Bently Nevada 3500 Series Service Manual

3500/22M-01-01-00

1. Description

3500/22M-01-01-00

3. Product Information

3500/22M-01-01-00 | Bently Nevada | 3500/22M TDI Module and I/O

Manufacturer : Bently Nevada

Product No. : 3500/22M-01-01-00

Product Type : 3500/22M TDI Module and I/O

Made in U.S.A

Ordering Information

3500/22M TDI Module and I/O

3500/22M-AA-BB-CC

Transient Data Interface Type : 01 = Standard (Use for standard monitoring applications)

I/O Module Type : 01 = 10Base-T/100Base-TX Ethernet I/O module

Agency Approval Option : 00 = None

Weight : 1.11 Kg

Specifications

Inputs

Power

Consumption 10.5 Watts

Data

Front Panel USB-B

10Base-T/ 100Base-TX I/O 10Base-T or 100Base-TX Ethernet, autosensing

100Base-FX I/O 100Base-FX Fiber-Optic Ethernet

Outputs

Front Panel LEDs

OK LED Indicates when the 3500/22M is operating properly

TX/RX LED Indicates when the 3500/22M is communicating with the other modules in the rack

TM LED Indicates when the 3500 rack is in Trip Multiply mode

CONFIG OK LED Indicates that the 3500 rack has a valid configuration I/O Module OK Relay

Function: Indicates when the 3500 rack is operating normally or when a fault has been detected within the rack. User can select either an “OPEN” or “CLOSED” contact to annunciate a NOT OK condition. This relay always operates as “Normally Energized”.

Ratings: Standard OK Relay is rated to 5A @ 24 Vdc/120 Vac, 120 Watts/600 VA Switched Power (maximum) OK Relay with gold-plated contacts is rated down to 1 mA @ 1 Vdc (minimum)

Arc Protection: Arc suppressors are provided

I/O Module System Contacts

Trip Multiply

Description: Used to place 3500 rack in Trip Multiply

Maximum Current: <1 mAdc, Dry Contact to Common

Alarm Inhibit

Description : Used to inhibit all alarms in the 3500 rack

Maximum Current: <1 mAdc, Dry Contact to Common

Rack Reset

Description: Used to clear latched alarms and Timed OK Channel Defeat

Maximum Current: <1 mAdc, Dry

Communications

Protocols

BN Host Protocol: Communication with 3500 Configuration Software, 3500 Data Acquisition Software, and 3500 Display Software

BN TDI Protocol Communication with System 1 Condition Monitoring and Diagnostic Software

Front Panel

Communications USB-B

Protocol Supported BN Host Protocol

Baud Rate 115.2 kbaud maximum (auto-baud capable)

Cable Length USB Cable Length: 5 meters (16.4 ft) maximum. A 3 meter (9.8 ft) cable is included with the 3500 rack

Connector USB-B

10Base-T / 100Base-TX Ethernet I/O

Communications Ethernet, 10Base-T and 100Base TX. Conforms to IEEE802.3

Protocol Supported BN Host Protocol and BN TDI Protocol using Ethernet TCP/IP

Connection RJ-45 (telephone jack style) for 10BaseT/100Base-TX Ethernet cabling

Cable Length 100 metres (328 feet) maximum

100 Base-FX Ethernet I/O

Communications Ethernet, 100Base-FX Fiber Optic, full duplex multimode. Conforms to IEEE802.3u

Protocol Supported BN Host Protocol and BN TDI Protocol using Ethernet TCP/IP

Connection MT-RJ Male Fiber Optic connector for 100 BaseFX cabling

Cable Length 2000 metres (6560 feet) maximum, multimode fiber optic cable

The 3500/22M has a MT-RJ Male connector on the unit for Fiber Optic 100 Base-FX cabling therefore you MUST use a MT-RJ Female connector on the fiber optic cable to ensure proper connectivity.

Environmental Limits

TDI Module, 10Base-T/ 100Base-TX I/O, and

100Base-FX I/O

Operating

Temperature

-30°C to +65°C (-22°F to

+149°F)

Storage

Temperature

-40°C to +85°C (-40°F to

+185°F)

Humidity 95%, non-condensing

Battery Life

Powered TDI 38 years @ 50°C (122°F)

Unpowered

TDI 12 years @ 50°C (122°F)

Physical

TDI Module

Dimensions

(Height xWidth xDepth)

241.3 mm x 24.4 mm x 241.8

mm (9.50 in x 0.96 in x 9.52 in)

Weight 0.91 kg (2.0 lbs)

I/O Modules

Dimensions

(Height xWidth xDepth)

241.3 mm x 24.4 mm x 99.1 mm

(9.50 in x 0.96 in x 3.90 in)

Weight 0.20 kg (0.44 lbs)

Rack Space Requirements

TDI Module 1 full-height front slot

I/O Modules 1 full-height rear slot