

Appendix

- Power Type vs Standalone Chassis Compatible Table

ModelName	Slot	NMC Card Slot	Console Port	AdapterType	Power Built-in Type					Cooling Fan	Fan-less	Power Module	
				100~240VAC to 12VDC	100~240VAC	18~72VDC	18~60VDC	Dual Power 100~240VAC & 18~60VDC	Dual Power 100~240VAC & 18~72VDC				
CH01	1			✓							✓	12W	
CH01-AC	1				✓							✓	12W
CH01-DC	1						✓					✓	12W
CH01-AD	1											✓	12W/12W
CH01M-AC	1		✓		✓							✓	12W
CH01M-DC	1		✓				✓					✓	12W
CH01M-AD	1		✓									✓	12W/12W
CH02M-AC	2		✓		✓						✓		30W
CH02M-DC	2		✓				✓				✓		30W
CH02M-AD	2		✓								✓		30W/30W
CH02M-2-AC	2		✓		✓							✓	12W
CH02M-2-DC	2		✓				✓					✓	12W
CH02M-2-AD	2		✓									✓	12W/12W
CH02/NMC-AC	2	✓			✓						✓		30W
CH02/NMC-DC	2	✓					✓				✓		30W
CH02/NMC-AD	2	✓									✓		30W/30W
CH02/SMT-AC	2	✓			✓						✓		30W
CH02/SMT-DC	2	✓					✓				✓		30W
CH02/SMT-AD	2	✓									✓		30W/30W
CH04A-AC	4	✓			✓						✓		65W
CH04A-DC	4	✓					✓				✓		50W
CH04A-AD	4	✓									✓		65W/50W

Ordering Information

- DIP Switch Configuration Order : CH01
- Local Console Management Order : CH01M, CH02M and CH02M-2 "M" means the chassis with Console Management.
- Remote Web / SNMP Management Order : CH02 / NMC, CH02/SMT and CH04A
- Power Type : AD = AC + DC Power

Appendix

- Slide-in Card vs Standalone Chassis Compatible Table

Card Name	Product Name	Page	FRM220-CH20	FRM220A-CH20	CH08 CH08A	CH04A	CH02/NMC
FRM220-NMC	Network Management Controller		✓		✓	✓	✓
FRM220A-GSW/SNMP-10G	Gigabit Ethernet Aggregate Switch Card			✓			
FRM220A-GSW/SNMP	Gigabit Ethernet Aggregate Switch Card			✓			
FRM220-40G-1Q4S	40G QSFP to 4x10G SFP+ Transponder		✓		✓	✓	✓
FRM220-16G-3R	16G Multi Rate Transponder (3R)		✓		✓	✓	✓
FRM220-10G-FEC	SFP+ STM-64/10G Ethernet FEC Transponder		✓		✓	✓	✓
FRM220-10G-3R	10G 3R Transponder SFP+ to XFP Fiber Protection		✓		✓	✓	✓
FRM220-4G-3R	4G 2R Multi-Rate 2R Transponder (with protection for 3S model)		✓		✓	✓	✓
FRM220-DWDM	4 and 8-ch DWDM Mux/DeMux		✓		✓	✓	
FRM220-CWDM	4 and 8-ch CWDM Mux/DeMux		✓		✓	✓	
FRM220-OADM	Optical Add-Drop Multiplexer		✓		✓	✓	
FRM220-OAB15	Single Channel EDFA Booster NIC		✓		✓	✓	
FRM220-OP552	1+1 Fiber Optical Protection Switch		✓		✓	✓	✓
FRM220-OPS51	1:1 Fiber Optical Protection Switch		✓		✓	✓	✓
FRM220-MSW404S	4x GbE, RJ45 + 4x Dual Rate L2+ OAM Managed Switch with SyncE						
FRM220-MSW404	4x GbE, RJ45 + 4x Dual Rate L2+ OAM Managed Switch						
FRM220-MSW202	2x GbE, RJ45 + 2x Dual Rate L2+ OAM Managed Switch		✓		✓	✓	✓
FRM220-MX210	2-Port Gigabit Ethernet Multiplexer		✓		✓	✓	✓
FRM220-10GC-TS	10G Ethernet Converter 10G Base-T to SFP+		✓		✓	✓	✓
FRM220A-1002ES	2x 10/100/1000Base-T + 2x 100/1000Base-X SFP GbE Switch		✓	✓	✓	✓	✓
FRM220A-1000EAS/X	2-Port 10/100/1000Base-T + 2-Port 1000Base-X OAM/IP Managed Switch		✓	✓	✓	✓	✓
FRM220-10/100	10/100Base-TX to 100Base-FX Media Converter		✓		✓	✓	
FRM220-1000DS	1000Base-X to 1000Base-X SFP media converter		✓		✓	✓	✓
FRM220-1000TS	1000Base-T to 1000Base-X SFP Media Converter		✓		✓	✓	✓
FRM220-1000M	10/100/1000Base-T to 1000Base-X Web Smart OAM/IP Managed Converter		✓		✓	✓	✓
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP Web Smart OAM/IP Managed Converter		✓		✓	✓	✓
FRM220-1000EAS/X-1	OAM/IP-Based Managed Gigabit Ethernet Media Converter		✓		✓	✓	✓
FRM220-100AS-1	10/100Base-TX to 100Base-FX Media Converter		✓		✓	✓	
FRM220-10/100i	10/100Base-TX to 100Base-FX In-band Managed Converter		✓		✓	✓	✓
FRM220-10/100iS-2	Dual Channels 10/100Base-TX to 100Base-FX In-Band Managed Converter		✓		✓	✓	✓
FRM220-FXO-4&FXS-4	4xPOTS over Fiber		✓		✓	✓	✓
FRM220-FXO/FXS	POTS over Fiber		✓		✓	✓	✓
FRM220A-iMux16	Ethernet to 16 E1 Mux NIC		✓	✓	✓	✓	✓
FRM220A-iMux8	Ethernet to 8 E1 Mux NIC		✓	✓	✓	✓	✓
FRM220A-iMux4	Ethernet to 4 E1 Mux NIC		✓	✓	✓	✓	
FRM220-GFOM08	8-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer		✓		✓	✓	✓
FRM220-GFOM04	4-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer		✓		✓	✓	✓
FRM220-FOM04	4-Port E1/T1+100M Ethernet Fiber Multiplexer		✓		✓	✓	✓
FRM220-FOM01	E1/T1+100M Ethernet Fiber Multiplexer		✓		✓	✓	✓
FRM220-FTEC	E1/T1 Cross Rate Converter		✓		✓	✓	✓
FRM220-E1/Data	E1 to Data		✓		✓	✓	✓
FRM220-Eoe1/G(S)	Ethernet Bridge over E1 (GFP)		✓		✓	✓	✓
FRM220A-Eoe1	Ethernet Bridge over E1		✓	✓	✓	✓	✓
FRM220-DS3/E3	DS3/E3 over Fiber		✓		✓	✓	✓
FRM220-E1/T1	E1/T1 Fiber Modem		✓		✓	✓	✓
FRM220-Data	V.35/X.21/RS530/449/232 Fiber Modem		✓		✓	✓	✓
FRM220-Serial	RS485/232 Media Converter		✓		✓	✓	✓
FRM220-ET100	Ethernet over E1 Fiber Modem		✓		✓	✓	✓
FRM220-CCF	2ch/4ch Contact Closure Fiber Converter		✓		✓	✓	✓

- Power Type vs Standalone Chassis Compatible Table

Power Type (option)	AC: AC Power AD: AC+DC Power	DC: DC Power AA: AC+AC Power DD: DC+DC Power	AC, DC AD, AA, DD	AC, DC AD, AA, DD	AC, DC AD, AA, DD
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Appendix

- Slide-in Card vs Standalone Chassis Compatible Table

Card Name	Product Name	Page	CH02M	CH02M-2	CH02/SMT	CH01M	CH01
FRM220-NMC	Network Management Controller						
FRM220A-GSW/SNMP-10G	Gigabit Ethernet Aggregate Switch Card						
FRM220A-GSW/SNMP	Gigabit Ethernet Aggregate Switch Card						
FRM220-40G-1Q4S	40G QSFP to 4x10G SFP+ Transponder		✓		✓		
FRM220-16G-3R	16G Multi Rate Transponder (3R)		✓		✓	✓	✓
FRM220-10G-FEC	SFP+ STM-64/10G Ethernet FEC Transponder		✓		✓		
FRM220-10G-3R	10G 3R Transponder SFP+ to XFP Fiber Protection		✓		✓		
FRM220-4G-3R	4G 2R Multi-Rate 2R Transponder (with protection for 3S model)		✓		✓	✓	
FRM220-DWDM	4 and 8-ch DWDM Mux/DeMux						✓
FRM220-CWDM	4 and 8-ch CWDM Mux/DeMux						✓
FRM220-OADM	Optical Add-Drop Multiplexer						✓
FRM220-OAB15	Single Channel EDFA Booster NIC						✓
FRM220-OP552	1+1 Fiber Optical Protection Switch					✓	✓
FRM220-OPS51	1:1 Fiber Optical Protection Switch					✓	✓
FRM220-MSW404S	4x GbE, RJ45 + 4x Dual Rate L2+ OAM Managed Switch with SyncE		✓		✓		
FRM220-MSW404	4x GbE, RJ45 + 4x Dual Rate L2+ OAM Managed Switch		✓		✓		
FRM220-MSW202	2x GbE, RJ45 + 2x Dual Rate L2+ OAM Managed Switch		✓		✓	✓	✓
FRM220-MX210	2-Port Gigabit Ethernet Multiplexer		✓		✓	✓	✓
FRM220-10GC-TS	10G Ethernet Converter 10G Base-T to SFP+		✓		✓		
FRM220A-1002ES	2x 10/100/1000Base-T + 2x 100/1000Base-X SFP GbE Switch		✓		✓	✓	✓
FRM220A-1000EAS/X	2-Port 10/100/1000Base-T + 2-Port 1000Base-X OAM/IP Managed Switch		✓		✓	✓	✓
FRM220-10/100	10/100Base-TX to 100Base-FX Media Converter						✓
FRM220-1000DS	1000Base-X to 1000Base-X SFP media converter		✓		✓	✓	✓
FRM220-1000TS	1000Base-T to 1000Base-X SFP Media Converter		✓		✓		✓
FRM220-1000M	10/100/1000Base-T to 1000Base-X Web Smart OAM/IP Managed Converter					✓	✓
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP Web Smart OAM/IP Managed Converter					✓	✓
FRM220-1000EAS/X-1	OAM/IP-Based Managed Gigabit Ethernet Media Converter		✓		✓	✓	✓
FRM220-100AS-1	10/100Base-TX to 100Base-FX Media Converter		✓		✓	✓	✓
FRM220-10/100i	10/100Base-TX to 100Base-FX In-band Managed Converter					✓	✓
FRM220-10/100iS-2	Dual Channels 10/100Base-TX to 100Base-FX In-Band Managed Converter		✓		✓	✓	✓
FRM220-FXO-4&FXS-4	4xPOTS over Fiber					✓	✓
FRM220-FXO/FXS	POTS over Fiber					✓	✓
FRM220A-iMux16	Ethernet to 16 E1 Mux NIC		✓	✓	✓		
FRM220A-iMux8	Ethernet to 8 E1 Mux NIC					✓	
FRM220A-iMux4	Ethernet to 4 E1 Mux NIC					✓	
FRM220-GFOM08	8-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer		✓	✓	✓		
FRM220-GFOM04	4-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer		✓	✓	✓		
FRM220-FOM04	4-Port E1/T1+100M Ethernet Fiber Multiplexer		✓	✓	✓		
FRM220-FOM01	E1/T1+100M Ethernet Fiber Multiplexer					✓	✓
FRM220-FTEC	E1/T1 Cross Rate Converter					✓	
FRM220-E1/Data	E1 to Data					✓	✓
FRM220-Eoe1/G(S)	Ethernet Bridge over E1 (GFP)					✓	✓
FRM220A-Eoe1	Ethernet Bridge over E1					✓	✓
FRM220-DS3/E3	DS3/E3 over Fiber					✓	✓
FRM220-E1/T1	E1/T1 Fiber Modem					✓	✓
FRM220-Data	V.35/X.21/RS530/449/232 Fiber Modem					✓	✓
FRM220-Serial	RS485/232 Media Converter					✓	✓
FRM220-ET100	Ethernet over E1 Fiber Modem					✓	✓
FRM220-CCF	2ch/4ch Contact Closure Fiber Converter					✓	✓

- Power Type vs Standalone Chassis Compatible Table

Power Type (option)	DC12: AC Adapter AD: AC+DC Power	AC: AC Power AA: AC+AC Power	DC: DC Power DD: DC+DC Power	AC, DC, AD	AC, DC, AD	DC12	DC12, AC, DC, AD, AA, DD	AC, DC, AD
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