NB3700 WLAN

Ruggedized WLAN Router Dual-band 802.11abgn MIMO

Applications

- Passenger Wi-Fi
- Condition monitoring
- Passenger information systems
- Passenger counting systems

The NB3700 WLAN brings wireless Internet access to trains. It may be used for passenger Wi-Fi or any other electronic equipment on board.

The NB3700 WLAN is a railway access point or wlan client. As WLAN access point it extends the Internet connection of a NB3700 Mobile Router to all cars of a train.

The router software is based on well proven components including an embedded Linux operating system and standard communication protocols. The device is administrated via web browser or command line. Selfprovisioning for new software or new configuration is possible. The device can be configured remotely by customer programs via a powerful application interface.

The router is qualified for operating under harsh environmental conditions defined by EN50155, supporting the temperature range TX (-40°C bis +70°C, +85°C for 15 minutes). The device is now also available with extended input voltage (72 - 110V).

Key Features

- EN50155 TX certification
- CEN TS 45545 certification
- WLAN 2.4+5 GHz
- M12 5 port switch
- 2 digital inputs/outputs
- isolated power
- Extended input voltage (72 - 110V) option

Specifications

WiFi	IEEE 802.11abgn up to 300 Mbps 2.4/5GHz MIMO Access Point or Client Max users in access point mode: WPA: 54, WPA2: 110 Antenna connector: TNC female, supporting one or two antennas
Ethernet Switch	5 port Ethernet switch 10/100 Mbps, auto MDX, M12 connector 4 poles D-coded female
Digital I/O	2 digital inputs, level 0 (not set): 0-4.0 VDC level 1 (set): 7.2-40 VDC 2 digital outputs, 0-60 VDC/1A, maximum switching capacity: 60 W Connector: M12 8 poles A-coded female
Serial (option)	Protocol: 1 x RS232 DCE interface instead of digital I/O port Connector type: M12, 4 poles, D-coded female
USB	USB host interface, Connector type: USB A
Power	Standard - Nominal voltages: 24VDC, 36VDC and 48VDC according to EN50155; Voltage range 12VDC to 60VDC, -15% / +5% Option - Nominal voltages: 72VDC, 96VDC and 110VDC according to EN50155; Voltage range 50VDC to 136VDC, ±10% Max. power consumption: 15W; Compliant with EN50155 class S2/C1: interruptions up to 10ms are tolerated, no batteries; Connector type: M12, 4 poles, A-coded male, Pin1 +, Pin3 -
Environment	EN50155 TX Operational temperature: -40 °C to +70 °C (+85°C for 15 minutes) Storage temperature: -40 °C to +85°C Conformal coated, IP40 with SIM / USB cover mounted, IP52 option
Dimensions, weight	190mm x 86mm x 104mm, ~1'100g
MTBF	117'000h-296'000h depending on model
Railway standards	EN50155, CEN/TS 45545, IEC 60068-2-6:1982; IEC 60068-2-27:1987
EMC Standards	EN55022:2010, EN 61000-6-3:2007+A1:2012, EN 50121-3-2:2006+AC:2008 (Emission) EN55024:2010, EN 50121-3-2:2006+AC:2008 (Immunity)
Type approval	CE according to R&TTE
Order numbers NB3700-W	(contact sales for more models, options or project specific adaptations) WLAN(WiFi) 802.11abgn access point/client router

NetModule AG
Meriedweg 11
3172 Niederwangen
T +41 31 985 25 10
F +41 31 985 25 11
Switzerland

NetModule GmbH
Frankfurter Strasse 92
65760 Eschborn
T +49 6196 77 99 79 0
F +49 6196 77 99 79 9
Germany