SSF-SFP-RJ45-10G

10 Gigabit Fiber Media Converter

Manual

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10 GIGABIT FIBER MEDIA CONVERTERS

Ordering Information

SSF-SFP-RJ45-10G 10/100/1000/10GBase-Tx Ethernet Media Converter to 10GBase-X SFP+ slot, AC adapter included

Overview

The SSF-SFP-RJ45-10G is a high performance and reduced size 10G Ethernet fiber media converter. Physical dimensions have been reduced for minimum footprint and highest density attainable in 19" rack environment: 12 units/RU. Reliability is highly ranked with an MTBF exceeding 65,000 hours.

SSF-SFP-RJ45-10G supports quad speed IEEE802.3an (10G Base-T) and 10/100/1000BaseTx to IEEE802.3ae (10G Base-X) protocols. DIP switches allow set-up in either fixed 10G mode, fixed 1G mode or 10/100/1G/10G auto negotiation on copper port.

Package includes AC adapter 100-240V to DC 12V and one User Manual.

Features

- 10/100/1000/10GBase-T to 10GBase-X SFP+ slot conversion
- Data transparent
- Forward Jumbo 9k+ packet size data
- Very low latency
- SFP+ slot supports any SFP transceiver type (SR, LR, ER, ZR and CWDM DWDM short and long-haul models)
- Supports SFP+ hot swap
- Low power consumption (10W maximum).

Technical Specifications

Standards	IEEE 802.3an (10GBase-T), 802.3ae(10GBase-SR, LR, ER or ZR)
Connectors	SFP+ slot, RJ45 TP port, DC power plug
RJ45 port	Full duplex, 10/100/1000/10G Base-Tx
SFP+ slot	Supports 10G speed SFPs
Power Adapter	Adapter with AC 100-240V input, 0.5A AC frequency: 50-60Hz, Output DC 12V/1A
Power Requirements	DC 12V, 10W max. power consumption
Dimensions	90mm x 60mm x 20mm (SFP not included)
Mounting	Wall or shelf (optional bracket needed)
Environmental Conditions	Operating Ambient Temperature: 0 to 50℃ Operating Humidity: Maximum 85%, Non-condensing Storage Temperature: -30 to 70℃ Storage Humidity: Maximum 95%, Non-condensing Indoor rated operating device
MTBF	65,000 hours

Installation

1. Choose a flat secure surface with room for proper ventilation.
2. Power up the unit using the included AC adapter. Observe PWR LED status indicating proper power to the unit.
3. Connect RJ45 UTP port using Cat5e or better cable to another Ethernet device. Make sure the TP LED indicates proper connectivity.
4. Insert a Gigabit or Fast Ethernet rated SFP transceiver into the SFP slot. Make sure the fiber transceiver used matches the fiber type (MM or SM) and also a similar optical transceiver at the other end of the fiber. Inspect FX LED for proper fiber link status.

Troubleshooting

1. No TP/LNK light: verify proper UTP cabling/pinout.
2. No FX/LNK light: verify fiber connectivity and fiber type. Consider cleaning up fiber connectors and SFPs with appropriate tools. Make sure Tx and RX ports are properly crossed between units. Make sure FX speed is properly set on DIP sw.
3. No PWR light: Use only the AC adapter included. Make sure AC power is available

DIP Switch Settings

	MODEL	SSF-SFP-RJ45-10G	
DIP	Function	Settings	
SW 1	LFP	OFF – Disabled	ON – Enabled
SW 2	ALS	OFF – Disabled	ON – Enabled
SW 3	Converter Type & Speed	ON	Works either 10G or 1G fixed speed converter
SW 4	Converter Type & Speed	ON	RJ45: 10/100/1000/10G and SFP: 10G speed

LED Indicators

	FUNCTION
TP/LNK	Off – No link; On – RJ45 link OK; Blinking – data traffic present
SPD	Off – No link; On – 10G Base-T (on RJ45 port)
FX/LNK SFP1 SFP2	Off – No link; On – Fiber link OK; Blinking – data traffic present
SFP1, SFP2	Off – No link; On – Fiber link OK; Blinking – data traffic present
LOOP	Off – No loop; On – Loop enabled
PWR	Off – No power available; On – Power is present

Warning

1. Use only indoors in climate-controlled environment.
2. Avoid looking directly into fibers or lasers while unit is powered.
3. Use only the AC adapter included with the unit (or with the LFC series chassis available separately)

FCC and CE markings

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

This is a CE class B device, intended to be used in residential, commercial or industrial applications.