

Technical Specifications - Stratix 5400 Switches

Attribute	1783-HMS8T4CGN, 1783-HMS16T4CGN, 1783-HMS8TG4CGN, 1783-HMS8TG4CGR	1783-HMS4C4CGN, 1783-HMS16TG4CGN, 1783-HMS16TG4CGR	1783-HMS8S4CGN, 1783-HMS8SG4CGN, 1783-HMS8SG4CGR	1783-HMS4T4E4CGN	1783-HMS4S8E4CGN, 1783-HMS8T8EG4CGN, 1783-HMS4SG8EG4CGN, 1783-HMS4EG8CGN, 1783-HMS4EG8CGR, 1783-HMS8T8EG4CGR, 1783-HMS4SG8EG4CGR,
Alarm relay ratings	1 A @ 30V DC or 0.5 A @ 48V DC				
Power requirements	3.7 A max @ 12...54V DC	4.3 A max @ 12...54V DC	5.0 A max @ 12...54V DC	3.7 A max @ 12...54V DC	4.3 A max @ 12...54V DC
Power over Ethernet input power				44...54V DC for PoE 50...54V DC for PoE+ or a combination of PoE and PoE+	
Isolation voltage	60V (continuous), basic insulation type, all ports to ground No isolation between individual ports Type tested at 500V AC for 60 s				
DC power connection	0.82...0.52 mm ² (18...20 AWG) solid or stranded copper wire rated at 30 °C (86 °F), or greater, above the surrounding air temperature 6.3 mm (0.25 in.) ± 0.5 mm (0.02 in.) strip length				
Alarm connection	0.5...0.8 mm ² (20...18 AWG) solid or stranded, UL/CSA-rated style 1007 or 1569 twisted-pair copper appliance wiring material (AWM) wire, 6.3 mm(0.25 in.) ± 0.5 mm (0.02 in.) strip length				
Ground connection	4 mm ² (10 AWG) solid or stranded copper wire				
SFP modules ⁽¹⁾	<ul style="list-style-type: none"> • 1783-SFP100FX • 1783-SFP1GSX • 1783-SFP100LX • 1783-SFP1GLX 				
Memory card replacement	1784-SD1				
Screw torque, ground terminal	0.51 N•m (4.5 lb•in)				
Screw torque, power terminal	0.56 N•m (5.0 lb•in)				
Screw torque, alarm terminal	0.23 N•m (2.0 lb•in)				
Weight, approx	2.88 kg (6.35 lb)				
Wiring category ⁽²⁾	3 - on console ports 2 - on DC power and alarm ports 2 - on Ethernet ports				
Enclosure type rating	None (open-style)				
Pilot duty rating	Alarm not rated				
North American temp code	T3				
ATEX temp code	T3				

(1) SFP modules supported only on switches with combo ports or SFP slots.

(2) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Technical Specifications - Stratix 5700 Switches

Attribute	1783-BMS06SL, 1783-BMS06SA, 1783-BMS06TL, 1783-BMS06TA, 1783-BMS06SGL, 1783-BMS06SGA, 1783-BMS06TGL, 1783-BMS06TGA	1783-BMS10CL, 1783-BMS10CA, 1783-BMS10CGL, 1783-BMS10CGA	1783-BMS10CGN, 1783-BMS10CGP	1783-BMS20CL, 1783-BMS20CA, 1783-BMS20CGL, 1783-BMS20CGP, 1783-BMS20CGN, 1783-BMS20CGPK	1783-BMS4S2SGL, 1783-BMS4S2SGA
Alarm relay ratings	1 A @ 30V DC or 0.5 A @ 48V DC				
Power requirements	0.5...2.0 A max @ 12...48V DC Class 2/SELV			0.5...3.0 A max @ 12...48V DC Class 2/SELV	0.5...2.0 A max @ 12...48V DC Class 2/SELV
Power consumption	9.5 W @ 24V DC @ 40 °C (104 °F) 15 W max	12.5 W @ 24V DC/40 °C (104 °F) 17 W max	15 W @ 24V DC/40 °C (104 °F) 20 W max	21 W @ 24V DC/40 °C (104 °F) 30 W max	12.5 W @ 24V DC/40 °C (104 °F) 14 W max
Isolation voltage	50V (continuous), basic insulation type, DC power ports to ground, DC power ports to Ethernet ports, and DC power ports to alarm ports No isolation between individual Ethernet ports No isolation between console port and system Type tested at 850V DC for 60 s				60V (continuous), basic insulation type, DC power ports to ground, alarm ports to ground, and DC power ports to alarm ports No isolation between console port and system Type tested at 707V DC for 60 s
Ethernet connection ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2- or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702				—
DC power connection	0.5...0.8 mm ² (20...18 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max, 6.3 mm (0.25 in.) ±0.5 mm (0.02 in.) strip length				
Alarm connection	0.5...0.8 mm ² (20...18 AWG) solid or stranded, UL/CSA-rated style 1007 or 1569 twisted-pair copper appliance wiring material (AWM) wire, 6.3 mm (0.25 in.) ±0.5 mm (0.02 in.) strip length				
Ground connection	4.0 mm ² (12 AWG) min, stranded copper wire				
SFP modules ⁽²⁾	<ul style="list-style-type: none"> • 1783-SFP100FX • 1783-SFP1GSX • 1783-SFP100LX • 1783-SFP1GLX 				
Memory card	1784-SD1				
Torque	0.23 N•m (2.0 lb•in) on power and alarm connectors 0.96 N•m (8.5 lb•in) max on ground terminals				0.23 N•m (2.0 lb•in) on power and alarm connectors 0.4 N•m (3.5 lb•in) max on ground terminals
Weight, approx	1.11 kg (2.45 lb)	1.25 kg (2.75 lb)	1.38 kg (3.05 lb)	2.04 kg (4.50 lb)	1.22 kg (2.69 lb)
Wiring category ⁽³⁾	3 - on console and alarm ports 2 - on DC power ports 2 - on Ethernet ports				3 - on console ports 2 - on DC power and alarm ports
Enclosure type rating	None (open-style)				
Pilot duty rating	Alarm not rated				
North American temp code	T4				
IEC temp code	T4				

(1) See [page 45](#) for recommended products.

(2) SFP modules supported only on switches with combo ports or SFP slots.

(3) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Environmental Specifications - Stratix 5700 Switches (continued)

Attribute	1783-BMS06SL, 1783-BMS06SA, 1783-BMS06TL, 1783-BMS06TA, 1783-BMS06SGL, 1783-BMS06SGA, 1783-BMS06TGL, 1783-BMS06TGA, 1783-BMS10CL, 1783-BMS10CA, 1783-BMS10CGL, 1783-BMS10CGA, 1783-BMS10CGN, 1783-BMS10CGP, 1783-BMS20CL, 1783-BMS20CA, 1783-BMS20CGL, 1783-BMS20CGP, 1783-BMS20CGN, 1783-BMS20CGPK	1783-BMS4S2SGL, 1783-BMS4S2SGA
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz. . . 80 MHz	
Voltage variation IEC 61000-4-29	10 ms interruption on DC power ports	
Damped oscillatory wave immunity IEC 61000-4-18	±1 kV line-line (DM) and ±2.5 kV line-earth (CM) on power ports	±1 kV line-line (DM) and ±2.5 kV line-earth (CM) on DC power ports at 1 MHz and 100 kHz ±1 kV line-line (DM) and ±2.5 kV line-earth (CM) on alarm ports at 1 MHz and 100 kHz

Stratix 5700 Power over Ethernet Switches**Technical Specifications - Stratix 5700 Power over Ethernet Switches**

Attribute	1783-BMS12T4E2CGL, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGNK
Ethernet data rate	10/100 Mbps
Alarm relay ratings	30V DC, 1 A or 48V DC, 0.5 A
Power requirements	12...48V DC, 0.5...3.0 A max Class 2/SELV
Power over Ethernet input power	48V DC for PoE 54V DC for PoE+ or a combination of PoE and PoE+
Power consumption	15 W @ 24V DC 40 °C (104 °F) 20 W max
Isolation voltage	60V (continuous), basic insulation type, DC power ports to ground, and PoE power ports to ground No isolation between individual Ethernet ports No isolation between PoE power and Ethernet ports No isolation between console port and system Type tested at 1585V DC for 60 s
Ethernet connections ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2- or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702
DC power connections	0.5...0.8 mm ² (20...18 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max, 6.3 mm (0.25 in.) ±0.5 mm (0.02 in.) strip length
Alarm connections	0.5...0.8 mm ² (20...18 AWG) solid or stranded, UL/CSA-rated style 1007 or 1569 twisted-pair copper appliance wiring material (AWM) wire, 6.3 mm (0.25 in.) ±0.5 mm (0.02 in.) strip length
Ground connection	4.0 mm ² (12 AWG) min, stranded copper wire
SFP modules ⁽²⁾	<ul style="list-style-type: none"> • 1783-SFP100FX • 1783-SFP1GSX • 1783-SFP100LX • 1783-SFP1GLX
Memory card	1784-SD1
Torque	0.23 N•m (2.0 lb•in) on power and alarm connectors 0.96 N•m (8.5 lb•in) max on ground terminals
Weight, approx	1.11 kg (2.45 lb)

Stratix 8000 and Stratix 8300 Ethernet Managed Switches

Technical Specifications - Stratix 8000 and Stratix 8300 Switches

Attribute	1783-MS06T	1783-MS10T	1783-RMS06T	1783-RMS10T
Description	Stratix 8000™ managed switch, Layer 2 • 6 ports	Stratix 8000 managed switch, Layer 2 • 10 ports	Stratix 8300™ managed switch, Layer 3 • 6 ports	Stratix 8300 managed switch, Layer 3 • 10 ports
Inrush current, max	2.0 A			
Switch input rating, max	2 A max @ 18...60V DC, CL 2/SELV			
Alarm relay rating, max	1 A max @ 30V DC, CL 2/SELV			
Power dissipation	15.1 W	15.7 W	15.1 W	15.7 W
Isolation voltage	75V (continuous), basic insulation type, power to ground, power to network channels, and power to alarm No isolation between individual Ethernet ports No isolation between console port and system Type tested at 1000V AC for 60 s			
Ethernet connections ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2- or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702			
DC power and alarm connections	0.5...0.8 mm ² (20...18 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater, 1.2 mm (3/64 in.) insulation max			
Functional ground connection	3.3...5.3 mm ² (12...10 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater			
SFP modules ⁽²⁾	<ul style="list-style-type: none"> • 1783-SFP100FX • 1783-SFP1GSX • 1783-SFP100LX • 1783-SFP1GLX 			
Memory card	1783-MCF		1783-RMCF	
Torque	0.23 N·m (2.0 lb·in) on power and alarm connectors			
Wiring category ⁽³⁾	2 - on alarm ports 2 - on power ports 2 - on Ethernet ports			
Enclosure type rating	None (open-style)			
North American temp code	T4			
IEC temp code	T4			

(1) See [page 45](#) for recommended products.

(2) SFP modules supported only on switches with combo ports or SFP slots.

(3) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Technical Specifications - Stratix 8000 and Stratix 8300 Expansion Modules

Attribute	1783-MX08T	1783-MX08F	1783-MX04S	1783-MX08S
Description	Expansion module • 8 ports, copper	Expansion module • 8 ports, fiber	Expansion module • 4 SFP ports, fiber	Expansion module • 8 SFP ports, fiber
Backplane power	3.3V DC, 1.7 A max	3.3V DC, 3.6 A max	3.3V DC, 2.5 A max	3.3V DC, 4.0 A max
Power consumption	5.6 W	11.8 W	8.25 W	13.2 W
Isolation voltage	75V (continuous), basic insulation type, expansion backplane to network channels No isolation between individual Ethernet ports Type tested at 1000V AC for 60 s	—		
Ethernet connections ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2- or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702	—		
SFP modules	—		• 1783-SFP100FX • 1783-SFP100LX	
Wiring category ⁽²⁾	2 - on Ethernet ports	—		
Enclosure type rating	None (open-style)			
North American temp code	T4			
IEC temp code	T4			

(1) See [page 45](#) for recommended products.

(2) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Technical Specifications - Stratix 8000 and Stratix 8300 Fiber Expansion Module

Attribute	1783-MX08F
Ethernet data rate	100 Mbps
Connecting mode	Full duplex
Optical wavelength	1310 nm
Optical cable length, max	Graded index multimode fiber; 2000 m
Optical link budget	8 db with 62.5/125 μ m multimode cable 4 db with 50/125 μ m multimode cable
Connector type	IEC 61754-20 LC connector

Technical Specifications - Stratix 8000 and Stratix 8300 Power over Ethernet Expansion Modules

Attribute	1783-MX04E	1783-MX04T04E
Description	Expansion module • 4 ports, Power over Ethernet	Expansion module • 4 ports, copper • 4 ports, Power over Ethernet
Backplane power	3.3V DC, 0.94 A max	3.34V DC, 1.08 A max
Power over Ethernet input power	48V DC for PoE 54V DC for PoE+ or a combination of PoE and PoE+ 2.5 A max	48V DC for PoE 54V DC for PoE+ or a combination of PoE and PoE+ 2.4 A max
Power dissipation	3.0 W	3.6 W

Accessories

SFP Transceivers

Cat. No.	Description	Wavelength	Core Size/ Cladding Size (micron)	Modal Bandwidth (MHz/km)	Cable Length	Compatibility
1783-SFP100FX	100 Base-FX multi-mode transceiver	1310 nm	50/125	500	2 km (6562 ft)	Stratix 5700 Stratix 8000 Stratix 8300
			62.5/125	500		
1783-SFP100LX	100 Base-LX single-mode transceiver	1310 nm	G.652	—	10 km (32,808 ft)	Stratix 5700 Stratix 8000 Stratix 8300
1783-SFP1GSX	1000 Base-SX multi-mode transceiver	850 nm	62.5/125	160	220 m (722 ft)	Stratix 6000 Stratix 5700 Stratix 8000 Stratix 8300
			62.5/125	200	275 m (902 ft)	
			50/125	400	500 m (1640 ft)	
			50/125	500	550 m (1804 ft)	
1783-SFP1GLX	1000 Base-LX/LH single-mode transceiver	1310 nm	G.652	—	10 km (32,808 ft)	Stratix 6000 Stratix 5700 Stratix 8000 Stratix 8300

Memory Cards

Cat. No.	Description	Compatibility
1784-SD1	1 GB industrial SD card	Stratix 5700
1783-MCF	Stratix 8000 CompactFlash card (spare)	Stratix 8000
1783-RMCF	Stratix 8300 CompactFlash card (spare)	Stratix 8300