

Gigabit Singlemode Fiber to Ethernet Media Converter, POE+ - 10/100/1000 SC, 1310 nm, 20 km (12.4 mi.)

MODEL NUMBER: **N785-P01-SC-SM1**



This Ethernet extender lets you send data and power up to 20 km (12.4 mi.), well beyond the 100 m (328-ft.) limit of conventional copper cable.

Features

Extends Power and Data to a PoE+ Device up to 20 Kilometers via SC Singlemode Fiber Cable This economical unit converts a singlemode fiber optical signal to a copper Ethernet signal that extends both power (48 VDC) and 10/100/1000 Mbps Gigabit Ethernet to a PoE+ (Power over Ethernet) device. Because Cat5e/6 cables are limited to only 100 meters, it is more effective to couple the N785-P01-SC-SM1 with singlemode fiber cable to reach greater distances. This could include providing both data and power to PoE and PoE+ devices, such as security cameras, VoIP telephones, point-of-sale kiosks and access control devices.

Supports Power over Ethernet to Save You Money and Give You More Installation Choices PoE saves you the expense and effort of purchasing, connecting and installing individual power supplies for each device. It also helps you install PoE devices in areas far away from AC outlets, such as poles or ceilings.

Supports Auto-Sensing of Network Speed and Other Advanced Functions Monitoring and controlling your network nodes is easy with the N785-P01-SC-SM1's advanced features, such as automatic network speed sensing, full/half-duplex auto-detection and automatic MDI/MDIX configuration. Six LEDs indicate the converter's power, PoE, Ethernet network and fiber link statuses at a glance. Link fault pass through (LFP) monitors both the SC and RJ45 ports to ensure link status remains active.

Works in tandem with N785-INT-SC-SM Media Converter This media converter connects to the N785-INT-SC-SM using singlemode fiber optic cabling with SC ends (such as N356-Series, sold separately) to extend an Ethernet network connection up to 20 kilometers. Use Cat5e/6 cabling (such as N001- or N201-Series cables) to deliver data and power to a 10/100/1000 Mbps PoE device up to 100 meters (328 feet) from the N785-P01-SC-SM1.

Completely Plug-and-Play with No Additional Software Required for Connection The compact metal converter is easy to install and set up with no software or drivers required. The included power supply connects to a convenient AC outlet with no computer or other signal source needed.

Highlights

- Extends power (48 VDC) + data (1000 Mbps) to any edge PoE+ device
- Supports singlemode fiber optic cable with SC connectors up to 20 km (12.4 mi.)
- RJ45 jack supports auto-MDI/MDIX to bridge various network devices
- Supports both full- and half-duplex operation
- Works in tandem with N785-INT-SC-SM (sold separately)

Applications

- Deliver power and data to a PoE device mounted somewhere that is difficult to reach or without AC outlets
- Extend a Gigabit Ethernet network beyond the standard 100 m reach of copper cabling

System Requirements

- 10/100/1000 Mbps Gigabit Ethernet network
- Singlemode SC fiber optic cabling up to 20 km (12.4 mi.)
- N785-INT-SC-SM media converter

Package Includes

- N785-P01-SC-SM1 Gigabit Singlemode Fiber to Ethernet Extender
- External power supply with 3.6 ft. (1.09 m) cord and NEMA 5-15P plug (Input: 100-240V, 50/60 Hz, 1.5A; Output: 48V 1.25A)
- Owner's manual

Specifications



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OVERVIEW	
UPC Code	037332236944
Product Type	Fiber to PoE
Technology	Cat5/5e; Cat6; Cat6a; PoE; Singlemode
Mode Type	Singlemode
DISPLAY	
Accessories (Included)	External Power Supply (Input: 100-240V, 50/60Hz, 1.5A; Output: 48V/1.25A)
NETWORK	
Network Ports	RJ45 (FEMALE); SC (FEMALE)
INPUT	
AC Power Adapter Plug(s)	NEMA 5-15P North America
AC Power Adapter Input Specs (V / Hz / A)	100-240V / 50/60Hz / 1.5A
AC Power Adapter Output Specs (V / A)	48V / 1.25A
AC Power Adapter Cord Length (ft.)	3.6
AC Power Adapter Cord Length (m)	1.1
POWER	
Power Source Type	AC Adapter with detachable power cord
AC Adapter	Input: 100-240V, 50/60Hz, 1.5A; Output: 48V, 1.25A
DC Barrel Plug	OD: 5.5 x 2.1 x 10mm, Positive Pin, Negative Sleeve
CONNECTIONS	
Side A - Connector 1	RJ45 (FEMALE)
Side B - Connector 1	SC DUPLEX (FEMALE)
PoE Type	Type 2 PoE+ (30W, IEEE 802.3at)
USER INTERFACE, ALERTS & CONTROLS	
LED Indicators	PWR (Power LED), 1000M (UTP port speed LED), PoE (PoE status LED), SD (Fiber signal LED), L/A TP (UTP Port link status LED), L/A FP (Fiber port link status LED)
PHYSICAL	
Color	Black
Power Cord Color	Black
Shipping Weight (lbs.)	0.00
Shipping Weight (kg)	0.00



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Unit Dimensions (hwd / in.)	0.980 x 3.740 x 2.760
Unit Dimensions (hwd / cm)	2.4892 x 9.4996 x 7.0104
Unit Packaging Type	Box
Unit Weight (lbs.)	0.44
Unit Weight (kg)	0.20
Housing	Metal
ENVIRONMENTAL	
Operating Temperature Range	-4° to 140°F (-20° to 60°C)
Storage Temperature Range	-4° to 158°F (-20° to 70°C)
Relative Humidity	5% to 90% RH, Non-Condensing
COMMUNICATIONS	
Network Compatibility	10 Mbps; 100 Mbps (Fast Ethernet); 1 Gbps (Gigabit)
Network Speed Details	10 Mbps; 100 Mbps; 1000 Mbps
Wavelength	1310nm
Transmission Distance	20 km
IEEE Standards Supported	802.3; 802.3u; 802.3ab; 802.3z; 802.3at; 802.3af
Wavelength Division Multiplexing (WDM)	Yes
FEATURES & SPECIFICATIONS	
Data Transfer Rate	1 Gbps; 10 Mbps; 100 Mbps
Mounting Accessory Included	No
Working Mode	Full/Half Duplex
Auto MDIX Support	Yes
DIN Mountable	No
Optical Port	SC
STANDARDS & COMPLIANCE	
External Power Supply Certifications	CCC; FCC; PSE; UL; cUL
Product Compliance	RoHS; FCC (USA)
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty



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