



Connecting Devices and Networks

NetBox Wireless Routers

Typical Applications

NetBox is the preferred communication module for M2M applications such as:

- Transportation, Trams, Buses
- Land line backup or replacement
- Condition Monitoring
- Points of Sale, ATMs
- Security and Surveillance

Hardware Highlights

The unique hardware features of NetBox are:

- UMTS and GSM
- WLAN 802.11 a/b/g
- 1 or 4 Port Ethernet
- Dual SIM
- Extended Temperature
- Mechanical Shock and Vibration resistant
- Integrated GPS Receiver

NetBox Wireless Routers

The NetBox Wireless Routers connect devices and networks using wireless and wireline communication links.

The NetBox Wireless Router family starts with the NB1310, a small and inexpensive UMTS router with one Ethernet port.

The NB2210 adds a serial line and 2 digital inputs and 2 outputs.

The NB2500 is the flagship providing most flexibility. The base platform is an industrial 4 port switch which features an OpenVPN server for small installations. The NB2500 may be ordered with the options GSM/UMTS, WLAN and GPS.

NetBox Software is based on well proven components including an Embedded Linux operating system with a flexible communication framework. For the establishment of Virtual Private Networks (VPN) major technologies are supported: IPsec, OpenVPN and PPTP.

Typical applications are the wireless integration of vehicles such as trams and buses, vending machines, digital signage, CCTV and many more.

	NB1310	NB2210	NB2500
Mobile GSM/UMTS	✓	GSM	Option
SIM Card Slots	1	1	2
WLAN 802.11 a/b/g	Option	-	Option
Ethernet Ports	1	1	4
Serial Ports	-	1	1
Integrated GPS Receiver	Option	-	Option
Digital Inputs / Outputs	-	2/2	-
Extended Temperature Range	-	-	✓

NetBox Software	
Connection Management	Mobile connection establishment (dial on demand, permanent) Maximum availability due to Hardware and Software monitoring with automatic recovery. Connection fallback by backup profile and second SIM Full control over roaming behaviour and network selection WLAN client and access point configuration Support for external DSL or cable modem
Routing	Static Routing Dynamic Routing Least Cost Routing by prioritizing UMTS, WLAN and Ethernet Port based subnetting Port to VPN mapping Network Address Port Translation (NAPT)
Security / Firewall	Multiple Firewalls Stateful Packet Inspection Access Control Lists Port Forwarding Exposed Host
Virtual Private Networking (VPN)	OpenVPN server, client, and bridge Internet Protocol Security (IPsec) Optional Cisco Easy VPN (EzVPN) Point-to-point tunneling protocol (PPTP) for Windows integration CSD Dial-out and Dial-in
Services	DHCP server DNS proxy server Dynamic DNS, e.g dyndns Web, Telnet and SSH server COM server for tunneling serial line over TCP/IP Modbus-RTU to Modbus-TCP Gateway E-mail client for event notification SMS client for alarming and configuration SNMP agent supporting traps and MIB-II NTP Client Unstructured Supplementary Service Data (USSD) GPS server with Google Maps integration
System Administration	Easy to use Web Manager via Browser Command Line Interface (CLI) Batch configuration with text files HTTP management interface Network analysis tools Failsafe remote software update over any communication link

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