

# 10G 3R Transponder FRM220-10G

The FRM220-10G is a series of managed 10G fiber to fiber 3R repeater and transponders. Based on a number of 10 Gigabit Fiber standards, these transponders support XFP to XFP (XX), SFP+ to XFP (SX), or SFP+ to SFP+ (SS) fiber connections. The transponders are 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 full duplex wire speed forwarding capability between the 2 fiber media, the FRM220-10G brings you the best and simplest solution for your 10G conversion between fiber and fiber.

### Features

- Multiple protocol supported 10G Ethernet, 10G FC, STM-64, OC-192
- Network management via Web, Telnet, SNMP in central FRM220-CH20 chassis
- 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 Single Slot Chassis

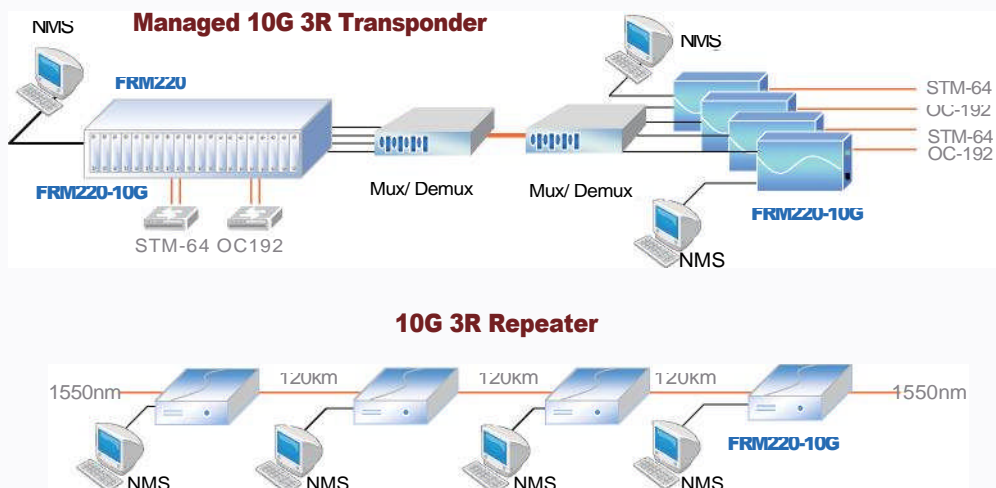


### Optical Interface

Connector	FRM220-10G-SS LC, 1x Line SFP to 1x Client SFP+ FRM220-10G-XX LC, 1x Line XFP to 1x Client XFP FRM220-10GSX LC, 1x Line SFP+ to 1x Client XFP
Traffic Format	OC-192/STM-64 10 Gigabit Ethernet LAN 10G FC (10.51875G) OTN G.709; OTU2 (10.709225G)
Regeneration	Re-amplification Re-shaping Re-timing
Loopback	Line / Client
Fiber	SM 9/125um
Wavelength	CWDM 1470 ~ 1610nm DWDM 1529.55 ~ 1565.50nm
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	150g
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
Humidity	10 ~90% non-condensing
Certification	CE, FCC, LVD, RoHS
MTBF	65,000 hrs (25°C)

### Indications

- Power Input
- Power Consumption
- Dimensions
- Weight
- Temperature
- Humidity
- Certification
- MTBF



FRM220-10G can be inserted in CH02M, CH02N and CH20 chassis.

### Ordering Information

FRM220-      Optional card

- 10G-SS
- 10G-SX

Example: FRM220-10G-SS