

# Owner's Manual

## Gigabit Fiber to Ethernet Media Converters with PoE

Models (North America): N785-P01-LC-MM1,  
N785-P01-SC-MM1, N785-P01-SC-MM2,  
N785-P01-SC-SM1, N785-P01-SFP

Models (International): N785-INT-PLCMM1,  
N785-INT-PSCMM2, N785-INT-PSFP

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## Package Includes

- N785-P01-Series or N785-INT-Series Media Converter
- External Power Supply with NEMA 1-15P Power Cord (100-240V), (N785-P01-Series only)
- External Power Supply with AU, EU, UK and US Power Cables (N785-INT-Series Only)

## Product Features

### All Models:

- Convert your fiber network to a copper network with the addition of power
- Supports 10/100/1000 Mbps speeds
- Supports up to 100 m (328 ft.) over Cat5e/Cat6 cable to your PoE-compliant device
- IEEE 802.3af Power over Ethernet (PoE) and IEEE 802.3at compliant
- Auto identification of MDI/MDI-X
- Supports full-duplex and half-duplex modes
- LED indicators monitor Ethernet and Fiber link status
- Link Fault Pass Through (LFP) allows network personnel to quickly identify faults

Model	Optical Fiber Connector	Wavelength	Mode	Max Distance from Source
N785-P01-LC-MM1	LC	850 nm	Multimode	550 m (1804 ft.)
N785-P01-SC-MM1	SC	850 nm	Multimode	550 m (1804 ft.)
N785-P01-SC-MM2	SC	1310 nm	Multimode	2000 m (6561 ft.)
N785-P01-SC-SM1	SC	1310 nm	Singlemode	20 km (12.4 mi.)
N785-P01-SFP	User-Definable	Dependent on transceivers used	Dependent on transceivers used	Dependent on transceivers used
N785-INT-PLCMM1	LC	850 nm	Multimode	550 m (1804 ft.)
N785-INT-PSCMM2	SC	1310 nm	Multimode	2000 m (6561 ft.)
N785-INT-PSFP	User-Definable	Dependent on transceivers used	Dependent on transceivers used	Dependent on transceivers used

# Accessories

## **All Models:**

- N001-Series Cat5e Snagless Patch Cables
- N201-Series Cat6 Snagless Patch Cables

## **N785-P01-SFP and N785-INT-PSFP Models Only:**

- N286-01GSX-MDLC SFP to LC Multimode Transceiver (850 nm / 550 m)
- N286-01GLX-SLX SFP to LC Singlemode Transceiver (1310 nm / 10 km)

# Installation

## Notes:

- To avoid Electrostatic Discharge (ESD) damage, it is recommended you handle the product while wearing an ESD wrist grounding strap, or touch a conductive surface (such as metal) to discharge any potential ESD prior to handling the product.
- Before installation, verify your fiber equipment's wavelength (850 nm or 1310 nm) and mode type (Single or Multi) matches that of the N785-P01-Series or N785-INT-Series Media Converter.

1. Ensure all equipment in the installation is powered off.

### 2. (N785-P01-SFP and N785-INT-PSFP Models Only):

Install a user-supplied SFP transceiver that matches your fiber equipment's credentials.

**Note:** Your fiber equipment's wavelength and mode type must match that of the N785-P01-Series or N785-INT-Series Media Converter.

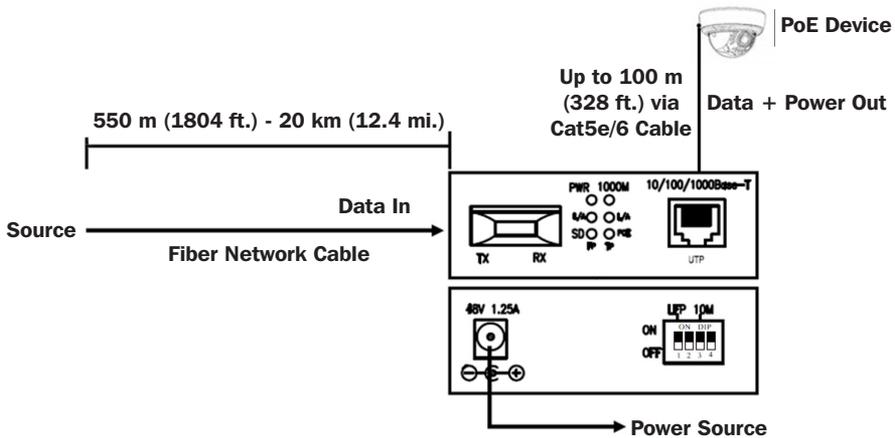
3. Using existing fiber cable from your network infrastructure, connect the media converter to your fiber network.

4. With a user-supplied Cat5e/Cat6 cable (up to 100 m / 328 ft.), connect your IEEE 802.3 af/at PoE-compliant device to the media converter's 10/100/1000Base-T UTP port.

**Note:** If your PoE-compliant device is farther than 100 m (328 ft.) away, moving DIP switch 3 (10M) to the ON position allows you to run an additional 230 m (750 ft.) of Cat5e/6 cable (up to 330 m / 1082 ft. away in total) at 10 Mbps speeds only.

5. Connect the included power supply to the media converter.

6. Turn on power to all equipment in the installation.

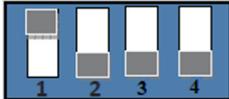


# DIP Switch Settings

**Note:** DIP switches 2 and 4 have no function.

## DIP Switch 1 – Link Fault Pass Through (LFP)

To enable the LFP function, move DIP switch 1 to the ON position.



### Link Fault Pass Through (LFP)

LFP provides constant monitoring of the links connected to the media converter. If either the copper or fiber link fails, the media converter will pass the fail state through both links (copper and fiber), preventing the connected equipment from transmitting packets that would otherwise end up lost. The LFP function includes both the LLCF (Link Loss Carry Forward) and LLF (Link Loss Return) functions. LLCF and LLR functions can immediately alarm network administrators to the problem of the link media and provide an efficient solution to monitor the network.

### Link Loss Carry Forward (LLCF)

LLCF occurs when a device is connected to the converter and the TP (copper) line of the media converter loses the link, resulting in the media converter's fiber to disconnect from the transmission link.

### Link Loss Return (LLR)

LLR occurs when a device is connected to the converter and the FP (fiber) line loses the link, resulting in the media converter's fiber to disconnect from the transmission link.

## DIP Switch 3 – 10M

With DIP switch 3 in the ON position, the supported transfer distance of the RJ45 port changes to 330 m (1082 ft.) and the data transfer rate changes to 10 Mbps. This allows you to extend beyond the 100 m (328 ft.) limit while running at lower speeds. When in this mode, speeds of 100 and 1000 Mbps are not supported.



# LED Functions

LED	Color	Status	Function
PWR	Green	ON	The device is powered on
PoE	Green	ON	RJ45 port is providing DC 48V to the remote PoE device
		OFF	RJ45 port is not providing DC 48V to the remote PoE device
SD	Green	ON	Fiber port is receiving optical signal
		OFF	Fiber port is not receiving optical signal
1000M	Green	ON	1000 Mbps speed
		OFF	10/100 Mbps speed
L/A – TP (Link/Act) (RJ45 Port)	Green	ON	Indicates the RJ45 port link is operating at 10/100/1000 Mbps
		Blinking	Indicates the PoE media converter is actively sending or receiving data over the RJ45 port
		OFF	Indicates the RJ45 port link is not operating
L/A – FP (Link/Act) (Fiber Port)	Green	ON	Indicates the fiber port link is operating
		Blinking	Indicates the PoE media converter is actively sending or receiving data over the fiber port
		OFF	Indicates the fiber port link is not operating

# Warranty and Product Registration

## 2-YEAR LIMITED WARRANTY

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of two (2) years from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from

TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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