

Industrial M2M/3G Gateway/Router

MRD-305-DIN

- Industrial remote access using the Internet
 - Economic and environmental benefits
 - Access SCADA systems, HMI and PLCs remotely
 - Wireless mobile broadband GPRS / EDGE / 3G / HSPA connection
- Designed for industrial applications
 - Compact casing for easy integration
 - Power input range, 10 to 36VDC
 - Built-in two port Ethernet switch
- Secure resilient Internet access
 - The connection manager monitors and ensures constant connectivity
 - Easy to use firewall prevents unauthorized access
 - Encrypted and secure data transmission with VPN-tunnels
- A wide variety of communication solutions
 - Can act as a gateway to the internet
 - Works very well with M2M type SIM cards
 - Management via easy to use web-interface or SMS



R&TTE
Radio and telecommunications
terminal equipment

EN 61000-6-2
Industrial Immunity

EN 61000-6-3
Residential Emission

EN 61000-6-4
Industrial Emission

Remote access removes boundaries, eliminates the need for time consuming site visits and provides a network infrastructure suitable for today's "always-on" society. The MRD-305-DIN industrial M2M/3G gateway/router uses the Internet to cost effectively inter-connect systems, allowing HMI, PLCs, sensors etc to communicate with each other.

A compact case design with a power input range between 10 to 36 VDC make the unit well suited for industrial applications. Easy integration with other devices is achieved using the built-in two port Ethernet switch.

The stability of mobile connections can be affected by various different parameters and in order to ensure constant connectivity the MRD-series features a connection manager:

The MRD-305-DIN offers network protection from malicious eavesdroppers via encrypted communication tunnels (VPN), and features a simple, yet powerful, packet inspection firewall.

The requirements and needs vary between different types of M2M applications. Sometimes all that is needed is a reliable gateway to the internet as all the intelligence may be located in other devices in the system. Whereas other applications might have simpler devices that need to be securely connected to each other, or a server, via a VPN. Regardless of which type of M2M application you might have the MRD-305-DIN from Westermo can fulfill your communication needs. The unit works very well with any type of SIM card, such as static IP SIM, M2M SIM, or an off-the-shelf SIM in both packet mode or circuit switched data (CSD) mode.

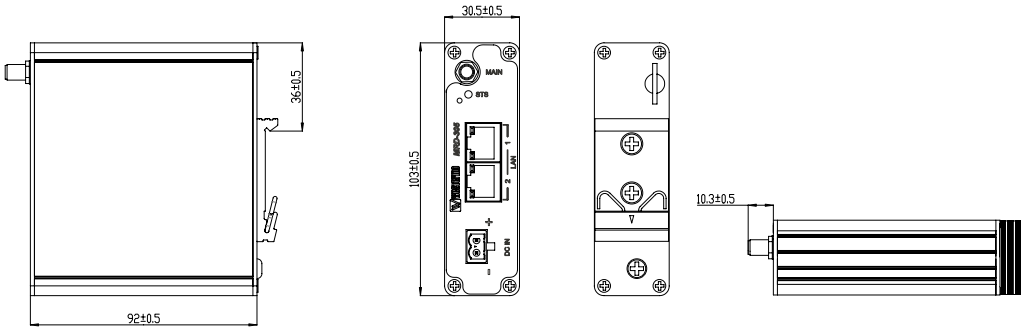
Configuring the unit is very easy with the built-in web-interface, no need for special AT-commands or similar. The device can also provide both management and monitoring via SMS, for example an SMS could be sent to start a VPN.

Ordering Information

Art.no	Description
3623-0030	MRD-305-DIN, GPRS/3G/HSUPA/HSDPA/ Router, DIN-rail mounted
3125-0001	PS-30 Power Supply (Accessories)

Specifications MRD-305-DIN

Dimensions



Dimension W x H x D 31 x 103 x 103 mm

Weight 0.25 kg

Degree of protection IP40

Power

Rated voltage	12 to 24 VDC
Operating voltage	10 to 36 VDC
Rated current	60 mA @ 24 VDC

Interfaces

Ethernet TX	2 x 10 Mbit/s or 100 Mbit/s				
SIM	1 x SIM slot (3 volts SIM supported)				
Mobile/Cellular Technology	Max Connectivity Speed			Frequency (MHz)	
	Downlink	Uplink	Note		
GSM	14.4 kbit/s	14.4 kbit/s	–	850/900/1800/1900	
GPRS	85.6 kbit/s	85.6 kbit/s	Class 12		
EDGE	236.8 kbit/s	236.8 kbit/s	Class 12		
3G UMTS	384 kbit/s	384 kbit/s	–	850/900/1900/2100	
HSDPA	7.2 Mbit/s	–	Cat 8		
HSUPA	–	5.7 Mbit/s	Cat 6		
Antennas	Transmit (TX)	Receive (RX)	Required	Label	Connector
Main Antenna	YES	YES	YES	MAIN	SMA

Temperature

Operating	–40 to +70°C (–40 to +158°F)
Storage & Transport	–40 to +85°C (–40 to +185°F)

Agency approvals and standards compliance

EMC	EN 55024, EN 55024 A1, EN 55024 A2, Electromagnetic compatibility – Immunity IT equipment
	EN 55022, EN 55022 A1, Information technology equipment.
	Radio disturbance characteristics. Limits and methods of measurement
Safety	EC/EN 60950, IT equipment

Protocols and Functionality

Ethernet Technologies	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseTX
Cellular Technologies	Circuit Switched Data mode (CSD) GSM GPRS Multi-slot class 12, mobile station class B, PBCCH support, coding schemes CS 1-4 EDGE Multi-slot class 12 (max 236.8 kbit/s), mobile station class B, modulation and coding scheme MCS 1-9 3G (WCDMA / UMTS) 384 kbit/s downlink / uplink HSDPA up to 7.2 Mbit/s downlink HSUPA up to 5.7 Mbit/s uplink
Layer-2 QoS	IEEE 802.1p Class of Service
IP Routing, Firewall, VPN and Cyber Security	Static IP routing Stateful inspection Firewall / ACL, NAT, Port Forwarding 1 x IPsec VPN, PSK & X.509 1 x OpenVPN / SSL VPN client 1 x WeConnect RADIUS PPP Dial in/Dial out
Manageability	Management tools <ul style="list-style-type: none"> • Web interface (HTTP and HTTPS) • Command Line Interface (CLI) via SSHv2 and TELNET • SNMPv1/v2c/v3 • SMS Control Flexible alarm/event handling system Syslog (log files and remote syslog server) SNTP (NTP client) DHCP client DHCP server DDNS (Dynamic DNS update client)