



SHM COMMUNICATIONS LTD

Engineering Energy Information

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Application note: Ethernet Gateway Unit (EGU) Requirements

This application note details the necessary network configurations to successfully install and commission an SHM EGU.

Customer Network Specification

- Connection: RJ45 socket located inside the unit (if using cable gland, ensure plug can pass through). Please fit either an RJ45 socket in the vicinity of the EGU or a cable with RJ45 plug fitted.
- Protocol: **10/100 Base-T auto sense**. TCP/IP, UDP
- Ethernet Ports used: You must ensure these are not blocked by firewall / network topology between the EGU and any PC that will be used to the EGU.
- TCP 23** (telnet) used for EGU configuration.
- TCP 4001** used for data (this is SHM default. Can be changed if necessary). The data port is configured into EGU before operation.
- Network security: Communications is **initiated from the PC**, not from the EGU – you must ensure that your network permits this communications between the management PC(s) and the EGU via the data port (4001 by default) and telnet from PC to EGU.
- Addressing: SHM strongly recommends that **static addressing** is used. EGU acts as a server. Stark software can use host name or IP address. If **DHCP** must be used, please ensure that a suitably long lease time is used so that the device stays at the same address.
- Default IP address: 192.168.127.254 / 255.255.255.0
- PC Software needed: Ping, telnet, optionally Moxa Configurator.

Prior to SHM arrival on Site

- F SHM can furnish Host name and MAC address of EGU if necessary
- F Network point in vicinity of EGU, or cable with RJ45 plug – tested for connectivity, and functionally (e.g. ping to a PC on that connection, and ideally an application that can respond to telnet too)
- F Report allocated IP address, data port (4001 default) Subnet Mask and Gateway IP Address to SHM so unit can be pre configured

Supporting documentation

- F SHM Ethernet Gateway EGU1 installation manual. Available at http://www.shmcomms.co.uk/tech_support/tech_manuals.htm in the technical support area. Includes installation and troubleshooting information.
- F The EGU1 uses internally, a device from Moxa Company, detailed manual is available from SHM, or from the Moxa site, www.moxa.com refer to the DE-311 device.