

TECHNICAL DATA

XM-500 ETHERNET GATEWAY MODULE

The award winning, Allen-Bradley XM® series is the world's most comprehensive family of distributed machine condition monitoring and protection devices.

With the XM series discreet or networked monitoring solutions can be quickly and cost effectively deployed for steam, gas and hydro turbines, motors, compressors, pumps, fans, blowers and most other rotating machinery.

The XM-500 Ethernet Gateway Module provides a powerful bridge between an XM® DeviceNet network and Ethernet. The Gateway can serve as a simple passive bridge for host computer access to data and configuration information, or it can serve as an active Master / Scanner for the network.

As a passive bridge the XM-500 allows transparent access to network devices. This allows host processes such as Emonitor™, RSMACC Enterprise Online and RSLinx OPC Server the most efficient and least intrusive method possible for accessing live, historical and configuration data from any network module. As a passive device the Ethernet side of the module provides a standard TCP/IP interface and auto baud support of both 10 and 100 BaseT networks.

When applied as a Network Master the XM-500 provides complete DeviceNet Master functionality and support for a fully populated DeviceNet network of up to 63 devices. In this mode the module supports the EtherNet/IP protocol for access of up to 8kB of multiplexed scanned data. Note: Multiplexed access reduces performance capability. The XM-500 is not recommended for EtherNet/IP access when high performance throughput is required.

SIMPLE DEVICENET TO ETHERNET BRIDGE



The XM-500 Ethernet Gateway Module supports Explicit Messaging of DeviceNet devices from Ethernet hosts, seamless Control and Information Protocol (CIP) integration for support of other NetLinx™ products, and is fully supported by Rockwell Software's RSLinx software. And when configured as a master, the module can provide Automatic Device Replacement (ADR) functionality to connected DeviceNet devices.

SPECIFICATIONS

Communications

DeviceNet:

- Standard DeviceNet protocol for all functions
- Available Electronic Data Sheet (EDS) file provides support for most DeviceNet compliant systems
- Baud rate: 125kb, 250kb or 500 kb
- Standard DeviceNet Master Scanner functionality supporting up to 63 XM slave devices
- Supports Explicit Messaging, Polling, Change of State (COS), and Bit Strobe I/O messaging
- Supports Automatic Device Replacement (ADR), including:
 - Automatic Address Recovery
 - Automatic Configuration Recovery
- 65k bytes of ADR space
- 8k bytes of Input table space (no Output table)
- Event logging captures time stamped records of changes in alarm and relay status, and changes to module configurations

Ethernet:

- 10/100 BaseT Auto switching
- UDP and TCP/IP protocol stack
- IT protocols: SMTP, FTP and HTTP
- DHCP/BootP and ARP support for IP address configuration
- Supports the Ethernet/IP control system protocol via multiplexed data access
- Up to 64 simultaneous connections EtherNet/IP connections

Indicators

7 LEDs:

- Gateway Status - red/orange/green
- DeviceNet Module Status - red/green
- DeviceNet Network Status - red/green
- Ethernet Activity – green
- Ethernet Link – green
- Ethernet Network Status - red/green
- Ethernet Module Status - red/green

Software

- RSLinx™ version 2.40 or later
- RSNetWorx for DeviceNet version 3.00 or later
- RSMACC Enterprise Online
- XM Emonitor Gateway

Non-Volatile Configuration

The module configuration is retained in nonvolatile memory from where it is read upon power up.

Power

Module: 7 - 32Vdc

Consumption: 130 - 140mA @ 24Vdc

Heat Production:

Max: 7 Watts (24 BTU/hr)

Typical: 4 Watts (14 BTU/hr)

Environmental

Temperature

- Operating: 0 to +70°C (32 to 158°F)
- Storage: -25 to +85°C (-13 to 185°F)

Relative Humidity: 95% non-condensing

Physical

Dimensions

- Height: 2.08in (52.7mm)
- Width: 4.3in (109.2mm)
- Depth: 4.96in (126mm)
(+connectors 0.21 in / 5.2 mm)

Weight: 14.9 ounces (422 grams)

Approvals

CE, C-Tick, ODVA,
CSA Class I, Div 2, Groups A B C D,
UL, EEX

HOW TO ORDER

The XM-500 Ethernet Gateway Module can be ordered by contacting your local authorized Allen-Bradley distributor or Rockwell Automation sales office.

Catalog Number	Description
1440-GWEN2DN	XM-500 Ethernet Gateway

www.rockwellautomation.com

Power, Control and Information Solutions

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