

# 3500/91M EGD Comm Gateway Module

## Datasheet

Bently Nevada Machinery Condition Monitoring

126M4407 Rev. A



### 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\* V1e 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).



## Specifications

### Inputs

Power	
Power Consumption	7.4 watts typical
Data Types	
Producer Exchanges	<ul style="list-style-type: none"> <li>Rack, Module, Channel and Data value status</li> <li>Data values (float)</li> <li>Setpoints (float)</li> </ul>
Consumer Exchanges	<ul style="list-style-type: none"> <li>Group Reset</li> <li>Group Trip Multiply</li> <li>Group Alarm Inhibit</li> <li>Group Special Alarm Inhibit</li> </ul>

### 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 °C to +65 °C (-22 °F to +150 °F).
Storage Temperature:	-40 °C to +85 °C (-40 °F to +185 °F).
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

## 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

## Hazardous Area Approvals



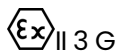
For the detailed listing of country and product specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756) available from [Bentley.com](https://www.bentley.com).

### 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 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.

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## Ordering Options

### 3500/91M EGD Communication Gateway

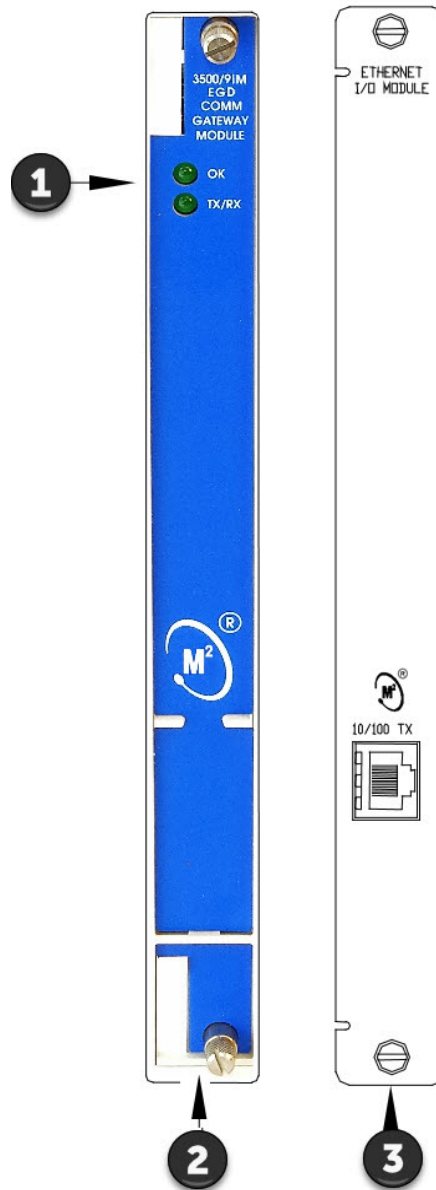
#### 3500/91M-AXX-BXX

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

## 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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