146031-02

100Base-FX Fiber-Optic TDI I/O Module

Bently Nevada 146031-02 is the 100Base-FX fiber-optic I/O module for the 3500/22M Transient Data Interface. It uses full-duplex multimode Ethernet and an MT-RJ male module connection.

BRAND	Bently Nevada	ORIGIN	USA
MODEL	146031-02	FAMILY	3500/22M Transient Data Interface
HS CODE	8537101190	SHIP FROM	Xiamen, Fujian, China
DIMENSIONS		PRODUCT	100Base-FX Fiber-Optic TDI I/O Module

MANUFACTURER SOURCE RECORD

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

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Product Overview

SYSTEM FUNCTION

Bently Nevada 146031-02 is the 100Base-FX fiber-optic I/O module for the 3500/22M Transient Data Interface. It uses full-duplex multimode Ethernet and an MT-RJ male module connection.

FULL-DUPLEX 100BASE-FX ETHERNET

Verified model-specific feature or controlled record item.

MULTIMODE FIBER INTERFACE

Verified model-specific feature or controlled record item.

MT-RJ MODULE CONNECTION

Verified model-specific feature or controlled record item.

UP TO 2000 M PUBLISHED FIBER LENGTH

Verified model-specific feature or controlled record item.

TECHNICAL NOTE

Install 146031-02 in the full-height rear slot matched to the TDI and use a multimode cable with an MT-RJ female mating connector. Verify polarity, cleanliness, grounding and the documented maximum fiber distance before enabling host data transfer.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Country of origin	USA
HS code	8537101190
Ship from	Xiamen, Fujian, China
Ethernet	100Base-FX full-duplex multimode
Standard	IEEE 802.3u
Module connector	MT-RJ male
Required cable connector	MT-RJ female
Maximum cable length	2000 m
Protocols	BN Host and BN TDI over TCP/IP
Operating temperature	-30 to +65 degC
Humidity	95% non-condensing
Rack space	1 full-height rear slot

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.

Acceptance Path

1 IDENTITY

Record 146031-02.

2 INTERFACE

Document mounting and connections.

3 CONFIGURATION

Confirm system and channel.

4 PROOF

Complete functional acceptance.

Applications and Precautions

LONG-DISTANCE SYSTEM 1 LINK

Extends TDI host communication over multimode fiber within the published distance.

ELECTRICALLY ISOLATED PLANT NETWORK

Uses optical media between the rack and compatible host network equipment.

HIGH-INTERFERENCE ENVIRONMENTS

Provides fiber transport where copper network exposure is undesirable.

FIBER TDI REAR-I/O REPLACEMENT

Restores the specified 100Base-FX interface behind the installed 3500/22M.

Controlled Checks

NO.	CHECK
1	Confirm the complete 146031-02 marking before installation.
2	Remove a 3500/20 RIM I/O before installing the TDI I/O arrangement.
3	Use only one primary TDI network I/O module at the TDI position.
4	Use multimode 100Base-FX cable with an MT-RJ female connector at the module.
5	Keep the fiber route within the published 2000 m maximum.
6	Inspect and clean both optical faces and verify transmit/receive polarity.
7	Preserve the approved Signal Common and rack-ground arrangement.
8	Prove optical link, TCP/IP communication, rack access and dynamic-data transfer before release.

FAQ, Related Products and Source

QUESTION	ANSWER
What distinguishes 146031-02 from the copper TDI I/O execution?	146031-02 provides full-duplex multimode 100Base-FX fiber Ethernet rather than an RJ-45 copper interface.
Which mating connector is required at 146031-02?	The module has an MT-RJ male connection, so the fiber cable must use an MT-RJ female connector.
What is the maximum multimode distance for 146031-02?	The current manufacturer datasheet permits up to 2000 metres or 6560 feet.
Which Ethernet standard applies to 146031-02?	Its 100Base-FX interface conforms to IEEE 802.3u.
What optical checks should precede power-up of 146031-02?	Inspect and clean the MT-RJ faces, verify transmit/receive polarity, cable type, bend control and end-to-end loss.
Can 146031-02 and 146031-01 be installed simultaneously as primary TDI network interfaces?	No. The TDI supports only one primary Transient Data Interface network I/O module at a time.
Does 146031-02 change the TDI host protocols?	No. It still transports BN Host Protocol and BN TDI Protocol using Ethernet TCP/IP.
Which final records belong to a 146031-02 fiber acceptance test?	Retain connector inspection, polarity, route length, link state, IP communication, configuration access, data transfer and final diagnostics.

Related Bently Nevada Products

MODEL	RELATION	APTER POWER PAGE
136719-01	Bently Nevada machinery-monitoring component	View 136719-01
136719-01-304719	Bently Nevada machinery-monitoring component	View 136719-01-304719
140471-01	Bently Nevada machinery-monitoring component	View 140471-01
133323-01	Bently Nevada machinery-monitoring component	View 133323-01
133396-01	Bently Nevada machinery-monitoring component	View 133396-01
133442-01	Bently Nevada machinery-monitoring component	View 133442-01
133819-02	Bently Nevada machinery-monitoring component	View 133819-02
136188-02	Bently Nevada machinery-monitoring component	View 136188-02

MANUFACTURER SOURCE RECORD

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