

# 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	CH04A	CH02/NMC
FRM220A-GSW/SNMP-10G	Gigabit Ethernet Aggregate Switch Card	2-4		✓			
FRM220-NMC	Network Management Controller	3-4	✓		✓	✓	✓
FRM220-MP7G1X	7x GE to 10G Muxponder	3-10	✓		✓	✓	✓
FRM220-40G-1Q4S	40G QSFP to 4x10G SFP+ Transponder	3-12	✓		✓	✓	✓
FRM220-40G-2Q	40G QSFP+ to 40G QSFP+ 3R Transponder	3-11	✓		✓	✓	✓
FRM220-16G-3R	16G Multi Rate Transponder (3R)	3-13	✓		✓	✓	✓
FRM220-10G-3R	10G 3R Transponder SFP+ to XFP Fiber Protection	3-14	✓		✓	✓	✓
FRM220-4G-3R	4G 2R Multi-Rate 2R Transponder (with protection for 3S model)	3-15	✓		✓	✓	✓
FRM220-1000DS	1000Base-X to 1000Base-X SFP media converter	3-16	✓		✓	✓	✓
FRM220-DWDM	4 and 8-ch DWDM Mux/DeMux	3-17	✓		✓	✓	
FRM220-CWDM	4 and 8-ch CWDM Mux/DeMux	3-19	✓		✓	✓	
FRM220-OADM	Optical Add-Drop Multiplexer	3-21	✓		✓	✓	
FRM220-OAB15	Single Channel EDFA Booster NIC	3-22	✓		✓	✓	
FRM220-OPS51M	1:1 Multi-mode Optical Protection Switch	3-23	✓		✓	✓	✓
FRM220-OPS51	1:1 Fiber Optical Protection Switch	3-24	✓		✓	✓	✓
FRM220-OPS52	1+1 Fiber Optical Protection Switch	3-24	✓		✓	✓	✓
FRM220-10GC-TS	10G Ethernet Converter 10G Base-T to SFP+	3-25	✓		✓	✓	✓
FRM220A-GSW40S	4x 100/1000Base-X SFP Managed GbE Switch	3-26	✓	✓	✓	✓	✓
FRM220A-GSW40T	4x 10/100/1000Base-T Managed GbE Switch	3-26	✓	✓	✓	✓	✓
FRM220A-1002ES	2x 10/100/1000Base-T + 2x 10/100/1000Base-X SFP GbE Switch	3-28	✓	✓	✓	✓	✓
FRM220A-1000EAS/X	2-Port 10/100/1000Base-T + 2-Port 1000Base-X OAM/IP Managed Switch	3-29	✓	✓	✓	✓	✓
FRM220-10/100AS-2	2x 10/100Base-TX + 2x 100Base-FX OAM / IP Managed Switch	3-31	✓		✓	✓	✓
FRM220-100AS-1	10/100Base-TX to 100Base-FX Media Converter	3-31	✓		✓	✓	
FRM220-10/100	10/100Base-TX to 100Base-FX Media Converter	3-32	✓		✓	✓	
FRM220-1000TS	1000Base-T to 1000Base-X SFP Media Converter	3-33	✓		✓	✓	✓
FRM220-1000M	10/100/1000Base-T to 1000Base-X Web Smart OAM/IP Managed Converter	3-34	✓		✓	✓	✓
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP Web Smart OAM/IP Managed Converter	3-35	✓		✓	✓	✓
FRM220-1000EAS/X-1	OAM/IP-Based Managed Gigabit Ethernet Media Converter	3-36	✓		✓	✓	✓
FRM220-10/100i	10/100Base-TX to 100Base-FX In-band Managed Converter	3-37	✓		✓	✓	✓
FRM220-10/100iS-2	Dual Channels 10/100Base-TX to 100Base-FX In-Band Managed Converter	3-38	✓		✓	✓	✓
FRM220-FXO-4&FXS-4	4xPOTS over Fiber	3-39	✓		✓	✓	✓
FRM220-FXO/FXS	POTS over Fiber	3-40	✓		✓	✓	✓
FRM220A-iMux16	Ethernet to 16 E1 Mux NIC	3-41	✓	✓	✓	✓	✓
FRM220A-iMux8	Ethernet to 8 E1 Mux NIC	3-41	✓	✓	✓	✓	✓
FRM220A-iMux4	Ethernet to 4 E1 Mux NIC	3-41	✓	✓	✓	✓	
FRM220-GFOM08	8-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer	3-43	✓		✓	✓	✓
FRM220-GFOM04	4-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer	3-44	✓		✓	✓	✓
FRM220-FOM04	4-Port E1/T1+100M Ethernet Fiber Multiplexer	3-45	✓		✓	✓	✓
FRM220-FOM01	E1/T1+100M Ethernet Fiber Multiplexer	3-46	✓		✓	✓	✓
FRM220-FTEC	E1/T1 Cross Rate Converter	3-47	✓		✓	✓	✓
FRM220-E1/Data	E1 to Data	3-48	✓		✓	✓	✓
FRM220-Eoe1/G(S)	Ethernet Bridge over E1 (GFP)	3-49	✓		✓	✓	✓
FRM220A-Eoe1	Ethernet Bridge over E1	3-50	✓	✓	✓	✓	✓
FRM220-DS3/E3	DS3/E3 over Fiber	3-51	✓		✓	✓	✓
FRM220-E1/T1	E1/T1 Fiber Modem	3-52	✓		✓	✓	✓
FRM220-Data	V.35/X.21/RS530/449/232 Fiber Modem	3-54	✓		✓	✓	✓
FRM220-Serial	RS485/232 Media Converter	3-56	✓		✓	✓	✓
FRM220-ET100	Ethernet over E1 Fiber Modem	3-57	✓		✓	✓	✓
FRM220-CCF20/CCF40	2ch/4ch Contact Closure Fiber Converter	3-58	✓		✓	✓	✓

## - 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
FRM220A-GSW/SNMP-10G	Gigabit Ethernet Aggregate Switch Card	2-4					
FRM220-NMC	Network Management Controller	3-4					
FRM220-MP7G1X	7x GE to 10G Muxponder	3-10					
FRM220-40G-1Q4S	40G QSFP to 4x10G SFP+ Transponder	3-12	✓		✓		
FRM220-40G-2Q	40G QSFP+ to 40G QSFP+ 3R Transponder	3-11	✓		✓		
FRM220-16G-3R	16G Multi Rate Transponder (3R)	3-13	✓		✓	✓	✓
FRM220-10G-3R	10G 3R Transponder SFP+ to XFP Fiber Protection	3-14	✓		✓		
FRM220-4G-3R	4G 2R Multi-Rate 2R Transponder (with protection for 3S model)	3-15	✓		✓	✓	
FRM220-1000DS	1000Base-X to 1000Base-X SFP media converter	3-16					
FRM220-DWDM	4 and 8-ch DWDM Mux/DeMux	3-17					✓
FRM220-CWDM	4 and 8-ch CWDM Mux/DeMux	3-19					✓
FRM220-OADM	Optical Add-Drop Multiplexer	3-21					✓
FRM220-OAB15	Single Channel EDFA Booster NIC	3-22					✓
FRM220-OPS51M	1:1 Multi-mode Optical Protection Switch	3-23				✓	✓
FRM220-OPS51	1:1 Fiber Optical Protection Switch	3-24				✓	✓
FRM220-OPS52	1+1 Fiber Optical Protection Switch	3-24				✓	✓
FRM220-10GC-TS	10G Ethernet Converter 10G Base-T to SFP+	3-25	✓		✓		
FRM220A-GSW40S	4x 100/1000Base-X SFP Managed GbE Switch	3-26	✓		✓	✓	✓
FRM220A-GSW40T	4x 10/100/1000Base-T Managed GbE Switch	3-26	✓		✓	✓	✓
FRM220A-1002ES	2x 10/100/1000Base-T + 2x 10/100/1000Base-X SFP GbE Switch	3-28	✓		✓	✓	✓
FRM220A-1000EAS/X	2-Port 10/100/1000Base-T + 2-Port 1000Base-X OAM/IP Managed Switch	3-29	✓		✓	✓	✓
FRM220-10/100AS-2	2x 10/100Base-TX + 2x 100Base-FX OAM / IP Managed Switch	3-31	✓		✓	✓	✓
FRM220-100AS-1	10/100Base-TX to 100Base-FX Media Converter	3-31	✓		✓	✓	✓
FRM220-10/100	10/100Base-TX to 100Base-FX Media Converter	3-32					✓
FRM220-1000TS	1000Base-T to 1000Base-X SFP Media Converter	3-33	✓		✓		✓
FRM220-1000M	10/100/1000Base-T to 1000Base-X Web Smart OAM/IP Managed Converter	3-34				✓	✓
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP Web Smart OAM/IP Managed Converter	3-35				✓	✓
FRM220-1000EAS/X-1	OAM/IP-Based Managed Gigabit Ethernet Media Converter	3-36	✓		✓	✓	✓
FRM220-10/100i	10/100Base-TX to 100Base-FX In-band Managed Converter	3-37				✓	✓
FRM220-10/100iS-2	Dual Channels 10/100Base-TX to 100Base-FX In-Band Managed Converter	3-38	✓		✓	✓	✓
FRM220-FXO-4&FXS-4	4xPOTS over Fiber	3-39				✓	✓
FRM220-FXO/FXS	POTS over Fiber	3-40				✓	✓
FRM220A-iMux16	Ethernet to 16 E1 Mux NIC	3-41	✓	✓	✓		
FRM220A-iMux8	Ethernet to 8 E1 Mux NIC	3-41				✓	
FRM220A-iMux4	Ethernet to 4 E1 Mux NIC	3-41				✓	
FRM220-GFOM08	8-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer	3-43	✓	✓	✓		
FRM220-GFOM04	4-Port E1/T1+10/100/1000M Ethernet Fiber Multiplexer	3-44	✓	✓	✓		
FRM220-FOM04	4-Port E1/T1+100M Ethernet Fiber Multiplexer	3-45	✓	✓	✓		
FRM220-FOM01	E1/T1+100M Ethernet Fiber Multiplexer	3-46				✓	✓
FRM220-FTEC	E1/T1 Cross Rate Converter	3-47				✓	
FRM220-E1/Data	E1 to Data	3-48				✓	✓
FRM220-Eoe1/G(S)	Ethernet Bridge over E1 (GFP)	3-49				✓	✓
FRM220A-Eoe1	Ethernet Bridge over E1	3-50				✓	✓
FRM220-DS3/E3	DS3/E3 over Fiber	3-51				✓	✓
FRM220-E1/T1	E1/T1 Fiber Modem	3-52				✓	✓
FRM220-Data	V.35/X.21/RS530/449/232 Fiber Modem	3-54				✓	✓
FRM220-Serial	RS485/232 Media Converter	3-56				✓	✓
FRM220-ET100	Ethernet over E1 Fiber Modem	3-57				✓	✓
FRM220-CCF20/CCF40	2ch/4ch Contact Closure Fiber Converter	3-58				✓	✓

## - 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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