

Serial Redirector Function Provided

The MGate™ EIP3000 series products have a serial redirector function that allows additional options for DF1 network integration. The serial redirector function allows the commands of a serial master (command initiator) to be redirected to the serial slave (command executor) on another port. In addition, a serial master can operate simultaneously

with EtherNet/IP Clients or other serial masters without altering the DF1 architecture or software. Using the serial redirector function, EIP3000 gateways can establish redundant backup control or Ethernet monitoring of DF1 networks that were originally designed for a single serial master.

ProCOM—Virtual Serial Port for Multiple DF1 and EtherNet/IP Device Communication

Each MGate™ EIP3000 gateway supports a virtual serial port. A remote PC uses a Moxa-provided Real COM or TTY driver to connect to the EIP3000's virtual serial port. RSLinx and SCADA systems can use the virtual COM port to communicate with an EIP3000 gateway. The

virtual serial port function gives RSLinx or some SCADA systems the capability to connect to multiple DF1 and EtherNet/IP devices through a protocol gateway.

Pull high/low Resistors and Terminator Selection

When using termination resistors to prevent serial signal reflection, it is important to set the pull high/low resistors correctly so that the electrical signal is not corrupted. Since no set of resistor values is

universally compatible with all environments, the EIP3000 has DIP switches on the bottom panel for setting the termination and pull high/low resistor values.

Built-in Isolation

Complex device networks that incorporate high amperage devices could be subject to electrical signal distortion from electrical

discharges, magnetic noise, or common mode transients. MGate™ series products solve this problem by using built-in optical isolation.

Specifications

Ethernet Interface

Number of Ports: 2 (sharing 1 IP)

Speed: 10/100 Mbps, Auto MDI/MDIX

Connector: 8-pin RJ45

Magnetic Isolation Protection: 1.5 KV built-in

Serial Interface

Number of Ports:

EIP3170/3170I: 1

EIP3270/3270I: 2

Serial Standards: RS-232/422, software selectable

Connectors:

EIP3170/3170I: DB9 male for RS-232, terminal block for RS-422

EIP3270/3270I: DB9 male x 2

ESD Protection: 15 KV for all signals

Serial Communication Parameters

Data Bits: 7, 8

Stop Bits: 1, 2

Parity: None, Even, Odd

Flow Control: RTS/CTS, DTR/DSR

Baudrate: 50 bps to 921.6 Kbps

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

RS-422: Tx+, Tx-, Rx+, Rx-, GND

Ethernet Protocol: CIP (PCCC) on EtherNet/IP

Serial Protocol: DF1 Full-duplex

Software

Driver Support:

Windows Real COM Drivers: Windows 95, 98, ME, NT, 2000, XP x86/x64, 2003 x86/x64, Vista x86/x64, 2008 x86/x64, Embedded CE 5.0/6.0, XP Embedded

Fixed TTY Drivers: SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i

Linux Real TTY Drivers: 2.4.x, 2.6.x

Physical Characteristics

Housing: Plastic

Dimensions:

Without ears: 29 x 89.2 x 118.5 mm (1.14 x 3.51 x 4.67 in)

With ears extended: 29 x 89.2 x 124.5 mm (1.14 x 3.51 x 4.90 in)

Environmental Limits

Operating Temperature:

Standard Models: 0 to 55°C (32 to 131°F)

Wide Temp. Models: -40 to 75°C (-40 to 167°F)

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 85°C (-4 to 185°F)

Power Requirements

Input Voltage: 12 to 48 VDC

Power Connector: Terminal block

Regulatory Approvals

EMC: CE (EN55022 Class A and EN55024), FCC Part 15 Subpart B Class A

Safety: UL-508, LVD (EN60950-1)

Hazardous Location:

UL/cUL Class 1 Division 2 Groups A, B, C, D

ATEX II 3 G (Zone 2) (Pending)

Shock: IEC60068-2-27

Freefall: IEC60068-2-23

Vibration: IEC60068-2-6

EMS:

EN61000-4-2 (ESD): Level 3

EN61000-4-3 (RS): Level 3

EN61000-4-4 (EFT): Level 4

EN61000-4-5 (Surge): Level 3

EN61000-4-6 (CS): Level 3

EN61000-4-8: Passed

EN61000-4-11: Passed

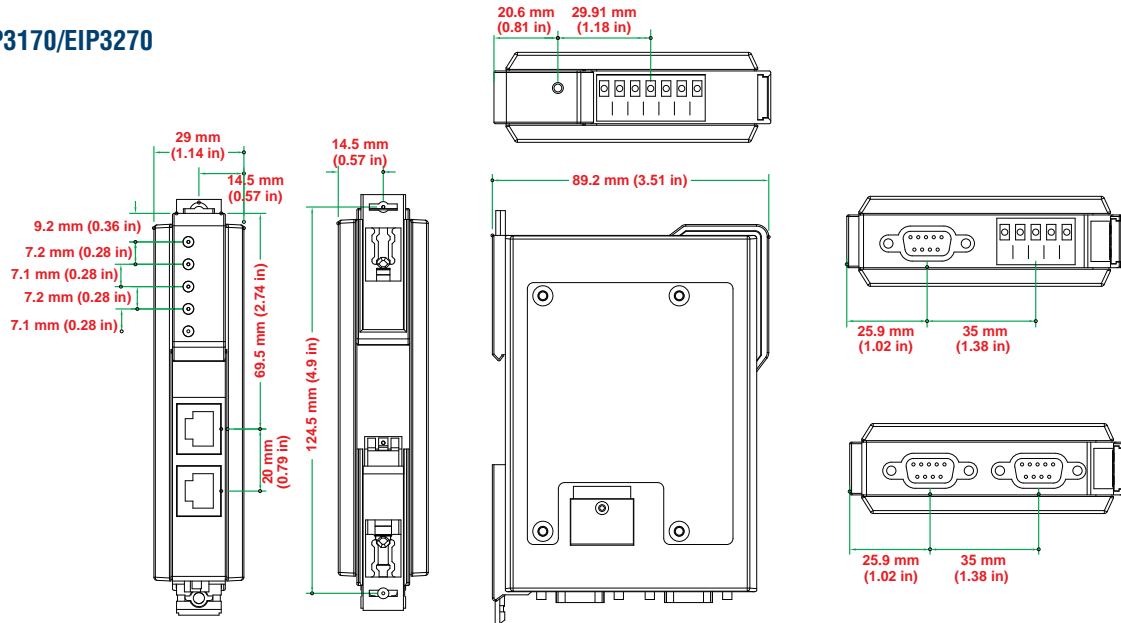
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

EIP3170/EIP3270



Ordering Information

Available Models

- MGate™ EIP3170:** 1-port DF1 to EtherNet/IP gateway, 0 to 55°C operating temperature
- MGate™ EIP3170I:** 1-port DF1 to EtherNet/IP gateway with 2 KV isolation, 0 to 55°C operating temperature
- MGate™ EIP3270:** 2-port DF1 to EtherNet/IP gateway, 0 to 55°C operating temperature
- MGate™ EIP3270I:** 2-port DF1 to EtherNet/IP gateway with 2 KV isolation, 0 to 55°C operating temperature
- MGate™ EIP3170-T:** 1-port DF1 to EtherNet/IP gateway, -40 to 75°C operating temperature
- MGate™ EIP3170I-T:** 1-port DF1 to EtherNet/IP gateway with 2 KV isolation, -40 to 75°C operating temperature
- MGate™ EIP3270-T:** 2-port DF1 to EtherNet/IP gateway, -40 to 75°C operating temperature
- MGate™ EIP3270I-T:** 2-port DF1 to EtherNet/IP gateway with 2 KV isolation, -40 to 75°C operating temperature

Optional Accessories (can be purchased separately)

- DR-45-24:** 24 VDC DIN-rail power supply (2 A @ 45 W) with universal 85 to 264 VAC input
- DR-75-24:** 24 VDC DIN-rail power supply (3.2 A @ 75 W) with universal 85 to 264 VAC input
- DR-120-24:** 24 VDC DIN-rail power supply (5 A @ 120 W) with switch for choosing 88 to 132 VAC, or 176 to 264 VAC input

Package Checklist

- 1 MGate™ EIP3170 or EIP3170I or EIP3270 or EIP3270I EtherNet/IP gateway
- Quick installation guide (printed)
- Document and Software CD
- Warranty Card