



NetBox Wireless Router – NB2210

Typical Applications

The NB2210 is a versatile wireless router for M2M applications such as:

- Remote Management
- Vending and Retail (Vending machines, POS, ATM)
- Telemetry and Monitoring
- Security & Surveillance

Hardware Features

The NB2210 hardware features are:

- GPRS / EDGE Class 12
- 1 Ethernet Port
- 1 COM Port
- 2 digital Inputs and 2 digital Outputs
- 1 SIM Socket
- Power Supply 9-28 VDC

NetBox Wireless Router NB2210

The NB2210 connects Ethernet-enabled equipment to the internet over mobile networks (GSM/GPRS/EDGE) and makes your devices and data accessible from wherever you want.

NB2210 provides all standard access router functionality to connect Ethernet enabled remote devices and with the Internet and corporate Intranets. The customer benefits from a transparent full-duplex IP connection. Since the NB2210 can replace several modems this solution is very economical. A unique feature are the 2 digital inputs and 2 digital outputs that let you manage any sensor or actuator, e.g. a door contact or an emergency stop. No additional signaling hardware is needed. With the integrated OpenVPN client build your Virtual Private Networks.

NB2210 is based on the newest Internet and mobile network standards thus keeping your M2M application open and scalable and protecting your investment. The following picture illustrates typical architecture of an M2M solution. Applications include remote management, telemetry, EPOS and surveillance.

NetBox Software

Mobile Connection

SIM and PIN handling
 Mobile connection establishment (dial on demand, permanent)
 Mobile connection monitoring
 Fallback to backup profile or SIM
 Automatic or manual network selection

Networking / VPN / Security

Static Routing
 OpenVPN, IPsec, PPTP
 Network Address Port Translation (NAPT)
 Stateful Firewall, Access Control Lists

Services

DHCP server, DNS proxy server, DNS update agent
 Telnet server, SSH server, Web server
 COM server
 E-mail, SMS, Event management
 Remote Access Server

System Administration

Web Management, Command Line Interface, File configuration,
 Advanced troubleshooting, Easy software update

NetBox Hardware	
GSM Interface	Quad-Band GSM (850 / 900 / 1800 / 1900) Mobile station class B Data transfer via Enhanced Data Rates for GSM Evolution (EDGE): Multi Slot Class (MS-C) 12, Modulation Coding Schemes (MCS) 1-9, Maximum data rate at MCS 9: 236kbps upload and download (4 time slots), max. 5 time slots in total. Data transfer via General Packet Radio Service (GPRS): Multi Slot Class 12, Coding Schemes (CS) 1-4 Maximum data rate at CS 4: 84kbps upload and download (4 time slots), max. 5 time slots in total. Data transfer via Circuit Switched Data (CSD): Up to 14.4 kbit/s, Protocol V.110
Ethernet Interface	1 Ethernet 10/100BaseTX
Serial Interface	1 x RS232 full-featured DCE interface or half-duplex RS485
Digital I/O	2 digital inputs - Maximum input voltage 40 VDC - Minimum voltage for level 1 (set): 7.2 VDC - Maximum voltage for level 0 (not set): 5.6 VDC - Insulation 2500 Vrms Note: A negative input voltage is not recognized. 2 digital outputs - Limiting continuous current: 1 A - Maximum switching voltage 60 VDC, 42 VAC (Vrms) - Maximum switching capacity: 60 W - Insulation 1500 Vrms
Antenna Interface	Impedance: 50 Ohm Plug: SMA female
Power Supply	Input voltage: 9V DC to 28V DC Power consumption: max. 5 W
Environmental Conditions	For indoor use only Temperature range: 0 °C to +55 °C; (-20°C to +70°C storage) Humidity: 5 to 80% (non condensing) Altitude up to 4000m Mains Voltage Ripple less than ±10% of the nominal voltage Overvoltage Category: II Pollution Degree: 2
Dimensions / Weight	154mm x 84mm x 38mm, Weight: 228g
Type Approval	R&TTE, CE (see EC Declaration of Conformity)
Options	
Mounting Adapter	DIN rail mounting adapter, wall mounting adapter
Antennas	Various antennas available, depending on application
M2M Service Packages	see product information "M2M Service Packages"

NetModule AG
 Meriedweg 11
 3172 Niederwangen

T +41 31 985 25 10 Switzerland
 F +41 31 985 25 11

NetModule GmbH
 Alte Landstrasse 21
 85521 Ottobrunn

T +49 89 189 46690 Germany
 F +49 89 189 46699

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