



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.