

Stratix Ethernet Device Specifications

Stratix® 2000 Switches (1783-US), Stratix 2500 Switches (1783-LMS), Stratix 6000 Switches (1783-EMS)

Stratix 2100 Ethernet Unmanaged Switches (1783-USP)

Stratix 4300 Remote Access Routers (1783-RA)

Stratix 5200 Ethernet Managed Switches (1783-CMS)

Stratix 5400 Switches (1783-HMS), Stratix 5410 Switches (1783-IMS), Stratix 5700 Switches (1783-BMS)

ArmorStratix™ 5700 Switches (1783-ZMS), Stratix 8000 and 8300 Switches (1783-MS, 1783-RMS, 1783-MX)

Stratix 5800 Switches (1783-MMS, 1783-MMX)

Stratix 5100 Wireless Access Point/Workgroup Bridge (1783-WAP), Stratix 5900 Services Router (1783-SR)

Stratix 5950 Security Appliance (1783-SAD), Embedded Switch Technology (1783-ETAP), Configurable NAT Router (1783-NATR), CIP Security Proxy (1783-CSP)

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Stratix 5700 Ethernet Managed Switches

Cat. No.	Total Ports	RJ45 Ports ⁽¹⁾	Combo Ports	PoE/PoE+ Ports	SFP Slots	Firmware Type	CIP Sync (IEEE 1588)	NAT	DLR	Conformal Coating
1783-BMS4S2SGL	6	—	—	—	4 FE + 2 GE	Lite	—	—	—	—
1783-BMS4S2SGA	6	—	—	—	4 FE + 2 GE	Full	—	—	—	—
1783-BMS06SL	6	4 FE	—	—	2 FE	Lite	—	—	—	—
1783-BMS06SA	6	4 FE	—	—	2 FE	Full	—	—	—	—
1783-BMS06TL	6	6 FE	—	—	—	Lite	—	—	—	—
1783-BMS06TA	6	6 FE	—	—	—	Full	—	—	—	—
1783-BMS06SGL	6	4 FE	—	—	2 GE	Lite	—	—	—	—
1783-BMS06SGA	6	4 FE	—	—	2 GE	Full	—	—	—	—
1783-BMS06TGL	6	4 FE + 2 GE	—	—	—	Lite	—	—	—	—
1783-BMS06TGA	6	4 FE + 2 GE	—	—	—	Full	—	—	—	—
1783-BMS10CL	10	8 FE	2 FE	—	—	Lite	—	—	—	—
1783-BMS10CA	10	8 FE	2 FE	—	—	Full	—	—	—	—
1783-BMS10CGL	10	8 FE	2 GE	—	—	Lite	—	—	—	—
1783-BMS10CGA	10	8 FE	2 GE	—	—	Full	—	—	—	—
1783-BMS10CGP	10	8 FE	2 GE	—	—	Full	Yes	—	Yes	—
1783-BMS10CGN	10	8 FE	2 GE	—	—	Full	Yes	Yes	Yes	—
1783-BMS12T4E2CGL	18	12 FE	2 GE	4 FE	—	Lite	—	—	Yes	—
1783-BMS12T4E2CGP	18	12 FE	2 GE	4 FE	—	Full	Yes	—	Yes	—
1783-BMS12T4E2CGNK	18	12 FE	2 GE	4 FE	—	Full	Yes	Yes	Yes	Yes
1783-BMS20CL	20	16 FE	2 FE	—	2 FE	Lite	—	—	Yes	—
1783-BMS20CA	20	16 FE	2 FE	—	2 FE	Full	—	—	Yes	—
1783-BMS20CGL	20	16 FE	2 GE	—	2 FE	Lite	—	—	Yes	—
1783-BMS20CGP	20	16 FE	2 GE	—	2 FE	Full	Yes	—	Yes	—
1783-BMS20CGN	20	16 FE	2 GE	—	2 FE	Full	Yes	Yes	Yes	—
1783-BMS20CGPK	20	16 FE	2 GE	—	2 FE	Full	Yes	—	Yes	Yes

(1) FE = Fast Ethernet; GE = Gigabit Ethernet.

Table 33 - 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	1 A @ 30V DC or 0.5 A @ 48V DC				
Power input	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
Power dissipation	15 W	17 W	20 W	30 W	14 W

Table 33 - Technical 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
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
Wire size, 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				—
Wire size, 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				
Wire size, 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				
Wire size, ground connection	4.0 mm ² (12 AWG) min, stranded copper wire				
Screw torque, power and alarm terminals	0.23 N•m (2.0 in•lb)				0.23 N•m (2.0 in•lb)
Screw torque, ground terminal, max	0.96 N•m (8.5 in•lb)				0.4 N•m (3.5 in•lb)
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 ⁽²⁾	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				
SFP modules ⁽³⁾	1783-SFP100FX 1783-SFP100LX 1783-SFP100EXC 1783-SFP100ZXC 1783-SFP100T ⁽⁴⁾ 1783-SFP1GSX ⁽⁵⁾ 1783-SFP1GLX ⁽⁵⁾ 1783-SFP1GEXE ⁽⁵⁾ 1783-SFP1GZY ⁽⁵⁾ 1783-SFP1GTE ⁽⁵⁾				
Memory card	1784-SD1				
Industry standards	Substation KEMA (IEEE 1613, IEC 61850 - 3) IEEE 1613 Electric Power Stations Communications Networking IEC 61850-3 Electric Substations Communications Networking				

(1) See [page 93](#) 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](#).(3) SFP modules are supported only on switches with combo ports or SFP slots. For SFP specifications, see [page 91](#).

(4) The 1783-SFP100T module requires Stratix 5700 firmware revision 8.001or later.

(5) Gigabit Ethernet (GE) SFP modules work only in GE SFP slots. For a list of Stratix 5700 catalog numbers with GE SFP slots, see [page 44](#).

Table 34 - Environmental 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
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	-40...+60 °C (-40...+140 °F)	
Temperature, surrounding air, max	60 °C (140 °F)	
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)	
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing	
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz	
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	55 g	50 g
Emissions CISPR11 (IEC 61000-6-4)	Class A	
ESD immunity IEC 61000-4-2	8 kV contact discharges 15 kV air discharges	6 kV contact discharges 8 kV air discharges
Radiated RF immunity IEC 61000-4-3	20V/m with 1 kHz sine wave 80% AM from 80...1000 MHz 20V/m with 200 Hz 50% pulse 100% AM at 900 MHz 10V/m with 1 kHz sine wave 80% AM from 1000...2700 MHz	20V/m with 1 kHz sine wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% pulse 100% AM at 900 MHz 10V/m with 200 Hz 50% pulse 100% AM at 1890 MHz 20V/m with 1 kHz sine wave 80% AM from 2000...2700 MHz
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz and ±2 kV at 100 kHz on DC power ports ±4 kV at 2.5 kHz, ±2 kV at 5 kHz, and ±1 kV at 100 kHz on alarm ports ±4 kV at 2.5 kHz, ±2 kV at 5 kHz, and ±1 kV at 100 kHz on Ethernet ports	±4 kV at 2.5 kHz, 5 kHz, and 100 kHz on DC power ports ±4 kV at 2.5 kHz, 5 kHz, and 100 kHz on alarm ports
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on DC power ports ±2 kV line-earth (CM) on Ethernet ports	±1 kV line-line (DM) and ±2 kV line-earth (CM) on DC power ports ±1 kV line-line (DM) and ±2 kV line-earth (CM) on alarm ports
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz	
Magnetic field immunity IEC 61000-4-8	—	300 A/m long duration at 50 Hz and 60 Hz 1000 A/m short duration at 50 Hz and 60 Hz
Magnetic pulse immunity IEC 61000-4-9	—	300 A/m pulse
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
Environmental rating	IP30	

18-port and 20-port Switches
1783-BMS12T4E2CGNK, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGL, 1783-BMS20CL,
1783-BMS20CA, 1783-BMS20CGL, 1783-BMS20CGP, 1783-BMS20CGN, 1783-BMS20CGPK

