

INDUSTRIAL AUTOMATION PRODUCT

3500/20 125744-02

Rack Interface Module

Bently Nevada 3500/20 125744-02 is a Rack Interface Module for the 3500 machinery-protection system. It manages rack communications, configuration access and system-level status exchange.

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3500 Machinery Protection System
Part number	125744-02
Country	USA
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named Bently Nevada product record.

PARAMETER	TECHNICAL VALUE
Power consumption	4.75 W typical
Front-panel interface	RS232
Front-panel protocol	ASCII
Front-panel baud rate	9600 or 19200 baud
Network protocol	Bently Nevada proprietary
Network maximum data rate	38.4 kbaud
RS232 maximum cable length	30 m
RS422 maximum cable length	1200 m
External modem cable length	3 m typical
Rack addresses	63 selectable
System-contact current	Less than 1 mA dc
OK relay rating	5 A at 24 Vdc or 120 Vac
Operating temperature	-30 to +65 degC
Storage temperature	-40 to +85 degC
Relative humidity	95% non-condensing
Front rack space	1 full-height slot
Rear I/O rack space	1 full-height slot

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System Role and Architecture

Bently Nevada 3500/20 125744-02 is a Rack Interface Module for the 3500 machinery-protection system. It manages rack communications, configuration access and system-level status exchange.

FUNCTION 1

Provides the primary configuration and communication interface for a 3500 rack

FUNCTION 2

Collects rack status and monitoring information for compatible host software

FUNCTION 3

Supports front-panel local serial access and rear host-network connections

FUNCTION 4

Coordinates rack address, keylock and system-contact functions

Matched system components

- 3500 rack
- 125768-01 or approved RIM I/O module
- Rack Configuration Software
- RS232 or RS422 host network

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3500 rack
Companion hardware	125768-01 or approved RIM I/O module
Field connection	Rack Configuration Software
Primary system function	Provides the primary configuration and communication interface for a 3500 rack
Controlled acceptance duty	Local rack configuration

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Applications and Engineering Context

Local rack configuration

Provides the primary configuration and communication interface for a 3500 rack

Plant host data collection

Collects rack status and monitoring information for compatible host software

Multi-rack communication networks

Supports front-panel local serial access and rear host-network connections

Machinery-protection system status integration

Coordinates rack address, keylock and system-contact functions

TECHNICAL NOTE

Record the rack address, keylock state, rear I/O execution and host serial settings before removal; after installation confirm CONFIG OK, rack communication and system-contact operation.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	3500/20 125744-02 / 125744-02 recorded
Physical interface	3500 rack
Companion check	125768-01 or approved RIM I/O module
Functional proof	Provides the primary configuration and communication interface for a 3500 rack
Application test	Local rack configuration

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Engineering Precautions

1

Identify the complete 125744-02 marking and assigned 3500 rack before replacement.

2

Place the protected machine and rack communication clients in an approved maintenance state.

3

Isolate rack power and external contact circuits before removing the RIM.

4

Preserve the rack address, serial interface selection, baud rate and host topology.

5

Use ESD controls and protect the front serial connector and backplane contacts.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
3500/45 140072-04	Four-channel position monitor	Open product page
3500/60 163179-01	Six-channel temperature monitor	Open product page
3500/64M 140734-05	Four-channel dynamic-pressure monitor	Open product page
3500/40M 176449-01	Four-channel Proximity monitor	Open product page
3500/32M 149986-02	Four-channel relay control module	Open product page

MANUFACTURER SOURCE RECORD

3500/20 Rack Interface Module Datasheet

141531 Rev. D

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