

# FRM220-2.7G-3S

## 2.7G Transponder (3R) with Optical Line Protection



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2.7G transponder

The FRM220-2.7G-3S is a 3R 2.7G optical repeater and transponder, which consists of Re-amplification, Re-shaping and Re-timing. The transponder card converts a data signal to the correct wavelength for transmission on a specific channel by supporting SFP optics on both line side and client side interfaces. 1+1 Automatic optical line Protection Switching are supported for the aggregate fiber ports. When the FRM220-2.7G-3S card is placed in the FRM220 rack with SNMP management, the management can view the converter card's status, type, version, fiber link status and alarms. The card can be configured to enable or disable the port, reset the port and set the desired data rate to match the transmitted protocol.

### Features

- Multiple protocol supported at bit rates 34.3Mbps to 2.7Gbps (Fast Ethernet, Gigabit Ethernet, OC-3, OC-6, OC-12, OC-24, OC-48, STM-1, STM-4, STM-16, FC-1, FC-2)
- Network management via Web, Telnet, SNMP in central FRM220 chassis
- Link Fault Pass-Through (LFPT)
- Auto Laser Shutdown (ALS)
- Local configuration via DB9 craft port In Stand-alone
- Digital diagnostic monitoring of SFP module
- Perform optical repeater function (Re-amplification, Re-shaping, and Re-clocking)
- Facility loopback on both Client / Line sides
- 1+1 optic fiber protection
- Dip switch setting data rate
- Detect transceiver transmitter error alarm

### Specifications

<b>Optical Interface</b>	Connector	SFP LC
	Data rate	E3 to OC-48
	Regeneration	Re-amplification
		Re-shaping
		Re-clocking
	Loop back	Line/Client
	Fiber	MM 62.2/125 $\mu$ m, 50/125 $\mu$ m
		SM 9/125 $\mu$ m
	Wavelength	MM 850, 1310nm
		SM 1310, 1550nm
WDM 1310T/1550R, 1550T/1310R		
CWDM 1470 ~ 1610nm		

<b>Indications</b>	LED (PWR, Line Link, Client Link, Test, Loop back, Port Active, Alarm)
<b>Power Input</b>	12VDC
<b>Power Consumption</b>	< 10W
<b>Dimensions</b>	155 x 88 x 23mm (D x W x H)
<b>Weight</b>	120g
<b>Temperature</b>	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
<b>Humidity</b>	10 ~ 90% non-condensing
<b>Certification</b>	CE, FCC, RoHS compliant
<b>MTBF</b>	65,000 hrs

### Application

#### Managed 2.7G 3R Transponder with Fiber Protection



1+1 Fiber Protection



Protocols: Fast Ethernet, Gigabit Ethernet, OC-3, OC-6, OC-12, OC-24, OC-48, STM-1, STM-4, STM-16, FC-1, FC-2

### Ordering Information

Model Name	Description
FRM220-2.7G-3S	2.7G 3R Transponder with fiber protection, (optional SFP module)

Note: This card may be set by DIP switch or console, but **MUST** be placed in CH02M chassis.  
For standalone SNMP management, place this card in CH02/NMC(SNMP) chassis.