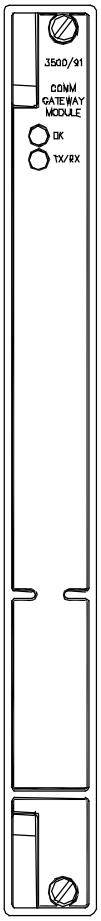
3500/91 EGD Communication Gateway Module

Bently Nevada* Asset Condition Monitoring



Description

The 3500/91 EGD (Ethernet Global Data) Communication Gateway modules provide 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 3500/91 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 3500/91 I/O modules are IEEE802.3 for 10BASE-T and 100BASE-TX (twisted pair), and IEEE 802.3u for 100BASE-FX (fiber optic).

imagination at work

Specifications

Inputs

Power Consumption:

7.4 watts typical

Data Types:

Producer Exchanges

- Rack, Module, Channel and Data value Status
- Data values (float)
- Setpoints (float)

Consumer Exchange

- Group Reset
- Group Trip Multiply
- Group Alarm Inhibit
- Group Special Alarm Inhibit

Outputs

Front Panel LED's:

OK LED:

Indicates when the 3500/91 is operating properly.

TX/RX LED:

Indicates when the 3500/91 is communicating with other modules in the 3500 rack.

Protocols

EGD

Version 2.01

Ethernet

IEEE 802.3 CSMA/CD

Communication Link:

Ethernet, 10-Mbps and 100-Mbps, and conforms to IEEE 802.3 and IEEE802.3u

Protocol:

Ethernet UDP/IP frame

Connection:

RJ-45 jack for the Ethernet 10BASE-T/100BASE-TX I/O Module

MT-RJ jack for the Ethernet 100BASE-FX 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%, noncondensing

Compliance and Certifications

EMC

Standards:
EN 61000-6-2 Immunity for Industrial Environments
EN 55011/CISPR 11 ISM Equipment

EN 61000-6-4 Emissions for Industrial Environments

European Community Directives:
EMC Directive 2004/108/EC

Electrical Safety

Standards:
EN 61010-1

European Community Directives:
2006/95/EC Low Voltage

Hazardous Approvals

North American

Approval Option (01)

When used with I/O module ordering options with internal barriers:

Ex nC [ia] IIC: Class 1, Div 1

AEx nC [ia] IIC: Class 1, Zone 2/0

Groups A, B, C, D

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

per drawing 138547

When used with I/O Module ordering options without internal barriers:

Ex nC [L] IIC: Class 1, Div 2

AEx nC IIC: Class 1, Div 2

Groups A, B, C, D

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

per drawing 149243

ATEX:

Approval Option (02)

For ATEX agency approval ordering options with internal barriers:

 II 3 / (1) G

Ex nc[ia Ga] IIC T4 Gc

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

For ATEX agency approval ordering options without internal barriers:

 II 3 / (3) G

Ex nC[nL Gc] IIC T4 Gc

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

Brazil

Approval Option (02)

For Selected Ordering Options with ATEX/North American agency approvals:

BR-Ex nC [nL] IIC T4

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

South Africa

Approval Option (02)

For Selected Ordering Options with ATEX/North American agency approvals:

Ex nCAL [ia] IIC T4

Ex nCAL [L] IIC T4

T4 @ Ta = -20 °C to +65 °C

(-4 °F to +150 °F)

Note: When used with Internal Barrier I/O Module, refer to specification sheet 141495-01 for approvals information.

For further certification and approvals information please visit the following website:
www.ge-mcs.com/bently

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 lbs.).

I/O Modules

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

Main Module

1 full-height front slot

I/O Modules

1 full-height rear slot

Ordering Information

Ordering Considerations

Version 3.70 (release pending) or higher of 3500 Rack Configuration Software is required.

The 3500/91 EGD requires a 3500/22M TDI to communicate with monitor modules.

Only 1 EGD per rack is allowed.

Version 1.20 (release pending) or higher of TDI (3500/22M) firmware is required.

For consumed exchange support, version 2.21 (release pending) or higher of 4-Channel firmware is required.

List of Options and Part Numbers

The 3500/91 EGD Communication Gateway

3500/91-AXX-BXX-CXX

A: Main Module Type
- 0 1 **EGD Communication Gateway Module**

B: I/O Module Type
- 0 1 **Ethernet 10BASE-T/100BASE-TX I/O Module**
- 0 2 **Ethernet 100BASE-FX I/O Module**

C: Agency Approval Option
- 0 0 **None**
- 0 1 **CSA/NRTL/C**
- 0 2 **CSA/A**

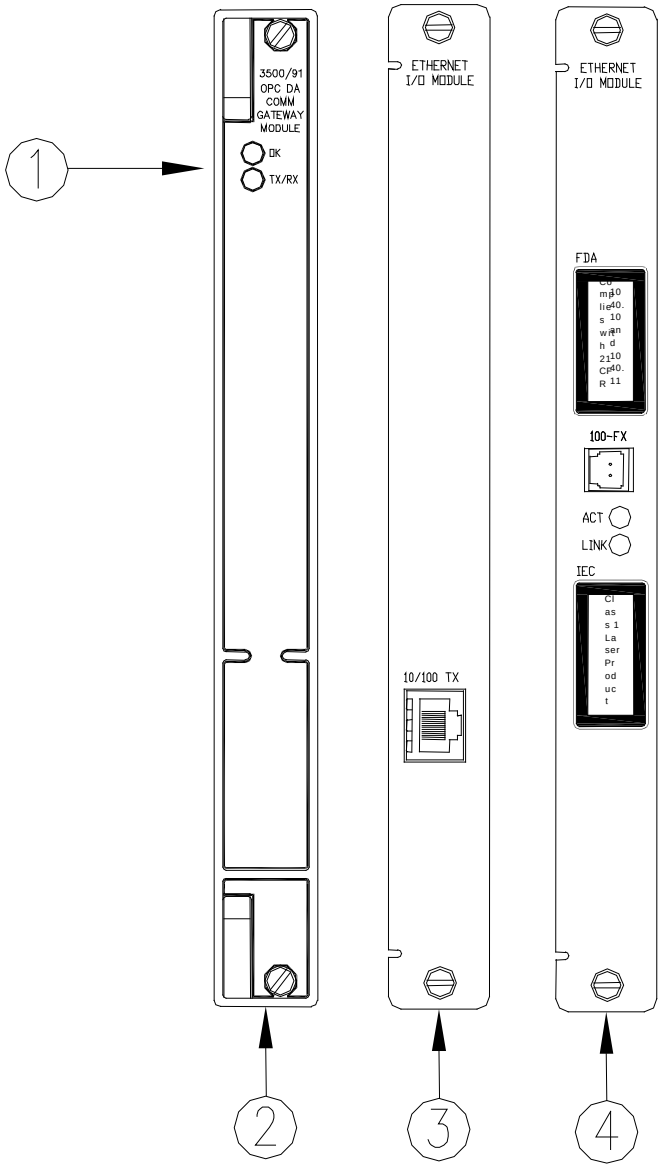
Spares

TBD	3500/91 Manual
161204-01	3500/91 EGD Gateway Module
161216-01	Ethernet 10BASE-T/100BASE-TX I/O Module
161216-02	Ethernet 100BASE-FX I/O Module

Network Accessories

Refer to our Network Accessories datasheet 164466-01

Front and Rear View



(1) Status LEDs.

(2) 3500/91 EGD Communication Gateway Module.

(3) Ethernet 10BASE-T/100BASE-TX I/O Module.

(4) Ethernet 100BASE-FX I/O Module.

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