



Model Name		FRM220-10G-3R	FRM220-16G-3R	FRM220-40G-1Q4S	FRM220-40G-2Q	FRM220-100GE-2Q
Description		10G Transponder (3R)	16G Transponder (3R)	40G Transponder (3R)	40G Transponder (3R)	100G Transponder (3R)
Fiber Interface	SFP+	4-port	4-port	4-port		
	QSFP+			1-port	2-port	
	QSFP28					2-port
	Connector Type	LC	LC	LC	LC	LC
Power	Power types		12VDC	12VDC	12VDC	12VDC
Front Panel	Diagnostic LEDs		✓	✓	✓	✓
Console Interface RS-232		via FRM220-CH02M chassis				
Features	1+1 Redundant fiber protection service channel per card		✓	✓		
			2ch	2ch	1ch	1ch
	Loop back test		✓	✓	✓	✓
	Auto Laser Shutdown (ALS)		✓	✓	✓	✓
	SNMP, Telnet, Web management		via NMC in FRM220 chassis			
TFTP f/w upgrade		✓	✓	✓	✓	✓
Protocol	100GE	100 Gbps				✓
	40GE	40 Gbps		✓	✓	
	16G FC	14.025 Gbps		✓		
	10G FC OTU2	11.31684 Gbps	✓	✓		
	10GE OTU2e	11.09573 Gbps	✓	✓		
	10GE OTU1e	11.04911 Gbps	✓	✓		
	STM64 OTU2	10.70923 Gbps	✓	✓		
	10G FC	10.5180 Gbps	✓	✓		
	10GE ODU2e	10.39953 Gbps	✓	✓		
	10GE ODU1e	10.35583 Gbps	✓	✓		
	10GE	10.3125 Gbps	✓	✓	✓	
	CPRI x20	10.137 Gbps	✓	✓		
	STM64 ODU2	10.03728 Gbps	✓	✓		
	OC192/STM64	9.95328 Gbps	✓	✓		
	CPRI x16	9.8304 Gbps	✓	✓		
	8G FC	8.5 Gbps	✓	✓		
	OBSAI x8 / CPRI x 10	6.144 Gbps	✓	✓		
	CPRI x8	4.9152 Gbps	✓	✓		
	4G FC	4.25 Gbps	✓	✓		
	OBSAI x4 / CPRI x5	3.072 Gbps	✓	✓		
	STM16 OTU1	2.66606 Gbps	✓	✓		
	STM16 ODU1	2.49878 Gbps	✓	✓		
	OC48 / STM16	2.48832 Gbps	✓	✓		
	CPRI x4	2.4576 Gbps	✓	✓		
	2G FC	2.125 Gbps	✓	✓		
	OBSAI x2	1.536 Gbps	✓	✓		
	1GE	1.25 Gbps	✓	✓		
	OC24	1.24416 Gbps	✓	✓		
	CPRI x2	1.2288 Gbps	✓	✓		
	1G FC	1.0625 Gbps	✓	✓		
OBSAI x1	768 Mbps	✓	✓			
OC12 / STM4	622.08 Mbps	✓	✓			
CPRI x1	614.4 Mbps	✓	✓			
Dimension (D × W × H) mm		155 × 88 × 23mm				