WLAN 2.4 or 5 GHz	Yes (up to 10 clients)	Yes

Load Balance:	Link Prioritizatoin and Aggregation; Load Balancing; Diffserv; SFQ; HTB; Priority based Queuing

Power requirements

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

Diagnostics features

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

Security features

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

Service

Other services:	DNS Cache;

Software

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 (Softflow), 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

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

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

Basis Standard:	CE according to 2014/53/EU (RED), UKCA (RER), FCC
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

Guarantee:	5 years

History

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

Variants

Item #	Type
942998225	NB1601-LWWt-G

© 2026 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.