MR-250

3G/HSDPA Router

- HSDPA /3G UMTS / EDGE / GPRS Router
- Ethernet port switch
- Dual SIM card operation
- Integrated RS-232 terminal server port
- SNMP management protocol
- Firewall

- IPsec VPN support (5 tunnels)
- VRRP, OSPF, BGP, RIP2 redundant protocols
- DIN Rail, wall or shelf mounted
- −20˚C to +55˚C
- 24 VDC supply
- DES • 3DES • AES • SSL • SSH (optional)

Field of application

HSDPA is the latest and fastest standard for wireless communication that is available today. The MR-250 utilise download speeds of up to 1,8 Mbit/s using HSDPA. Where HSDPA is not yet available MR-250 will automatically fall back to 3G (UMTS), EDGE or GPRS to always provide the fastest available communication technique.

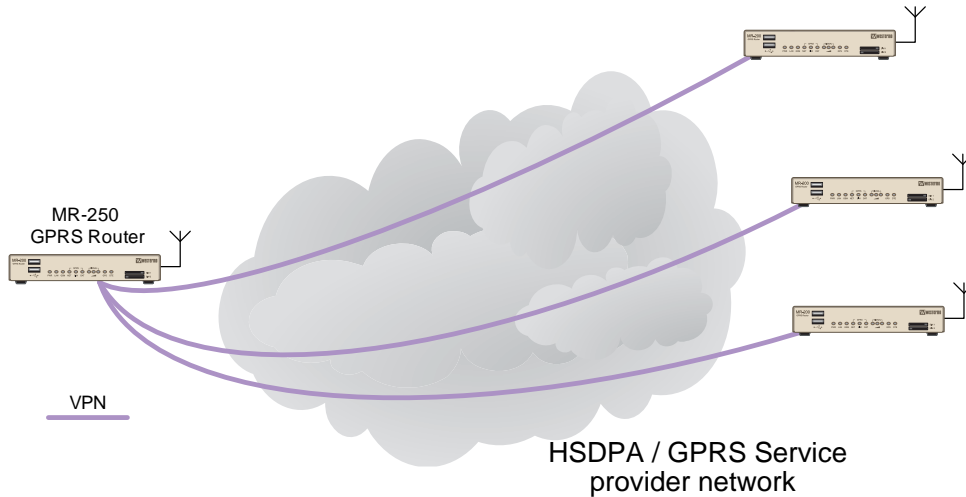The inbuilt RS-232 port can be used to connect legacy serial based equipment such as PLCs, RTUs or IEDs. Devices that support serial protocols such as Modbus RTU, DF1, DNP3, IEC870 etc can be easily connected to the MR-250 via the serial port. The Ethernet interface supports Multicasting (IGMP), VLAN, SNMP, SNTP, FTP, as well as all the standard TCP, UDP and DHCP protocols. Alternatively the internal serial port can be used as a backup connection to the remote site when used in conjunction with a suitable Westermo Modem.

The MR-250 router has an integrated stateful inspection firewall and can support 5 IPSEC VPN (**V**irtual **P**rivate **N**etwork) terminations which can be secured using optional 3DES, AES, SSL, SSH encryption, and MD5, SHA1 key exchange protocols. These features ensure that the remote sites can use the latest security technology to resist denial of service attacks and hacking. The VPN's can be used as
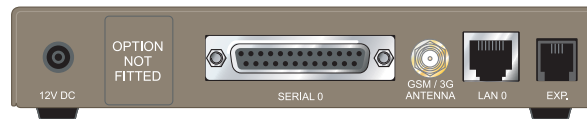
a way of increasing security and to create secure tunnels, running between sites. The VPNs can be used to interconnect the sites effectively replacing the requirement for dedicated leased lines. The VPN tunnels can be terminated on either another MR-250 HSDPA router or on a Westermo DR-250 ADSL router. An optional license for 50 VPN terminations is also available.

The MR-250 can also be used for remote sites access, allowing the user to browse WEB pages, monitor / edit PLCs or access any device connected to the LAN. The MR-250 will allow devices connected on the LAN side to send emails or connect to FTP servers for transferring files. The MR-250 supports VRRP (**V**irtual **R**edundant **R**outer **P**rotocol) allowing multiple physical routers to share a single gateway and provide multiple backup WAN connections. For complex network applications the MR-250 supports OSPF and RIP2. The MR-250 is supplied with a complete mounting kit for DIN rail, wall or shelf mounting. The wide temperature range and 24 VDC supply ensure that the MR-250 can be used in industrial applications without the need for modification or consideration of the environmental conditions.

Application

MR-250
GPRS Router

VPN

HSDPA / GPRS Service
provider network

Interfaces

12V DC | OPTION NOT FITTED | SERIAL 0 | GSM / 3G ANTENNA | LAN 0 | EXP.

Details

Network	GSM GPRS & EDGE 850 / 900 / 1800 / 1900 MHz • UMTS 3G & HSDPA 2100 MHz
Data Interface	Ethernet 10/100 Mbit/s Serial 25 Pin RS-232 Sync / Async
Antenna	GSM – 50 Ohm SMA
Case Material	Pressed steel
Power	12 – 24 VDC 250 mA
Protocols	TCP/IP / PPP / X.25 / XOT / FTP / Sync Tunnelling / SNMP / SMTP
Security	IPSec (5 tunnels Included) DES / 3DES / AES (Encryption is optional)
Network Features	Dynamic DNS and VPN tunnelling to enable use with dynamic network addresses. Detection of network problems and automatic failover to second GSM network. Dial Up (CSD) / Standby APN Remote management including over the air software updates
Management	Web server and command line interface remote and local access SNMP V 2.0c
Temperature	–20°C to +55°C Operating
Size / Weight	160 mm x 130 mm x 32 mm, 500 g
Programming	ScriptBASIC interpreter with user extensible libraries and control over main functions such as SMS, memory, serial ports, or other local devices.