

## 40G 3R Transponder



The FRM220-40G-2Q is a 40G QSFP+ to 40G QSFP+ 3R transponder that provides media conversion and distance extension for 40G Ethernet links. The FRM220-40G-2Q 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 (single-mode to single mode) extension. The FRM220-40G-2Q is hot-swappable with two QSFP+ sockets for 40G QSFP+ transceivers. The installation and setup is simple plug and play. The FRM220-40G-2Q can be inserted into any powered FRM220-CH20,CH08, CH04 chassis or CH02M, CH02/SMT standalone chassis with QSFP+ transceivers required for the application.

## Features

- Device management via FRM220 chassis with NMC
- Supports 40G repeater mode or Quad 10G optical multiplexer mode
- 40G link interface -- Ethernet/IEEE: 802.3ba 40GESR4/LR4/ER4
- 40G multi-link (fiber) interfaces – Ethernet/IEEE: 802.3ba XLAUI and OIF: CEI-11G
- QSFP+ ports for flexibility and scalability
- Supports hot-swapping (module and interfaces)
- Supports jumbo frame
- Supports DMI function for QSFP+ fiber module
- RoHS compliant and Lead-Free
- Supports loopback test function
- 3R function (Regenerator, Reshaper, Retimer)
- Supports LFPT function

## Specifications

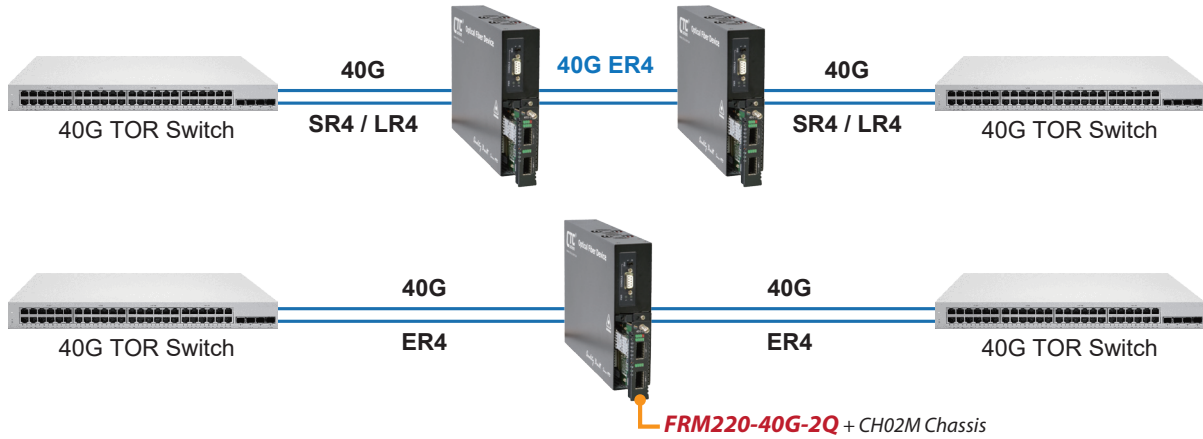
<b>Equipment function</b>	3R Transponder (Regenerator / Reshaper / Retimer)
<b>Protocol</b>	Multiple functions in one module: 40G converter/repeater—Quad 10G optical multiplexer 40G link interface Ethernet/IEEE 802.3ba 40GE-SR4/LR4/ER4 10G interface:9.95 ~ 11.3125Gbps
<b>Access Type</b>	40G Ethernet
<b>Interface Type</b>	QSFP+
<b>Transmission Distance</b>	Up to QSFP+ 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 5 ~ 90% (non-condensing)
<b>Weight</b>	130g
<b>Dimension</b>	159.5 × 20.8 × 88mm (D×W×H)
<b>Certification</b>	CE, FCC

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## Application

### 40G SR4/LR4/ER4 P to P application



## Ordering Information

Model Name	Description
FRM220-40G-2Q	40G QSFP+ to 40G QSFP+ 3R transponder card (optional 40G QSFP+ module)

### ■ Chassis Option

Model Name	Description
FRM220-CH20(HS)	2U 19", 20 slots rack mount chassis with high speed cooling fan and rack mounting kit
FRM220-AC	Chassis Power module 100~240 VAC, IEC connector, 200W
FRM220-DC48	Chassis Power module 36~60 VDC, 3 pin terminal block, 200W
FRM220-CH02M-AC/DC/AD	2-slot chassis with console port and AC or DC power, with fan
FRM220-CH02/NMC-AC/DC/AD	2-slot chassis with fan, managed via optional NMC card and with AC, DC or AD power
FRM220-CH02/SMT-AC/DC/AD	2-slot chassis with fan, managed via optional NMC card and with AC, DC or AD power plus fan/power alarm detection