

## 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
- 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.

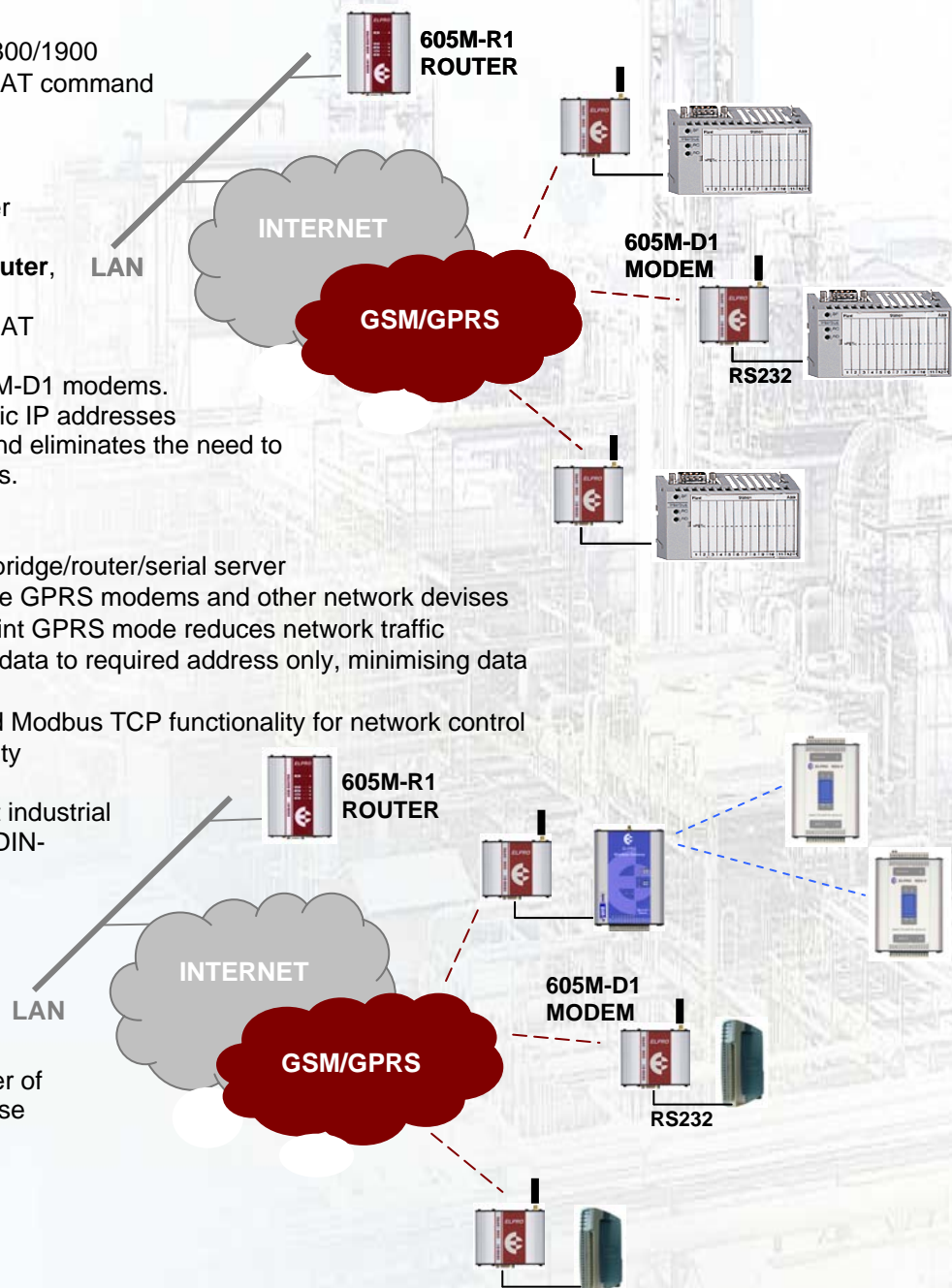
#### 605M-R1 Router

- 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, auto-rate 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

Configuration via Windows configuration utility

Network signal detection diagnostics

### 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

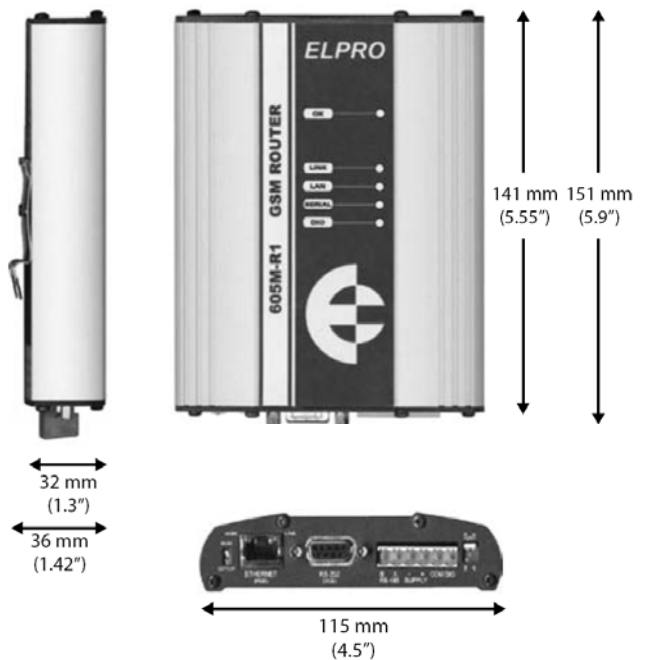
Modbus-aware routing - Router "learns" addressing, and converts messages from Master to point-to-point, further reducing charges

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

### ELPRO 605M-R1



### ELPRO 605M-D1

