

# SFMFF Series

## Stand-alone Fiber to Fiber Media Converter

### 1000Base-X or 1000Base Fiber Channel



SFMFF1313-220

The SFMFF stand-alone, when used individually or in pairs, functions as a mode converter that extends Gigabit Ethernet or Fiber Channel signals over single mode fiber up to 125 kilometers. The SFMFF also converts 1000Base-SX ports on a Gigabit Ethernet switch to 1000Base-LX on a port-by-port basis.

## Features

- Auto-Negotiation (1000Base-X ports)
- Link Pass Through
- Pause
- Automatic Link Restoration
- Protocol Transparency

## Specifications

Standards	IEEE 802.3 ATM, OC-3 STM-1 HSTR FDDI
Fiber Optic Connectors	Multimode: Min TX PWR: -10.0 dBm Max TX PWR: -4.0 dBm RX Sensitivity: -17.0 dBm Max In PWR: 0.0 dBm Link Budget: 7.00 dB  Single Mode: Min TX PWR: -13.0 dBm Max TX PWR: -3.0 dBm RX Sensitivity: -20.0 dBm Max In PWR: -3.0 dBm Link Budget: 7.00 dB
Status LEDs	Power: Lit for normal operation Port LKS (Single Mode fiber link): Steady LED indicates single mode fiber link Port LKM (Multimode fiber link): Steady LED indicates multimode fiber link
Dimensions	Width: 3.25" [82.55 mm] Depth: 4.7" [119.38 mm] Height: 1" [25 mm]
Power Supply	External AC/DC required 12VDC, 0.5 A; unregulated; standard; Output 12VDC, 1.0 A, 12 watts; 120-240VAC input
Environment	Operating: 0°C to 50°C Humidity: 5% to 90% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2 lbs. [0.90 kg]
Compliance	Safety: Wall Mount Power Supply: UL listed and CSA certified Regulatory: FCC Class A & B, CISPR/EN55022 Class A & B, CE Mark
Warranty	Lifetime

### Power Supply Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: SFMFF1314-220-NA

#### -NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil



## Ordering Information

### SFMFF1313-220

1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget 7.5 dB  
to 1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget 7.5 dB

### SFMFF1324-220

1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget 7.0 dB  
to 1000Base-LX 1310nm Extended multimode (62.5/125 µm fiber only) (SC) [up to 2 km]  
Link Budget: 7.0 dB

### SFMFF1424-220

1000Base-LX 1310nm single mode (SC)  
[10km/6.2 mi.] Link Budget: 7.0 dB  
to 1000Base-LX 1310nm Extended multimode (62.5/125 µm fiber only) (SC) [up to 2 km]  
Link Budget: 7.0 dB

### SFMFF1314-220

1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget: 7.0 dB  
to 1000Base-LX 1310nm single mode (SC)  
[10 km/6.2 mi.] Link Budget: 7.0 dB

## Single Fiber Products

### SFMFF1329-220

1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget: 7.0 dB  
to 1000Base-LX 1310nm TX/1550nm RX single fiber single mode (SC) [20 km/12.4 mi.]  
Link Budget: 13.0 dB

### SFMFF1329-221

1000Base-SX 850nm multimode (SC)  
[62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget: 7.0 dB  
to 1000Base-LX 1550nm TX/1310nm RX single fiber single mode (SC) [20 km/12.4 mi.]  
Link Budget: 13.0 dB

### Optional Accessories (sold separately)

#### Wide Input (24 - 60 VDC) Power Supplies

#### SPS-2460-PS

Piggy Back Power Supply

#### SPS-2460-SA

Stand-Alone Power Supply

#### Mounting Options

#### E-MCR-05

12-Slot Media Converter Rack

#### RMS19-SA4-02

4-Slot Media Converter Shelf

#### WMBD

DIN Rail Bracket 5" [127 mm]

#### WMBD-F

DIN Rail Bracket (flat) 3.3" [84 mm]

#### WMBL

Wall Mount Bracket 4" [102 mm]

#### WMBV

Vertical Wall Mount Bracket 5" [127 mm]