

146031-01

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

Bently Nevada 146031-01 is the copper Ethernet I/O module for the 3500/22M Transient Data Interface. It provides autosensing 10Base-T/100Base-TX communication through an RJ-45 connection.

BRAND	Bently Nevada	ORIGIN	USA
MODEL	146031-01	FAMILY	3500/22M Transient Data Interface
HS CODE	8537101190	SHIP FROM	Xiamen, Fujian, China
DIMENSIONS		PRODUCT	10Base-T/100Base-TX TDI I/O Module

MANUFACTURER SOURCE RECORD

3500/22M Transient Data Interface Module Datasheet
Baker Hughes / Bently Nevada publication 161581 Rev. AC

APTER POWER SALES TEAM

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Product Overview

SYSTEM FUNCTION

Bently Nevada 146031-01 is the copper Ethernet I/O module for the 3500/22M Transient Data Interface. It provides autosensing 10Base-T/100Base-TX communication through an RJ-45 connection.

AUTOSENSING COPPER ETHERNET INTERFACE

Verified model-specific feature or controlled record item.

RJ-45 10BASE-T/100BASE-TX CONNECTION

Verified model-specific feature or controlled record item.

100 M MAXIMUM ETHERNET SEGMENT

Verified model-specific feature or controlled record item.

BN HOST AND BN TDI TCP/IP PROTOCOLS

Verified model-specific feature or controlled record item.

TECHNICAL NOTE

Install 146031-01 in the full-height rear slot paired with the 3500/22M TDI. Use shielded Category 5 copper Ethernet, keep the segment within 100 m and verify the rack signal-common grounding arrangement before network commissioning.

Technical Data and Acceptance

Acceptance Path

PARAMETER	VERIFIED VALUE
Country of origin	USA
HS code	8537101190
Ship from	Xiamen, Fujian, China
Ethernet	10Base-T/100Base-TX autosensing
Standard	IEEE 802.3
Connector	RJ-45
Maximum cable length	100 m
Protocols	BN Host and BN TDI over TCP/IP
Operating temperature	-30 to +65 degC
Storage temperature	-40 to +85 degC
Humidity	95% non-condensing
Rack space	1 full-height rear slot

1 IDENTITY

Record 146031-01.

2 INTERFACE

Document mounting and connections.

3 CONFIGURATION

Confirm system and channel.

4 PROOF

Complete functional acceptance.

ENGINEERING BOUNDARY

Use the exact ordering-code values shown here together with the physical marking and installed-system record. Confirm mounting, connections and the configured channel before release.

Applications and Precautions

SYSTEM 1 HOST NETWORKING

Carries TDI data to compatible System 1 condition-monitoring software.

3500 RACK CONFIGURATION

Provides the Ethernet path used by compatible 3500 configuration software.

PLANT COPPER LAN INTEGRATION

Connects the rack through a shielded Category 5 RJ-45 segment.

TDI REAR-I/O REPLACEMENT

Restores the exact copper network interface behind the 3500/22M module.

Controlled Checks

NO.	CHECK
1	Verify the 146031-01 part number before removing the rear module.
2	Remove any incompatible RIM I/O before inserting a TDI I/O module.
3	Install only one primary TDI network I/O module behind the TDI.
4	Use shielded Category 5 cable with RJ-45 connectors.
5	Keep the copper Ethernet segment within 100 m.
6	Connect rack Signal Common to the approved single-point instrument ground when required.
7	Set the Power Input Module grounding selector as directed for the chosen Signal Common arrangement.
8	Verify link speed, IP communication, rack configuration access and data transfer before release.

FAQ, Related Products and Source

QUESTION	ANSWER
What network medium does 146031-01 use?	It is the 10Base-T/100Base-TX copper Ethernet I/O module for the 3500/22M TDI.
Which connector is fitted to 146031-01?	The official datasheet specifies an RJ-45 connection for 10Base-T/100Base-TX Ethernet cabling.
How long may the Ethernet cable from 146031-01 be?	The copper Ethernet segment is limited to 100 metres or 328 feet.
Which protocols pass through 146031-01?	It carries BN Host Protocol and BN TDI Protocol over Ethernet TCP/IP.
Can 146031-01 be installed while a 3500/20 RIM I/O remains in the rack?	No. The manufacturer warns that the RIM I/O must be removed before TDI I/O and TDI installation to avoid damage.
How many primary TDI network I/O modules may accompany a TDI using 146031-01?	Only one Transient Data Interface I/O module may be installed at a time behind or above the TDI.
What grounding check is required around 146031-01?	Verify the Signal Common single-point instrument-ground connection and the Power Input Module HP selector position for the approved rack arrangement.
What proves 146031-01 is ready for service?	Confirm RJ-45 link, negotiated Ethernet operation, correct rack address, configuration access, System 1 data transfer and no unexplained diagnostics.

Related Bently Nevada Products

MODEL	RELATION	APTER POWER PAGE
114M5335-01	Bently Nevada machinery-monitoring component	View 114M5335-01
125388-01	Bently Nevada machinery-monitoring component	View 125388-01
125565-01	Bently Nevada machinery-monitoring component	View 125565-01
3500-15-125840-02	Bently Nevada machinery-monitoring component	View 3500-15-125840-02
3500-15-129486-01	Bently Nevada machinery-monitoring component	View 3500-15-129486-01
3500-33	Bently Nevada machinery-monitoring component	View 3500-33
3500-40M-140734-01	Bently Nevada machinery-monitoring component	View 3500-40M-140734-01
3500-53-133388-01	Bently Nevada machinery-monitoring component	View 3500-53-133388-01

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