

**NEW**



# FRM220-40G-1Q4S

40G QSFP to 4x 10G SFP+ Transponder

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40G Transponder

The FRM220-40G-1Q4S is a 40G QSFP to 4x 10G SFP+ transponder that provides media conversion and distance extension for 40G over 10G links. The FRM220-40G-1Q4S meets the growing need for more bandwidth for data centers and enterprises. The emergence of high-end servers and Ethernet switches with 40G Ethernet interfaces increases the need for media conversion (multi-mode to single-mode) and link range extension. The FRM220-40G-1Q4S is hot-swappable with one QSFP slot for QSFP 40G transceiver and four SFP+ slots for SFP+ 10G transceiver. The installation and setup is simple plug and play. The FRM220-40G-1Q4S can be inserted into any powered FRM220-CH20 chassis with QSFP and SFP+ transceivers required for the application.

## Feature

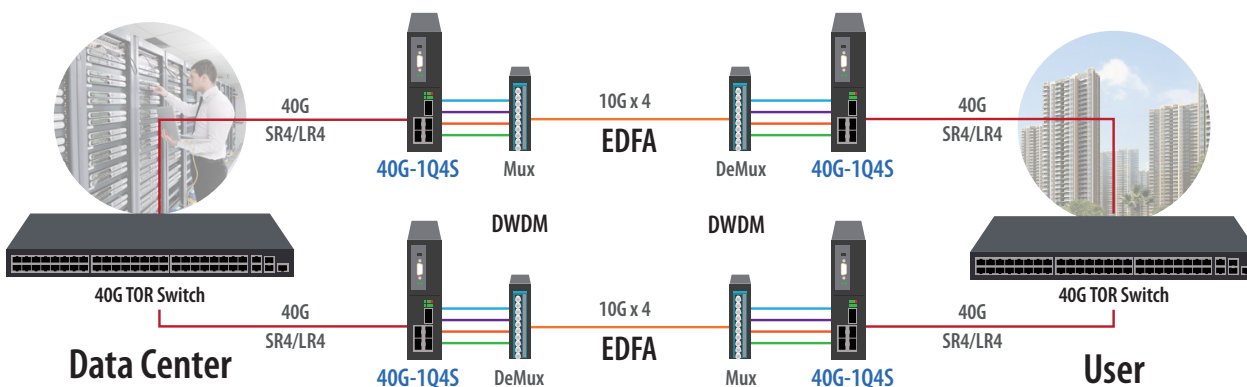
- Network Management via FRM220 Chassis
- Multiple functions in one module: 40G converter/repeater and Quad 10G optical multiplexer
- 40G link interface --Ethernet/IEEE: 802.3ba 40GE-LR4
- 40G multi-link (fiber) interfaces --Ethernet/IEEE: 802.3ba XLAUI and OIF: CEI-11G
- QSFP ports for flexibility and scalability
- Hot-swap support (module and interfaces)
- Supports 1x 40G QSFP and 4x 10G SFP+
- Supports DMI function for QSFP & SFP+ module
- Supports Loopback test function
- 3R function.

## Specifications

<b>Equipment function</b>	3R Transponder, Regenerator, Reshaper, Retimer
<b>Data Rate</b>	Aggregate Data Rate 32 - 56.8 Gbps Data Rate per Lane 8 - 14.2 Gbps
<b>Protocol</b>	CPRI x 16 STM - 64 OC - 192 FC8, FC10, FC16 10G Ethernet
<b>Interface Type</b>	40Gbps : QSFP (1 port), 10Gbps : SFP+ ( 4 ports)

<b>Transmission Distance</b>	Depends on QSFP & SFP+ module
<b>Power requirement</b>	Power input 12VDC Power consumption: ≤12W
<b>Work Environment</b>	Operating Temperature 0 ~ 50°C Storage Temperature -10 ~ 70°C Humidity 10 ~ 90% (non-condensing)
<b>Dimension</b>	Card: 155 x 23 x 88mm (D x W x H)

## Application



## Ordering Information

Model Name	Description
FRM220-40G-1Q4S	40G converter/repeater, Quad 10G Optical Multiplexer module with QSFP Interfaces

### Accessories

#### 10G SFP+ Transceiver Module

SFM-1000-SR85	10G SFP+ SR/SW MMF 300m, 850nm VCSEL, 10G Ethernet/FC/SDH/SONET
SFS-1010-LR31	10G SFP+ LR/LW SMF 10km, 1310nm DFB DML, 10G Ethernet/FC/SDH/SONET
SFS-1040-ER55	10G SFP+ ER/EW SMF 40km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET
SFS-1080-ZR55	10G SFP+ ZR/EW SMF 80km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET