# FOP-4FXS-4TTX-MM/SM20-W13 FOP-4FXO-4TTX-MM/SM20-W15

#### **Features**

- Web-based configuration
- Up to 4 FXS/FXO and full bandwidth 100M Ethernet traffic multiplexed into fiber uplink
- Support Caller ID feature and reverse polarity billing functions
- 2 channels of RS232/485
- 48VDC or 220VAC flexible power inputs

# 4 Voices & Ethernet Interfaces over Fiber



FOP-4FXx-4TTX-xxx series provides a simple and cost-effective solution for 100M Ethernet, as well as 2xRS232/485.

This equipment uses design of ultra large scale integrated circuit, and its outward appearance is succinct. The merits include easy installation and debugging, unnecessary for maintenance and steady performance. It is suitable in business for communication operator, government and kinds of entities.

FOP-FX fiber multiplexer can provide 4 channels, telephone through optical cable, the network application is point-to-point, supporting FXO (FOP-4FXO) or FXS (FOP-4FXS). It has solved telephone transmission problem of edge

customers.

Additional 4x10/100 Ethernet interfaces are embedded. This is a transparent bridge to bridge connection.

Note, that 4 channels of FXS/FXO are connected at same RJ-45 port, so all 8 pins of RJ-45 connector are used, and additional cable of RJ-45 ----> 4 x RJ-11 should be used in case the connections are made directly to phone sets, but if RJ-11 cable are patched to LSA+ or other distribution panels, then it's not necessary.

# TYPICAL APPLICATION



In private networks, Optical Multiplexer shares services such as FXS/FXO, RS232/RS485, Ethernet, in P2P topologies over fiber. 4FXS/FXO Optical Multioplexer establishes TDM and Ethernet connectivity between the remote branches and headquarters for edcational, financial and military sectors.



Fiber Multiplexers for Ethernet and Voice

# Smart Solutions for Smart Networks www.cxr.com

### **SPECIFICATIONS**

#### Fiber Interface

Number of Ports: 1

 Optical Wavelength: 850/1310nm (MM) 1310/1550nm(SM)

Transmission distance: 2 to 120Km

Fiber Optic Interface Type: FC/SC

Data Rate: 150Mbps

 Typical output power SM 1310/1550nm ≥ -8dBm MM 850nm ≥ -18dBm MM 1310nm ≥ -25dBm

• Receiver Sensitivity ≥ -34dBm

#### Fast Ethernet Interface

Number of Ports: 4

 Interface Type: 10/100Mbps, autonegociation, full/half duplex, flowcontrol, MDI/MDX crossover

 Compliance: IEEE802.3, 802.3u, 802.1p & 802.1Q

Max Frame Size : 2047Connector : RJ45

• Electrical Cable Type: Cat.5

#### **Management Port**

 Ethernet InBand Management : 10/100BaseT

 Console Port: RJ45 connector, standard RS232 @115.2kbps

#### Voice (FXS/FXO) interface

• Number of Ports: 4

Port Type: RJ45

• Second-Tier AC input impedance :  $200+680//104\Omega$  (Three components)

Return Loss : 40dB

Relay Interface (FXO): connected to

Ringing Voltage: 35~90V (adjustable)
Ringing frequency: 15~45HZ (adjustable)

 User Interface (FXS): Connected to Phone

Loop Resistance of Subscriber Line :  $\geq 1$ K $\Omega$  (including the phone)

Ringing voltage-peak: 50~90V (adjustable) Ringing frequency: 15~45HZ (adjustable) Supply voltage: 32~52V (adjustable)

#### **Environmental Limits**

Operating Temperature: 0 to 50°C
Storage Temperature: -40 to 85°C
Ambient Relative Humidity: 5 to 95% (non-condensing)

#### **Power Requirements**

· Input Voltage:

AC: 100-240VAC (±10%), 50/60Hz

DC:-48VDC (36-72VDC)
Power Consumption: < 30 watts

#### **Physical Characteristics**

Housing : MetalWeight : 1.0kg

Dimensions: 210 x 143 x 41mm

## **ORDERING INFORMATIONS**

FOP-4FXO-4TTX-MM	Fiber optic modem PCM 4 FXO (4 RJ45), bridge 4 ports 10/100BaseT total BW 100 Mbps, MM850 14dB budget 2km, FC/UPC, power supply AC and DC 48V.
FOP-4FXS-4TTX-MM	Fiber optic modem PCM 4 FXS (RJ45), bridge 4 ports 10/100BaseT total BW 100 Mbps, MM850 14dB budget 2km, FC/UPC, power supply AC and DC 48V.
FOP-4FXO-4TTX-SM20W13	Fiber optic modem PCM 4 FXO (4 RJ45), bridge 4 ports 10/100BaseT total BW 100 Mbps. Fiber SM WDM single core TX=1310, budget 20km , FC/UPC simplex, power supply AC and DC 48V.
FOP-4FXS-4TTX-SM20W15	Fiber optic modem PCM 4 FXS (RJ45), bridge 4 ports 10/100BaseT total BW 100 Mbps. Fiber SM WDM single core TX=1550, budget 20km , FC/UPC simplex, power supply AC and DC 48V.



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