Quick Start Guide

Hardened Gigabit Copper to Fiber Media Converter, Multimode, RJ45/SC

Model: N785-H01-SCMM

Hardened Gigabit Copper to Fiber Media Converter, Singlemode, RJ45/SC

Model: N785-H01-SCSM

Hardened Gigabit Copper to Fiber Media Converter, RJ45/SFP

Model: N785-H01-SFP

Este manual está disponible en español en la página de Tripp Lite: tripplite.com

Ce manuel est disponible en français sur le site Web de Tripp Lite : tripplite.com

WARRANTY REGISTRATION

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Product Features

- Extends a Gigabit Ethernet connection over SC multimode fiber cable up to 500 meters (N785-H01-SCMM)
- Extends a Gigabit Ethernet connection over ST singlemode fiber cable up to 10 kilometers (N785-H01-SCSM)
- Extends a Gigabit Ethernet connection to an open SFP port (N785-H01-SFP)
- Hardened housing withstands high operating temperatures
- Provides ESD, RFI and surge protection
- LEDs indicate Ethernet connection and fiber link status
- DIP switches control Local Loop Back testing (LLB), Remote Loop Back testing (RLB), Link Fault Signaling (LFS) and Reserve functions
- Link Fault Signaling (LFS) LED indicates when a cable has been severed or another cause for disruption has occurred
- Local Loop Back (LLB) tests the copper network connection
- Remote Loop Back (RLB) tests the fiber network connection
- Auto MDI/MDI-X functionality removes the need for crossover cabling

Package Contents

- N785-H01-SCMM or N785-H01-SCSM or N785-H01-SFP Media Converter
- External Power Supply with NEMA 1-15P Plug (Input: 100-240VAC, 50/60 Hz, 0.5A; Output: 12VDC, 1.5A)
- DIN Rail Kit
- Mounting Hardware
- Rubber Foot
- L-Shaped Bracket
- SC Connector Cap
- Quick Start Guide
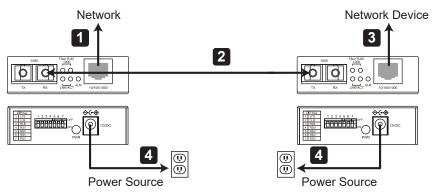
Optional Accessories

• N001-Series Cat5e Snagless Patch Cables

• N201-Series Cat6 Snagless Patch Cables

• N306-Series Duplex Multimode 62.5/125 Fiber Patch Cables (SC/SC)

• N356-Series Duplex Singlemode 9/125 Fiber Patch Cables (SC/SC)

• N286-Series Transceivers

• N785-CH12 12-Port Chassis for N784/N785 Media Converters

Installation

N785-H01-SCMM and N785-H01-SCSM

Notes:

• *The following installation instructions refer to an installation in which two media converters are used. A single media converter can be used for a copper-to-fiber installation.*

• *The following installation instructions refer to the N785-H01-SCMM. Connections are the same for the N785-H01-SCSM, with only the specs being different. See the **Specifications** section in this manual for details on your media converter.*

• *To avoid damage due to Electrostatic Discharge (ESD), it is recommended you handle the product while wearing an ESD wrist grounding strap or by touching a conductive surface (such as metal) to discharge any potential ESD prior to handling the product.*

1 Connect the RJ45 port on the media converter to your network with a user-supplied Cat5e/6 cable.

Installation

2 Connect the media converter to a second identical media converter using the appropriate type of fiber cable, making sure to connect the TX port on one unit to the RX port on the other.
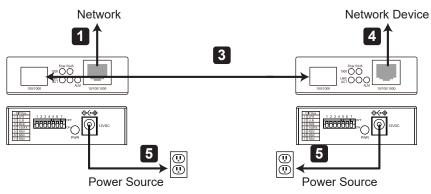
*Note: See the **Product Features** section in this manual to determine which type of fiber cable is supported by your media converter.*

3 Connect the RJ45 port on the second media converter to your network device (workstation, hub, switch, etc.) using a Cat5e/6 cable.

4 Connect the external power supplies that came with each media converter, and plug them into an AC power source.

N785-H01-SFP

Notes:

• *The following installation instructions refer to an installation in which two media converters are used. A single media converter can be used for a copper-to-fiber installation.*

• *The following installation instructions refer to the N785-H01-SFP. Connections are the same for all models, with only the specs being different. See the **Specifications** section in this manual for details on your media converter.*

• *To avoid damage due to Electrostatic Discharge (ESD), it is recommended you handle the product while wearing an ESD wrist grounding strap or by touching a conductive surface (such as metal) to discharge any potential ESD prior to handling the product.*

Network   Network Device

Power Source   Power Source

1 Connect the RJ45 port on the media converter to your network with a user-supplied Cat5e/6 cable.

2 Connect a transceiver to the open SFP port on the media converter.

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Installation

3 Connect fiber cabling matching the transceiver type to the transceiver's port and to a second media converter with a matching transceiver.

4 Connect the RJ45 port on the second media converter to your network device (workstation, hub, switch, etc.) using a Cat5e/6 cable.

5 Connect the external power supplies that came with each media converter, and plug them into an AC power source.

LED Status Table

LED	Status	Description
PWR (Green)	On	The unit is powered on
PWR (Green)	Off	The unit is not powered on
ALM (Red)	On	LFS enabled and link fault occurred
ALM (Red)	Off	LFS disabled or no link fault occurred
RJ45		
1000 (Green)	On	Copper connection up to 1000 Mbps
1000 (Green)	Off	Copper connection speed at 10/100 Mbps or connection failed
LNK/ACT (Green)	On	Copper port correctly linked
LNK/ACT (Green)	Off	Copper port link failure
Fiber		
1000 (Green)	On	Fiber connection up to 1000 Mbps
1000 (Green)	Off	Fiber connection speed at 10/100 Mbps or connection failed
LNK/ACT (Green)	On	Fiber port correctly linked and data is transmitting
LNK/ACT (Green)	Off	Link failed, data is not transmitting

LED Status Table

Link Fault Signaling (LFS)

The LFS LED will indicate when a cable has been severed or when some other cause of disruption in service has occurred. The LFS function monitors both copper and fiber segments for a total service report. Set DIP Switch 1 (LFS) to ON for normal operational use and to OFF when installing cables or when testing the network connection.

Loop Back Test

Each media converter features DIP switches to activate both local and remote loopback diagnostic test functions. Use the Local Loop Back (LLB) function to check if the copper segment is connected properly. Use the Remote Loop Back (RLB) function to check if the fiber segment is connected properly.

Note: When enabling loopback testing in one segment of the connection the other segment will be blocked until the loopback is disabled.

Specifications

Specification	N785-H01-SCMM	N785-H01-SCSM	N785-H01-SFP
Optical Wavelength	850 nm	1310 nm	N/A
Network Speed	10/100/1000 Mbps (Gigabit)		
Mode	Multimode	Singlemode	SFP
Transmission Distance	500 m	10 km	N/A
Duplex Mode	Auto MDI/MDIX		
IEEE Standards Supported	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/FX IEEE 802.3ab 1000Base-T IEEE 802.3z 1000Base-SX/LX IEEE 802.3 Auto-Negotiation		
Power Consumption	1.8W		
Power Supply Input	100-240VAC, 50/60 Hz, 0.5A		
Power Supply Output	12VDC, 1.5A		
Operating Temperature	14° to 140°F / -10° to 60°C		
Storage Temperature	-40° to 185°F / -40° to 85°C		
Relative Humidity	5% to 95% RH, Non-Condensing		
Unit Dimensions (H x W x D)	23.4 x 73.8 x 109.2 mm / 0.92 x 2.9 x 4.3 in.		

Warranty and Product Registration

2-Year Limited Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship for a period of two (2) years from the date of initial purchase. If the product should prove defective in material or workmanship within that period, Seller will repair or replace the product, at its sole discretion.

THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR OR TO DAMAGE RESULTING FROM ACCIDENT, MISUSE, ABUSE OR NEGLECT. SELLER MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSLY SET FORTH HEREIN. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ALL IMPLIED WARRANTIES, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE; AND THIS WARRANTY EXPRESSLY EXCLUDES ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES. (Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from jurisdiction to jurisdiction.)

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer makes no representation or warranty as to the suitability or fitness of these devices for any specific application.

Product Registration

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*No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

WEEE Compliance Information for Tripp Lite Customers and Recyclers (European Union)

Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite, they are entitled to:

- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- Send the new equipment back for recycling when this ultimately becomes waste

Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended.

Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Photos and illustrations may differ slightly from actual products.

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