



NB3701-2Wac

Railway Router with 2x WLAN-ac + EN50155

Proven multi-service onboard router for light rail and railways.



Keyfeatures

WiFi / WLAN	2x Dual Band IEEE 802.11a/b/g/n/ac (Wi-Fi 5), 100 Clients in Access Point Mode	
Ethernet	5x Fast Ethernet	
10	4x Digital I/O	
Power	24 VDC to 48 VDC	
Temperature Range	-40 °C to +70 °C, EN 50155 class OT4/ST0	
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates	
Compliance	CE (RED), Railway (EN50155, EN45545)	
Modularity	Extensions on request	

Product description

Applications

Passenger WiFiPassenger Infotainment

The NB3701 is the compact router for railways and other applications where similarly high demands are placed on the hardware. It is the right device for passenger WiFi or infotainment.

Specifications

WIFI / WLAN Standard 2x 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 4x TNC female Ethernet Standard 5x Fast Ethernet Ethernet standard 100BASE-TX, Auto MDIX Speed 10/100 Mbps Connector 5x M12 D-coded female USB Standard 1x USB 2.0 Host Connector 1x Type A 10s Туре 4x Digital I/O Signals 2x DI, 2x DO DI signals +, -DI level Low: 0 - 5 VDC, high: 7.2 - 40 VDC DO signals Relay outputs with NO, NC, COM (normally open, normally closed) DO level 0 - 60 VDC/1A, maximum switching capacity: 60 W Isolation 1'500 VDC Connector 1x M12 A-coded female System Core 1.3 GHz dual-core, 1 GB RAM, 4 GB flash Module Slots 2x miniPCle (PCle + USB)

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Software	Features	NetModule Router Software (supported features depending on product variant)
		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, Isolat 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, SNTP 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
Power	Input Voltage	24. 48 VDC
		Nominal voltages 24, 48 VDC
		Absolute voltages 24 VDC to 48 VDC (-30 % / +30 %)
		Galvanic isolation 1500 VDC
		Standard EN 50155 class S2/C1
	Connector	1x M12 A-coded male
	Consumption	15 W (max)
Mounting		Bracket
Dimensions	W x H x D	Width 165/100 mm x beight 95 mm x depth 104 mm
	WXHXD	Width 165/190 mm x height 85 mm x depth 104 mm
Weight		1100 g
Environment	Operating	-40°C to +70°C
	Temperature	
	Ingress Protection Level	IP40
MTBF		210'000 h / 24 years, according SN29500 at environmental temperature 40 $^\circ\text{C}$
Certifications	Compliance	
Certifications	Domain	CE according to 2014/53/EU (RED), 2011/65/EU (RoHS), Railway according to EN 50155 class OT4/STO, EN 45545 Railway
Order Code		
Sider Code		NB3701-2Wac

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