NB2700 Mobile

LTE/UMTS/GSM Router with optional GPS Receiver, VoIP-GSM Gateway

net Module

The NB2700 vehicular router provides Internet access using UMTS and LTE as wireless Internet connection. This router also acts as a remote access device for condition monitoring. Two mobile broadband links can be used for load balancing or for seamless switch-over using the Mobile IP protocol.

Users can connect their notebooks, smart phones or any types of WLAN clients to the NB2700. Depending on the router configuration and the user authentication and authorisation state, the traffic will be forwarded to a captive portal, the Internet or a private network. The two mobile broadband links can be used for load balancing or for seamless switch-over using the Mobile IP protocol. Devices not supporting WLAN can be connected via Ethernet. Also further access points may be attached via Ethernet.

The router is qualified to operate within an extended temperature range. Due to its special vibration and shock hardening, the device is an ideal solution for applications in harsh environments. Thanks to the e1 automotive certification, it may be integrated in new vehicles at production time.

Key Features

- Automotive E1 certification
- High Speed LTE 100 Mbps downlink / 50 Mbps uplink
- SIP-to-GSM gateway and vice versa
- MobileIP, OpenVPN, IPsec
- MFF-SIM and standard plug-in SIM
- Digital I/O
- Fail-safe OTA software update

Specifications

Cellular	Multimode LTE, UMTS and GSM module LTE/4G FDD Bands: B1(2100), B2(1900), B3(1800), B5(850), B7(2600), B8(900), B20(800) DC-HSPA+/UMTS/3G: B5(850), B8(900), B2(1900), B1(2100) GSM/2G: B5(850), B9(900), B3(1800), B2(1900) Data rates: LTE max. 100 Mbps downlink / 50 Mbps uplink (DC-HSPA+ 42/5.76) - or - Multimode UMTS and GSM module UMTS/3G: B5(850), B8(900), B2(1900), B1(2100) GSM/2G: B5(850), B9(900), B3(1800), B2(1900) Data rates: max. 14.4 Mbps downlink / 5.76 Mbps uplink Antenna connector: 2x SMA female
Ethernet Switch	5 port Ethernet switch, 10/100 Mbps, auto MDX - Connector type: RJ45
GPS Receiver	GPS receiver with NMEA 0183 data stream, tracking sensitivity -154 dBm (typical) Antenna connector: SMA female, support for active and passive antennas
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: 8 pins of the 13-pin terminal block
Serial	Protocol: RS232 3-wire - Connector type: 3 pins of the 13-pin terminal block
USB	USB Host interface, connector type: USB A
Power	Input voltage: 12V DC to 48V DC (- 25% /+ 20%; eff. 9-57,6V), max. power consumption: 6W
Environment	Temperature range: -25 °C to +70°C IP40 with SIM and USB covers mounted; MTBF 200'000h, with two modules 131'000h
Dimensions	165/190mm x 104mm x 40mm, ca. 600g
Safety Standards	EN60950-1:2006+A11:2009+A1:2010+A12:2011
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 Approvals	CE according to directive 1995/5/EC (R&TTE) E1 according to Regulation No. 10 FCC according to 47 CFR, Part 15
Order Numbers: NB2700-R NB2700-U NB2700-U-G NB2700-L-G	(contact sales for more models, options or project specific adaptations) Wireline router UMTS/GSM UMTS/GSM + GPS LTE/UMTS/GSM + GPS