

NB1810-LdWac4Ep-G

Industrial Router with LTE-Adv + WLAN-ac + GbE + SFP + 4x GbE-PoE + GNSS

Redundant network access for remote locations in harsh environments.



Keyfeatures

Mobile / Cellular	1x LTE Advanced, UMTS
SIM	2x Micro SIM
WiFi / WLAN	1x Dual-band IEEE 802.11a/b/g/n/ac (Wi-Fi 5), 100 Clients in Access Point Mode
Ethernet	4x Gigabit Ethernet with PoE (4-Port Switch), 1x SFP/Gigabit Ethernet Combo, 1x Gigabit Ethernet
Extended Storage	1x SD Card
Serial / Fieldbus	1x RS-232/485
Positioning	Multi-GNSS
Operation Temperature	-40 °C to +65 °C (@15 W PoE)
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates
Compliance	CE (RED)
Modularity	Extensions on request

Product description

The NB1810 is a powerful and robust cellular router designed for use in industrial environments.

Applications

- Industrial Security
- Point of Sale
- Public WiFi
- Smart Grid
- Oil & Gas
- Renewable Energy
- Factory Automation
- Mining
- CCTV

Specifications

Mobile / Cellular	Standard	1x Multimode LTE Advanced, UMTS for EMEA, NA 4G - LTE B1 (2100), B2 (1900), B3 (1800), B4 (AWS), B7 (2600), B12 (700ac), B13 (700c), B20 (800DD), B5 (850), B25 (1900), B26 (850), B29 (700), B41 (TDD2500), B30 (WCS) 3G - DC-HSPA+/UMTS B1 (2100), B2 (1900), B3 (1800), B4 (1700), B5 (850), B8 (900) 2G - GSM/GPRS/EDGE n.a. Category LTE Cat 6 Antenna ports 2x2 MIMO Data rate down / up (max) 300 Mbps / 50 Mbps Voice n.a.
	Region Connectors SIM	Europe, Middle East and Africa (EMEA), North America (NA) 2x SMA female 2x Micro SIM - 3FF
WiFi / WLAN	Standard	1x WLAN 2.4/5 GHz a/b/g/n/ac (Wi-Fi 5) Wireless standard IEEE 802.11a/b/g/n/ac (Wi-Fi 5) Frequency 2.4/5 GHz Diversity 2x2 MIMO Data rate (max) 300 Mbps (2.4 GHz) / 866 Mbps (5 GHz) Modes Client or access point (up to 100 clients) FCC ID TK4WLE600VX
	Connector	2x SMA female

Ethernet	Standard	<p>1x Gigabit Ethernet Ethernet standard 1000BASE-T, Auto MDIX Speed 10/100/1000 Mbps 1x Gigabit Ethernet / SFP combo (software switchable) Ethernet standard 1000BASE-T, Auto MDIX SFP standard Depending on module, ask for supported modules Speed 10/100/1000 Mbps Combo port SFP or GbE interface activated (software switchable) 4x Gigabit Ethernet PoE+ Ethernet standard 1000BASE-T, Auto MDIX Speed 10/100/1000 Mbps PoE standard IEEE802.3af, IEEE802.3at, including two event classification PoE output power max 30 W per port, 60 W in total</p>
	Connector	<p>2x RJ45, 1x RJ45, 4x RJ45</p>
Positioning	Standard	<p>1x GNSS Receiver BeiDou, GLONASS, GPS Antennas Active or passive Sensitivity -160 dBm Services Standalone, assisted GPS Data server with JSON, NMEA data stream</p>
	Connector	<p>1x SMA female</p>
USB	Standard	<p>1x USB 2.0 Host</p>
	Connector	<p>1x Type A</p>
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	<p>1x Terminal block header 3.5 mm (screw locking)</p>
Extended Storage		<p>SD Card Slot type microSD Speed (read / write) 600 kByte / s Application Store user and logging data of SDK or LXC applications SD card not included</p>
System	Core	<p>1.3 GHz dual-core, 1 GB RAM, 4 GB flash</p>
	Module Slots	<p>2x miniPCIe (PCIe + USB), 2x Extension (USB)</p>
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>48 VDC Nominal voltages 48 VDC (restricted input range for PoE switch) Absolute voltages 48 VDC (-10 % / +10 %)</p>
	Connector	<p>1x Terminal block header 3.5 mm (screw locking)</p>
	Consumption	<p>82 W (average), 90 W (max with 60W PoE load)</p>

Mounting		DIN-Rail
Dimensions	W x H x D	Width 95 mm x height 128/140 mm x depth 121 mm
Weight		1100 g
Environment	Operating Temperature Ingress Protection Level	-40°C to +50°C IP40
MTBF		180'000 h / 20.5 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		NB1810-LdWac4Ep-G