3500/91M EGD Comm Gateway Module
Datasheet

Description

The 3500/91M EGD (Ethernet Global Data) Communication Gateway modules provides comprehensive communication capabilities of 3500 rack-monitored values and status. This Ethernet network path provides information with response times suitable for controller applications. Using the 3500/91M EGD Gateway provides for integration with EGD protocol compatible controllers (e.g. GE Mark* VIe controllers, etc).

Supported protocols include:

- EGD (version 2.01)
- Ethernet UDP/IP

The Ethernet standards supported by the 3500/91M I/O module is IEEE802.3 for 10BASE-T and 100BASE-TX (twisted pair).

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Specifications

Inputs

Power	
Power Consumption	7.4 watts typical
Data Types	
Producer Exchanges	• Rack, Module, Channel and Data value status • Data values (float) • Setpoints (float)
Consumer Exchanges	• Group Reset • Group Trip Multiply • Group Alarm Inhibit • Group Special Alarm Inhibit

Outputs

OK LED:	Front panel indicates when the 3500/91M is operating properly.
TX/RX LED:	Front panel indicates when the 3500/91M is communicating with other modules in the 3500 rack.

Protocols

EGD	Version 2.01
Ethernet	
Ethernet	IEEE 802.3 CSMA/CD
Communication Link:	Ethernet, 10Mbps and 100-Mbps, and conforms to IEEE 802.3 and IEEE 802.3u

Protocol:	Ethernet UDP/IP frame
Connection:	RJ-45 jack for Ethernet 10BASE-T/100BASE-TX I/O Module

Environmental Limits

Operating Temperature:	-30 ºC to +65 ºC (-22 ºF to +150 ºF).
Storage Temperature:	-40 ºC to +85 ºC (-40 ºF to +185 ºF).
Humidity:	95%, non-condensing.

Physical

Main Module	
Dimensions (Height x Width x Depth):	241.3 mm x 24.4 mm x 241.8 mm (9.50 in x 0.96 in x 9.52 in)
Weight:	0.79 kg (1.75 lb.)
I/O Module	
Dimensions (Height x Width x Depth):	241.3 mm x 24.4 mm x 99.1 mm (9.50 in x 0.96 in x 3.90 in)
Weight:	0.39 kg (0.85 lb.)

Rack Space Requirements

Monitor Module	1 full-height front slot
I/O Module	1 full-height rear slot

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DNV GL Rules for Classification – Ships, Offshore Units, and High Speed and Light Craft

Compliance and Certifications

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

EMC

European Community Directive:

EMC Directive 2014/30/EU

Standards:

EN 61000-6-2 Immunity for Industrial Environments

EN 61000-6-4 Emissions for Industrial Environments

Electrical Safety

European Community Directive:

LV Directive 2014/35/EU

Standards:

EN 61010-1

RoHS

European Community Directive:

RoHS Directive 2011/65/EU

Maritime

ABS - Marine and Offshore Applications

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Hazardous Area Approvals

> For the detailed listing of country and product specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756) available from Bently.com.

CSA/NRTL/C

Class I, Zone 2: AEx/Ex nA nC ic IIC T4 Gc;
Class I, Zone 2: AEx/Ex ec nC ic IIC T4 Gc;
Class I, Division 2, Groups A, B, C, and D;

T4 @ Ta= -20°C to +65°C (-4°F to +149°F)
When installed per drawing 149243 or 149244.

ATEX/IECEx

⟨Ex⟩ II 3 G
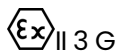
Ex nA nC ic IIC T4 Gc
Ex ec nC ic IIC T4 Gc

T4 @ Ta= -20°C to +65°C
(-4°F to +149°F)
When installed per drawing 149243 or 149244.

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Ordering Considerations

- Version 3.70 or higher of 3500 Rack Configuration Software is required.
- The 3500/91M EGD requires a 3500/22M TDI to communicate with monitor modules.
- Version 1.20 or higher of TDI (3500/22M) firmware is required.
- Only 1 EGD per rack is allowed.
- For consumed exchange support, version 2.21 or higher of 4-Channel firmware is required.

Ordering Options

3500/91M EGD Communication Gateway

3500/91M-AXX-BXX

1. I/O Module Type
   a. Ethernet 10BASE-T/100BASE-TX I/O Module
2. Agency Approval Option
   0 None
   a. CSA/NRTL/C
   b. CSA/ATEX/IECEx

Additional Options

Spares	
190782-01	3500/91M EGD Gateway Module
190798-01	Ethernet 10BASE-T/100BASE-TX I/O Module
Documentation	
164466	Network accessories datasheet
Bently _ Manuals	International Technical Documentation DVD

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Graphs and Figures
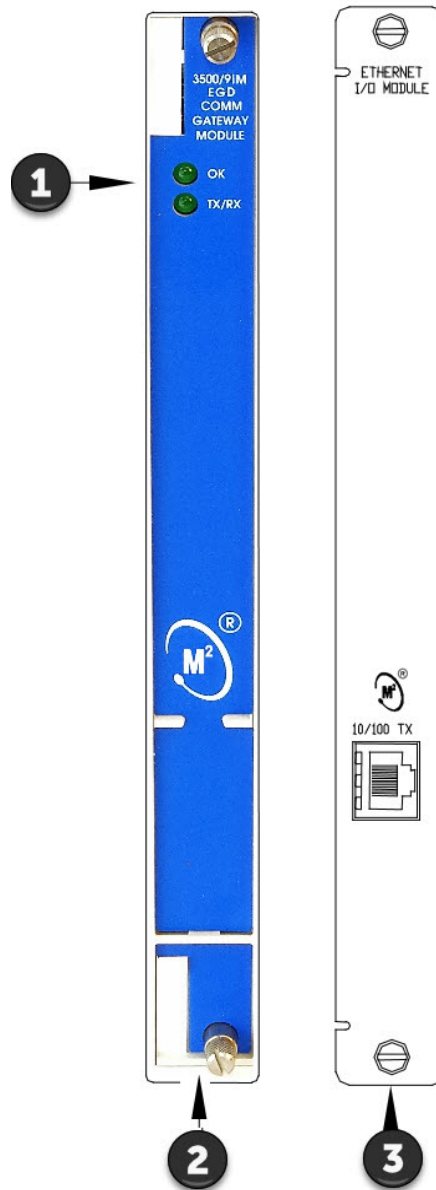
1. Status LEDs
2. EGD Comm Gateway Module
3. Ethernet 10BASE-T/100BASE-TX I/O Module

Figure 1: Front and rear views of the EGD Communication Gateway

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