Manuals+ — User Manuals Simplified.

COOPER Lighting Solutions Greengate EIM Ethernet Interface Module Owner's Manual

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COOPER Lighting Solutions Greengate EIM Ethernet Interface Module

Product Information

The Ethernet Interface Module (EIM) is a secured serial-to-ethernet protocol converter used to allow Greengate software applications to communicate with the Greengate panels. It uses the SSL and SSH protocols to transmit encrypted serial data over Ethernet, enabling data exchange between Keeper Enterprise, Greengate panels' programming software application, and the Greengate panels.

Manufacturer: MOXA NPort 6150 Series
Mechanical Size: 3.54 x 3.95 x 1.1 (90 mm x 100.4 mm x 29 mm)
Mounting: Desktop, DIN-rail mounting (with optional kit), Wall mounting Interfaces: Ethernet Configuration Options (Web Console, Windows Utility, Device Search Utility, MCC Tool, Serial Console, Telnet/SSH Console), Time Management (SNTP Client), Encryption (HTTPS, AES-128, AES-256, HMAC, RSA-1024, SHA-1, SHA-256, SHA-384), Security Protocols (HTTPS, SNMPv3, SSHv2), Serial Configuration Options (Serial Standards: RS-232, RS-422, RS-485; Secure Operation Modes: Reverse SSH, Secure Pair Connection, Secure Real COM, Secure TCP Client, Secure TCP Server, SSH; Standard Operation Modes: Disabled, Ethernet Modem, Pair Connection, PPP, Printer, Real COM, Reverse Telnet, RFC2217, TCP Client, TCP Server, Terminal, UDP;
Baudrate: 50 bps to 921.6 kbps)
Warranty: Five year warranty standard

Product Usage Instructions

1. Mounting:
   - For desktop mounting, place the Ethernet Interface Module on a flat surface.
   - For DIN-rail mounting, purchase a DINRAIL mounting kit from a MOXA supplier and follow the instructions provided.
   - For wall mounting, attach the Ethernet Interface Module to the desired location using appropriate screws and mounting brackets.
2. Connectivity:
   - Connect the Ethernet Interface Module to the ControlKeeper TouchScreen, ControlKeeper 4, ControlKeeper 4A, ControlKeeper 2, LiteKeeper 16 & 32, LiteKeeper 8, or LiteKeeper 4 lighting control panels using compatible cables.
   - Ensure that the serial standards (RS-232, RS-422, RS-485) are properly configured based on the

requirements of the connected devices.

3. Configuration:
   - Access the Ethernet Interface Module's configuration options through the Web Console (HTTP/HTTPS), Windows Utility, Device Search Utility (DSU), MCC Tool, Serial Console, or Telnet/SSH Console.
   - Configure the time management settings using the SNTP Client.
   - Enable encryption and select the desired encryption protocols for secure data transmission.
   - Choose the appropriate security protocols (HTTPS, SNMPv3, SSHv2) based on your requirements.
   - Configure the serial settings including operation modes (Secure Operation Modes: Reverse SSH, Secure Pair Connection, Secure Real COM, Secure TCP Client, Secure TCP Server, SSH; Standard Operation Modes: Disabled, Ethernet Modem, Pair Connection, PPP, Printer, Real COM, Reverse Telnet, RFC2217, TCP Client, TCP Server, Terminal, UDP) and baudrate (50 bps to 921.6 kbps).

Note: Specifications and dimensions are subject to change without notice. For any further assistance or troubleshooting, refer to the product warranty or contact the manufacturer.

Greengate
EIM – Ethernet Interface Module

A secured serial-to-ethernet protocol converter used to allow Greengate software applications to communicate with the Greengate panels.

Typical Applications

- Education
- Healthcare
- Hospitality
- Office
- Retail

Product Certification

Overview

The Ethernet Interface Module (EIM) use the SSL and SSH protocols to transmit encrypted serial data over Ethernet. This device enables data exchange between Keeper Enterprise, Greengate panels' programming software application, and the Greengate panels.

Product Features & Benefits

- Interface from TCP/IP to RS-232 – Provides data exchange between Keeper Enterprise and Greengate panels and allows specialist to program the panels.
- TLS and SSH Protocols support – Encrypting data before sending it over the network
- Intuitive web-based configuration page – Allows installer to easily customize the devices settings based on the network requirements

- 120 VAC wall transformer – External power source to power the EIM

Order Information

This is an accessory for the ControlKeeper TouchScreen, ControlKeeper 4, ControlKeeper 4A, ControlKeeper 2, LiteKeeper 16 & 32, LiteKeeper 8 and LiteKeeper 4 lighting control panels. When ordering, specify the Ethernet Interface Module (EIM) as a separate system accessory.

Catalog Number

Catalog Number	Description
EIM	Ethernet Interface Module

Product Specifications

Manufacturer: MOXA NPort 6150 Series

Mechanical

- **Size**: 3.54" x 3.95" x 1.1" (90 mm x 100.4 mm x 29 mm)
- **Mounting**: Desktop, DIN-rail mounting (with optional kit), Wall mounting.
  Note: DIN-RAIL mounting kits to be purchased directly from a MOXA supplier

Interfaces:

- 1 x RJ45 for Ethernet (10/100Base Tx)
- 1 X DB9 male for Serial communication

Electrical

- 1 x Power adapter provided.
- Input Current: 12-48 Vdc, 285 mA
- Input Voltage: 12 to 48 VDC

Environmental:

- Operating temperature: 32°F to 104°F (0°C to 40°C)
- Storage temperature: -40 to 75°C (-40 to 167°F)
- Ambient Relative Humidity: 5 to 95% (non-condensing)
- For indoor use only

Ethernet Configuration Options:

- Configuration options: Web Console (HTTP/HTTPS), Windows Utility, Device Search Utility (DSU), MCC Tool, Serial Console, Telnet/SSH Console

- Time Management: SNTP Client
- Encryption: HTTPS, AES-128, AES-256, HMAC, RSA-1024, SHA-1, SHA-256, SHA-384
- Security Protocols: HTTPS (TLS 1.2), SNMPv3, SSHv2

Serial Configuration options:

- Serial Standards: RS-232, RS-422, RS-485
- Secure Operation Modes: Reverse SSH, Secure Pair Connection, Secure Real COM, Secure TCP Client, Secure TCP Server, SSH
- Standard Operation Modes: Disabled, Ethernet Modem, Pair Connection, PPP, Printer, Real COM, Reverse Telnet, RFC2217, TCP Client, TCP Server, Terminal, UDP Baudrate: 50 bps to 921.6 kbps (supports non-standard baudrates)
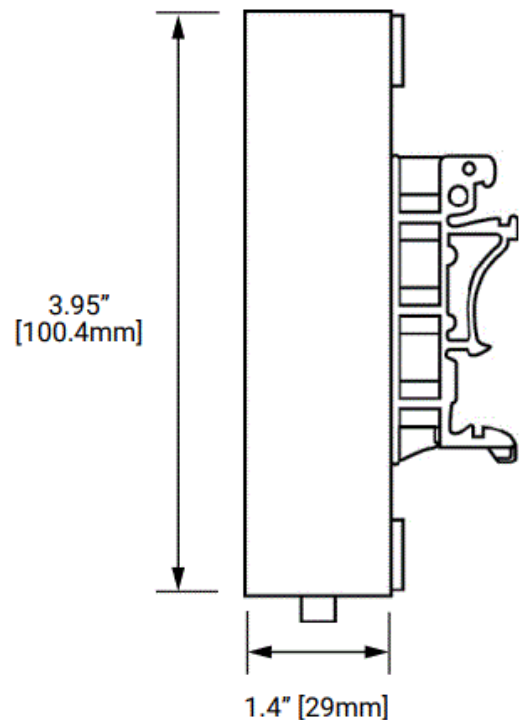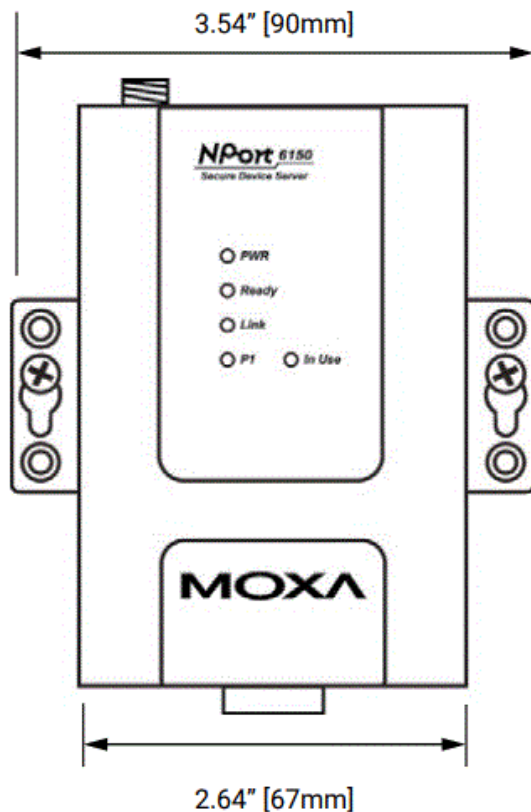
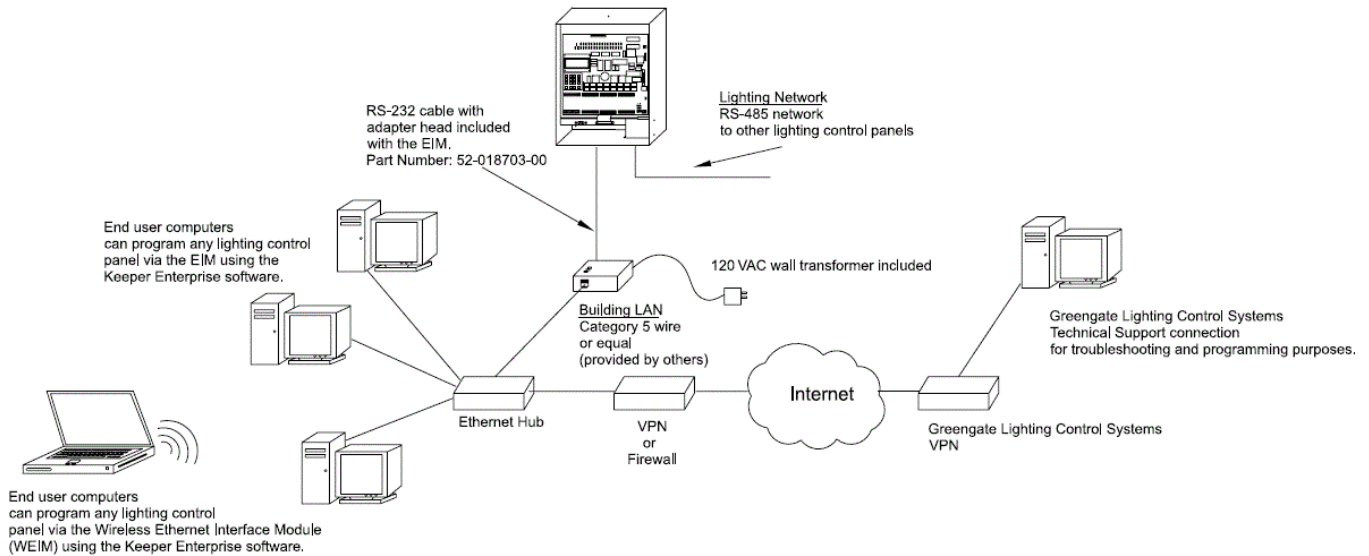**Standards/Ratings**

- cULus
- FCC

Warranty

Five-year warranty standard

Dimensional Details

Wiring Diagrams

The Ethernet Interface Module (EIM) permits the lighting control network to be accessed directly from the building LAN. This will permit the end user to monitor and program the lighting control panels from any PC in the building with the Keeper Enterprise software installed. The EIM also permits Greengate Lighting Control Systems to connect to the lighting control panels with the permission of the end user for programming and troubleshooting purposes.

1. IP address and device configuration is supplied by the owner (Building IT department)
2. The EIM may be connected to any lighting control panel on the network
3. 100% secure connection through the end users Firewall using the following technologies:

   A.) VPN connection (lock the connection down to only a few PCs) provides encryption as well as the ability to specify the computers that may connect to the unit.

   B.) Up to 256-bit encryption without a VPN connection. If two Secure EIMs are installed up to 256-bit encryption is available for communications.

Control Systems

- Greengate

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Specifications and dimensions subject to change without notice.

Documents / Resources

COOPER Lighting Solutions Greengate EIM Ethernet Interface Module [pdf] Owner's Manual
ControlKeeper TouchScreen, ControlKeeper 4, ControlKeeper 4A, ControlKeeper 2, LiteKeeper 16 32, LiteKeeper 8, LiteKeeper 4, Greengate, Greengate EIM Ethernet Interface Module, EIM Ethernet Interface Module, Ethernet Interface Module, Interface Module, Module

References

- ⟲ **Commercial Lighting Company | Cooper Lighting Solutions**
- ⟲ **Building Lighting - Control Panels - Greengate | Cooper Lighting Solutions**
- ⟲ **Legal | Cooper Lighting Solutions**