

605M-D1 GSM / GPRS SERIAL MODEM 605M-R1 GPRS ROUTER

Industrial-strength cellular data networks



The **ELPRO 605M-D1** is a quad-band GSM/GPRS serial data modem for applications requiring industrial-strength performance.

The 605M-D1 can operate in stand-alone mode, with the host device controlling dial-up communications or GPRS connections via AT commands.

605M-D1 Modem

- Quad-band GSM 850/900/1800/1900
- Supports the GSM standard AT command set
- Embedded TCP/IP stack supports PPP, UDP, FTP & email clients
- Built in terminal functionality
- Embedded Python interpreter

When used with the **605M-R1 Router**, the GPRS modem will network automatically without the need of AT control. The Router can handle communications for up to 50 605M-D1 modems. The Router keeps track of dynamic IP addresses allocated by the GPRS Service and eliminates the need to use expensive static IP allocations.

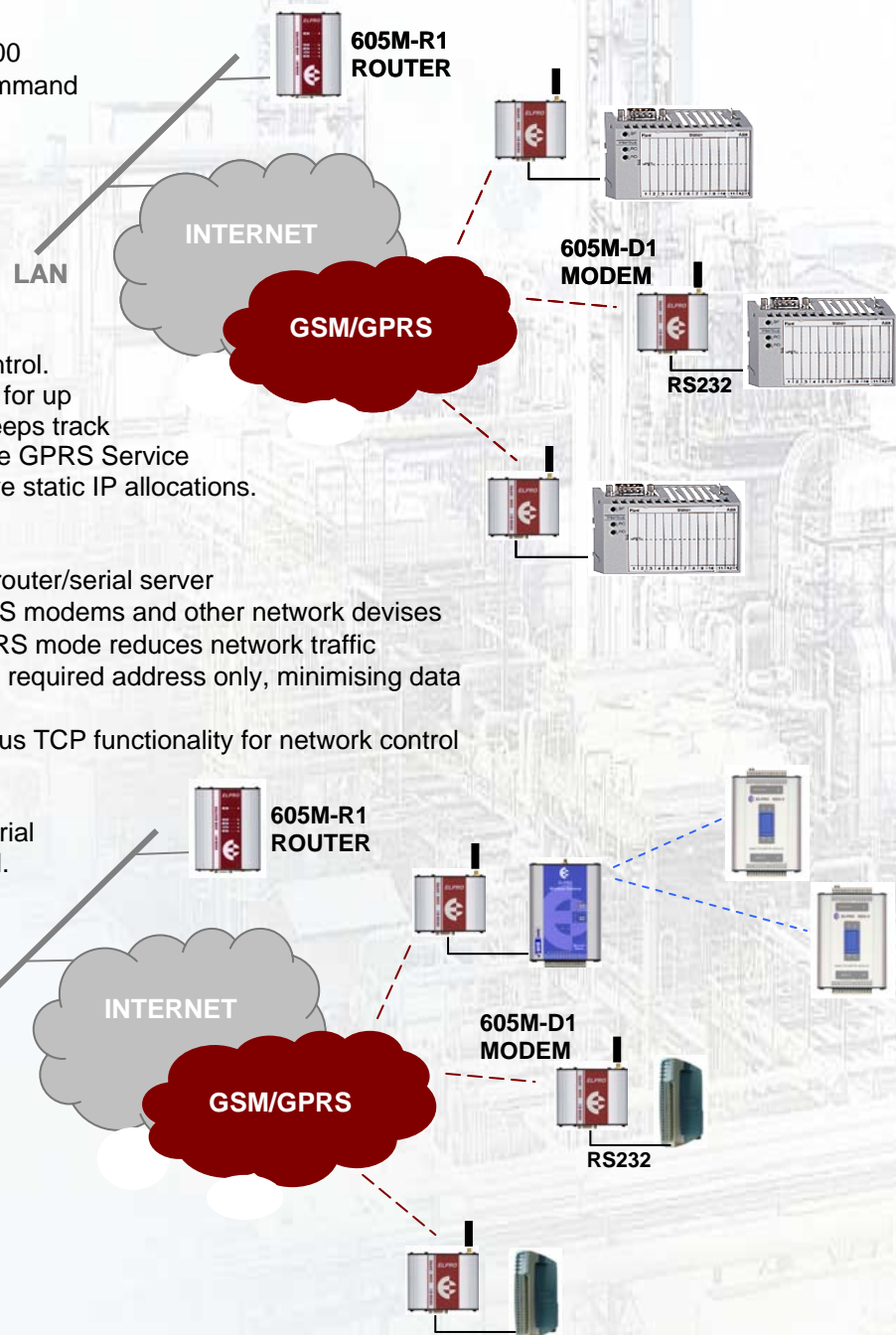
605M-R1 Router

- Industrial-strength Ethernet bridge/router/serial server
- Routes data between multiple GPRS modems and other network devices
- Transparent point-to-multipoint GPRS mode reduces network traffic
- Modbus-aware mode sends data to required address only, minimising data usage charges
- Optional Modbus Master and Modbus TCP functionality for network control
- Dual Redundancy functionality

Both units are housed in compact industrial case designed for mounting to a DIN-rail.

The **ELPRO 605M** products will interface easily with other ELPRO industrial wireless products to form hybrid networks.

For more information on the power of ELPRO's wireless networks, please contact your nearest ELPRO representative.



605M-D1 Modem Specifications

Quad-band EGSM, 2W @ 850 / 900 MHz, 1W @ 1800 / 1900 MHz

SMA female 50 ohm RF connector

Sensitivity -107 dBm @ 850 / 900 MHz, -106 dBm @ 1800 / 1900MHz

RS232 V.24 Serial, D-Type 9 pin connector, 300 to 115,200 bps, autorate from 2,400 to 38,400 bps

On board SIM holder, 3V with real time detection

Temperature -30 to 75 degC, Case, Heavy duty painted aluminium, DIN rail mounting

Power supply 10 - 24 VDC, Power consumption Idle 12mA, Dedicated mode 110mA, GPRS 550mA

GPRS Class 10, Mobile station class B. Coding Scheme 1 to 4. PBCCH support

Circuit switched data up to 14.4Kbps, V.110

AT-command mode and Automatic-connect mode

Embedded TCP/IP stack with access via AT commands
 supports PPP,UDP,FTP & email clients

Configuration via Windows configuration utility

Network signal and jamming detection diagnostics

Status reporting via SMS

605M-R1 Router Specifications

Router / Bridge / Serial Server functions

When connected to any Internet connected LAN, the 605M Router can control GPRS addressing for up to 50 605M Modems

Ethernet LAN connection 10/100 BaseT RJ45 IEEE 802.3

Embedded Protocols TCP/IP, UDP ARP, PPP, ICMP, HTTP, FTP, TFTP, TELNET, MODBUS, TCP

Serial RS232 V.24 DCE, 1.2 to 115.2 kb/s, RS485, 1.2 to 115.2kb/s
 Serial server, PPP, MODBUS TCP to MODBUS conversion

Discrete I/O, one channel, input voltage free contact / output FED
 30VDC 500mA

Temperature -35 to 65 degC, Humidity 99% non-condensing

Power supply 9-30 VDC, Current 240mA (12VDC), 150mA (24DC)

Case, Heavy duty painted aluminium, DIN rail mounting

Operating modes:

Broadcast routing, point to multi-point

Master/Slave routing - broadcast mode from Master, but point-to-point from Slaves, reducing data traffic and charges

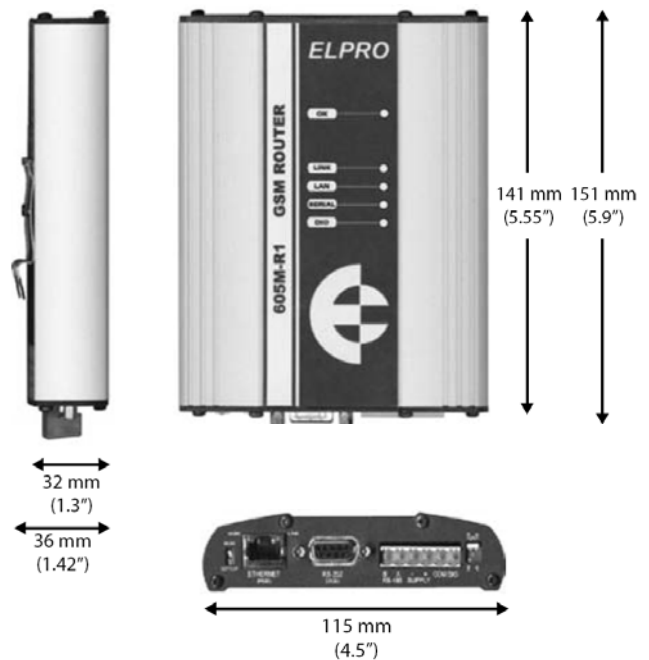
Modbus-aware routing - Router "learns" addressing, and converts messages from Master to point-to-point, further reducing charges

Modbus Master mode - Router acts as Modbus Master, polling Slave devices and transferring messages to other Slaves

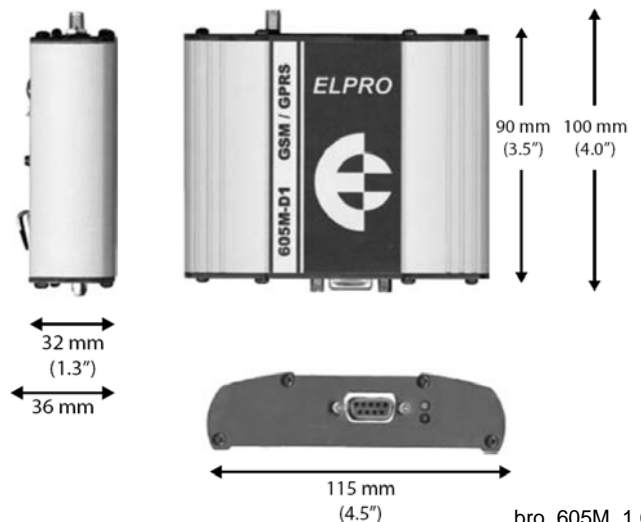
Modbus TCP Server mode - Router can connect to a SCADA or DCS (Modbus Master) and route messages to remote Slaves.

Dual-redundant functionality

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