



FRM220-FXO-4 FRM220-FXS-4

4x FXO over Fiber 4x FXS over Fiber

FRM220-FXO/FXS-4 is a 4 channel POTS (Plain Old Telephone System) over fiber converter/extender. The four POTS connection uses a standard RJ-11C modular connectors for each copper pair connection. A pair of FRM220-FXO/FXS-4 is required to implement an end to end system. FXO mode connects to a telephone line (PSTN) or PBX station line and has ability to detect ringing voltages and to act as a telephone. FXS mode is the reciprocal unit and has ability to act as PSTN and connects to a telephone device. When the FRM220-FXO/FXS-4 card is placed in the FRM220 rack with SNMP management, in-band management allows configuring and viewing the card and remote converter's status, type, version, fiber link status, on hook status and alarms. When placed in a single slot chassis and used standalone without management, the card may be configured by DIP switch.

Features

- Extend telephone voice transmission up to 120km over fiber
- Network management via terminal, web or SNMP in FRM220 chassis
- Supports telephone voice transmission
- Supports caller ID Pass-Through
- Supports FXS to FXS hot line

Specifications

Optical Interface	Connector	SFP-LC	
	Fiber	MM 62.2/125μm, 50/125μm	
		SM 9/125μm	
	Distance	MM 2km, SM 15/30/50km	
		WDM 20/40km	
	Wavelength	MM 1310nm, SM 1310, 1550nm	
		WDM 1310Tx/1550Rx (type A)	
		1550Tx/1310Rx (type B)	
Indications	LED (Power, FX Link, Phone Act, Test)		
Power Input	12VDC		
Power Consumption	< 5W		
Dimensions	155 x 88 x 23mm (D x W x H)		
Weight	120g		
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)		
Humidity	10 ~ 90% non-condensing		
Certification	CE, FCC, RoHS compliant		
MTBF	65,000 hrs		

Electrical Interface	Connector	RJ-11
	FXO modle	Impedance : 600 ohms
		Coding: 16 bits liner
		Loop Current : 10~100mA
		Ring Frequency: Acceptable 20 ~50Hz
		Insertion Loss: 0.0 ± 1.0 dB at 1000 Hz
		Impedance : 600 ohms
	FXS modle	Coding : 16 bits liner
		Dial: DTMF and Dial Pulse
		Battery Source: 48VDC ± 4V
		Ringing Waveform : Sine wave
		Ringing Frequency : 20/25/30/35/40/45/50 Hz selectable
		Ring Cadence: FXS to FXS : On / 1 sec, Off / 2 sec
		FXO to FXS; Reproduces the cadence detected by FXO
		Insertion Loss 0.0 ± 1.0dB at 1000Hz
		REN: 4.0B(Ring Equivalence Number)

Application

Automatic Ring down hotline



Voice transmission from 2km to 120km over fiber



Ordering Information

Model Name
Description

FRM220-FXO-4
4-port FXO fiber converter

FRM220-FXS-4
4-port FXS fiber converter

FRM220-FXS-4
4-port FXS fiber converter

Connector Type
Connectivity Distance

SC, ST, FC
002: 2km 015: 15km 030: 30km 050: 50km

20A: WDM 20km A type 20B: WDM 20km B type 40A: WDM 40km A typ Note: This card may be set by DIP switch and placed in CH01 standalone chassis.

When connected as a remote to a managed central chassis, this card supports in-band management.

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more detail

40A: WDM 40km A type 40B: WDM 40km B type