

Stratix 5700 Ethernet Managed Switches

Cat. No.	Total Ports	RJ45 Ports ⁽¹⁾	Combo Ports	(PoE/PoE+)	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	4FE + 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 8 - 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
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	

Stratix 5700 Power over Ethernet Switches

Table 9 - 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⁾	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)

Table 9 - Technical Specifications - Stratix 5700 Power over Ethernet Switches (Continued)

Attribute	1783-BMS12T4E2CGL, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGNK
Wiring category ⁽³⁾	3 - on console and alarm ports 2 - on DC power ports 2 - on Ethernet ports
Pilot duty rating	Alarm not rated
Enclosure type rating	None (open-style)
North American temp code	T4
IEC temp code	T4

(1) See [page 55](#) 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](#).

Table 10 - Environmental Specifications - Stratix 5700 Power over Ethernet Switches

Attribute	1783-BMS12T4E2CGL, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGNK
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
Emissions CISPR11 (IEC 61000-6-4)	Class A
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80...1000 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 1V/m with 1 kHz sine-wave 80% AM from 1000...2700 MHz
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz on DC power ports ±4 kV at 5 kHz on alarm ports ±4 kV at 5 kHz on Ethernet ports

Table 10 - Environmental Specifications - Stratix 5700 Power over Ethernet Switches

Attribute	1783-BMS12T4E2CGL, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGNK
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
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz ... 80 MHz
Damped oscillatory wave immunity IEC 61000-4-18	± 1 kV line-line (DM) and ± 2.5 kV line-earth (CM) on power ports

Table 11 - Certifications - Stratix 5700 Switches

Certifications (when product is marked) ⁽¹⁾	Stratix 5700 Switches
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810. UL Listed for Class I, Zone 2 Hazardous Locations, certified for U.S. and Canada. See UL File E194810. AEx/Ex nA nC IIC T4 Gc X
CE	European Union 2004/108/EC EMC Directive, compliant with: - EN 61326-1; Meas./Control/Lab., Industrial Requirements - EN 61000-6-2; Industrial Immunity - EN 61000-6-4; Industrial Emissions - EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2011/65/EU RoHS, compliant with: - EN 50581; Technical Documentation
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 94/9/EC ATEX Directive, compliant with: - EN 60079-15; Potentially Explosive Atmospheres, Protection "n" - EN 60079-0; General Requirements II 3 G Ex nA nC IIC T4 Gc X
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3
EtherNet/IP	ODVA conformance tested to EtherNet/IP specifications

(1) See the Product Certification link at <http://www.ab.com> for declarations of conformity, certificates, and other certification details.

18-port and 20-port Switches

1783-BMS12T4E2CGNK, 1783-BMS12T4E2CGP, 1783-BMS12T4E2CGL,
1783-BMS20CL, 1783-BMS20CA, 1783-BMS20CGL, 1783-BMS20CGP,
1783-BMS20CGN, 1783-BMS20CGPK

