10G 3R Transponder with Optical Line Protection
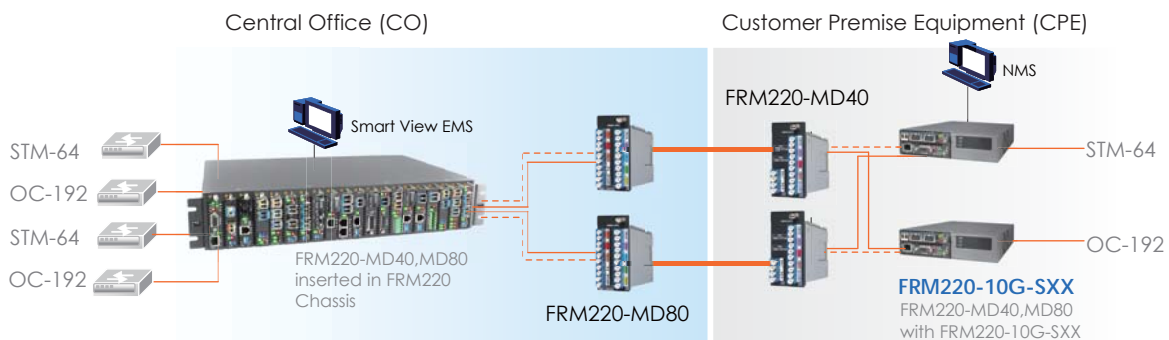
FRM220-10G-SXX

The FRM220-10G-SXX is a 10G fiber to fiber 3R repeater and transponder. Based on 10 Gigabit Fiber standards, the transponder support SFP+ to XFP (SX) or XFP to XFP (XX) fiber connections. 1+1 Automatic optical line Protection Switching is supported for the aggregate XFP fiber ports. The transponder is protocol transparent, providing 3R (Re-amplification, Re-shaping and Re-clocking) regeneration between these different optical module types. One of the major applications for this converter is in connecting proprietary transceiver equipment to CWDM or DWDM when these 'colored' optical modules are not available for the proprietary equipment. With transparent bi-directional forwarding capability between the 2 fiber media, the FRM220-10G-SXX brings you the best and simplest solution for your 10G conversion between fiber and fiber.

Features

- Multiple protocol supported 10G Ethernet, STM-64, OC-192, G.709 OTU2, Fiber Channel (1xFC, 2xFC, 4xFC, 8xFC, 10xFC)
- Network management via Web, Telnet, SNMP in central FRM220-CH20 chassis(10 cards in chassis max.)
- Protocol transparent 3R fiber media transponder / repeater (Re-amplification, Re-shaping and Re-clocking)
- Promotes flexibility and eases management with pluggable SFP+ or XFP transceiver
- Features two 10G ports offering multiservice 10G transponder and regenerator function
- Provides superior optics capabilities resulting in extended transport distances for regional application.
- Extend 10G Ethernet transmission over fiber Useful as a 'Transponder' in CWDM or DWDM
- systems for 10G Ethernet/Fiber Channel/STM-64 Supports Client / Line loop back tests
- Serial console for stand-alone management When inserted in CH02M dual Slot Chassis
- XFP/SFP+ Power supplies: +5.0V, -5.2V, +3.3V and +1.8V
- Support reference clock output
- Support 1+1 optical Line Protection

Specifications

Optical Interface	Connector	LC
		1x Line SFP+ to 2x Client XFP
		1x Line SFP+ to 1x Client XFP
		1x Line XFP to 1x Client XFP
	Traffic Format	OC-192/STM-64 (9.95328Gbps)
		1 Gigabit Ethernet (1.25Gbps)
		10 Gigabit Ethernet LAN(10.3125Gbps)
		G.709 OTU2 (10.709225Gbps)
		Fiber Channel
		1xFC(1.062 Gbps); 2xFC(2.125 Gbps);
		4xFC(4.25 Gbps); 8xFC(8.5 Gbps);
		10xFC(10 Gbps)
	Regeneration	Re-amplification
		Re-shaping, Re-timing
	Loopback	Line / Client
	Fiber	SM 9/125µm
		MM 50/125µm or 62.5/125µm
	Wavelength	Depends on SFP+ or XFP
Indications		LED (Power, Line Link, Client Link, Test, Loop back, Port Active, Alarm)
Power Input		Card : 12VDC , Standalone : AC,DC option
Power Consumption		<10W
Dimensions		155 x 88 x 23mm (D x W x H)
Weight		0.15kg
Temperature		0 ~ 60°C (Operating), -10 ~ 70°C (Storage)
Humidity		10 ~ 90% non-condensing
Certification		CE, FCC, LVD, RoHS
MTBF		65,000 hrs

Central Office (CO) — Customer Premise Equipment (CPE)

Ordering Information

Model Name	Description
FRM220-10G-SXX	10G 3R SFP+ to XFP fiber protection, (optional SFP+, XFP module)

Note: The card is suitable for using in CH02M standalone chassis.