

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 2000 Ethernet Unmanaged Switches—Series B

Cat. No.	Total Ports	RJ45 Ports ⁽¹⁾	SFP Ports ⁽¹⁾
1783-US5T/B	5	5 FE	—
1783-US5TG/B	5	5 GE	—
1783-US4T1F/B	5	4 FE	1 FE multimode preinstalled fiber SFP module
1783-US4T1H/B	5	4 FE	1 FE singlemode preinstalled fiber SFP module
1783-US8T/B	8	8 FE	—
1783-US6T2F/B	8	6 FE	2 FE multimode preinstalled fiber SFP modules
1783-US6T2H/B	8	6 FE	2 FE singlemode preinstalled fiber SFP modules
1783-US7T1F/B	8	7 FE	1 FE multimode preinstalled fiber SFP module
1783-US7T1H/B	8	7 FE	1 FE singlemode preinstalled fiber SFP module
1783-US6T2TG2F/B	10	6 FE + 2 GE	2 FE multimode preinstalled fiber SFP modules
1783-US6T2TG2H/B	10	6 FE + 2 GE	2 FE singlemode preinstalled fiber SFP modules
1783-US8TG2GX/B	10	8 GE	2 GE slots ⁽²⁾
1783-US16T/B	16	16 FE	—
1783-US16T2S/B	18	16 FE	2 FE slots ⁽²⁾

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

(2) SFP modules must be ordered separately.

The preinstalled fiber SFP modules that are listed in the SFP Ports column use the LC connector type.

Table 1 - Technical Specifications - Stratix 2000 Switches, Series B

Attribute	1783-US5T/B	1783-US5TG/B	1783-US4T1F/B, 1783-US4T1H/B	1783-US8T/B	1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B	1783-US6T2TG2F/B, 1783-US6T2TG2H/B	1783-US8TG2GX/B	1783-US16T/B	1783-US16T2S/B
Inrush current, max	1.85 A	0.33 A	1.69 A	1.31 A	0.41 A	1.83 A	0.55 A	0.47 A	1.63 A
Power input	24V (12...48V DC, 18...30V AC, 50/60 Hz), SELV								
Power consumption, max	3.4 W	4.5 W	3.4 W	4.6 W	4.6 W	7.5 W	10 W	8.0 W	8.0 W
Current, nom	DC 180 mA AC 360 mA	DC 250 mA AC 500 mA	DC 180 mA AC 360 mA	DC 250 mA AC 500 mA	DC 250 mA AC 500 mA	DC 450 mA AC 900 mA	DC 550 mA AC 1100 mA	DC 430 mA AC 860 mA	DC 430 mA AC 860 mA
Current, max	DC 380 mA AC 750 mA	DC 510 mA AC 1020 mA	DC 380 mA AC 750 mA	DC 510 mA AC 1100 mA	DC 510 mA AC 1100 mA	DC 850 mA AC 1700 mA	DC 1100 mA AC 2200 mA	DC 900 mA ~AC 1800 mA	DC 900 mA AC 1800 mA
Wire size, ground connection	2.5 mm ² (14 AWG) copper wire suitable for 86 °C (187 °F) above surrounding ambient temperature outside the enclosure, with a suitable ring terminal								
Wire size, DC power connection	4...0.25 mm ² (12...24 AWG) twisted-pair copper wire suitable for 86 °C (187 °F) above surrounding ambient temperature outside the enclosure								
Screw torque, ground terminal, max	0.91 N•m (8.05 in•lb)								
Screw torque, power terminals	0.50...0.56 N•m (4.5...5.0 in•lb)								
Enclosure type rating	None (open-style)								
North American temp code	T4	T4A	T5	T4	T4	T4	T4	T5	
ATEX temp code	T4	T4	T4	T4	T4	T4	T4	T4	

Table 1 - Technical Specifications - Stratix 2000 Switches, Series B (Continued)

Attribute	1783-US5T/B	1783-US5T6/B	1783-US4T1F/B, 1783-US4T1H/B	1783-US8T/B	1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B	1783-US6T2TG2F/B, 1783-US6T2TG2H/B	1783-US8TG2GX/B	1783-US16T/B	1783-US16T2S/B
IECEX temp code	T4	T4	T4	T4	T4	T4	T4	T4	
MAC addresses, max supported	2 K	8 K	2 K	2 k	2 K	8 K	8 K	8 K	
SFP modules ⁽¹⁾	No SFP slots	No SFP slots	Preinstalled	No SFP slots	Preinstalled	Preinstalled	Ordered separately: 1783-SFP1GSX 1783-SFP1GLX 1783-SFP1GEXE 1783-SFP1GZX	No SFP slots	Ordered separately: 1783-SFP100FX 1783-SFP100LX 1783-SFP100EXC 1783-SFP100ZXC

(1) For specifications of preinstalled SFP modules, see [Table 2](#). For specifications of SFP modules ordered separately, see [Table 76](#).

Table 2 - Preinstalled SFP Module Specifications - Stratix 2000 Switches

Attribute	Multimode (100Base-FX)	Singlemode (100Base-LX)
Central wavelength (nm)	1310	1310
Transmission distance (km)	2	20
Applicable distance (km)	0...2	0...20
Luminous power, min (db)	-19	-10
Luminous power, max (db)	-10	-5
Receiving sensitivity (dBm)	-31	-34
Overload luminous power	-3	-3

Table 3 - Environmental Specifications - Stratix 2000 Switches, Series B

Attribute	1783-US5T/B, 1783-US8T/B	1783-US5TG/B, 1783-US4T1F/B, 1783-US4T1H/B, 1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B, 1783-US6T2TG2F/B, 1783-US6T2TG2H/B, 1783-US8TG2GX/B, 1783-US16T/B, 1783-US16T2S/B
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)	-10 °C < Ta < +60 °C (14 °F < Ta < +140 °F)	-40 °C < Ta < +75 °C (-40 °F < Ta < +167 °F)
Temperature, ambient, max	60 °C (140 °F)	75 °C (167 °F)
Temperature, surrounding air, max	60 °C (140 °F)	75 °C (167 °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)	15 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g	
Emissions CISPR11 (IEC 61000-6-4)	IEC 61000-6-4	
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...2000 MHz 20V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz	
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz on power ports ±2 kV at 5 kHz on communication ports	
Surge transient immunity IEC 61000-4-5	±2 kV line-line (DM) and ±4 kV line-earth (CM) on power ports ±2 kV line-earth (CM) on communication ports	
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz	
Environmental rating	IP30	

Table 4 - Certifications - Stratix 2000 Switches, Series B

Certifications (when product is marked) ⁽¹⁾	1783-US5T/B, 1783-US8T/B, 1783-US6T2TG2F/B, 1783-US16T/B	1783-US5TG/B, 1783-US4T1F/B, 1783-US4T1H/B, 1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B, 1783-US6T2TG2H/B, 1783-US8TG2GX/B, 1783-US16T2S/B
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.	
CE	European Union 2014/30/EU 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	
RCM	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions	
Ex	European Union 2014/34/EU ATEX Directive, compliant with: • EN 60079-0; General Requirements • EN 60079-15; Potentially Explosive Atmospheres, Protection "n" • II 3 G Ex nA IIC T4 Gc • DEMKO 16 ATEX 1816X	
IECEX	IECEX System, compliant with: • IEC 60079-0; General Requirements • IEC 60079-15; Potentially Explosive Atmospheres, Protection "n" • II 3 G Ex nA IIC T4 Gc • IECEX UL 16.0169X	

Table 4 - Certifications - Stratix 2000 Switches, Series B

Certifications (when product is marked) ⁽¹⁾	1783-US5T/B, 1783-US8T/B, 1783-US6T2TG2F/B, 1783-US16T/B	1783-US5TG/B, 1783-US4T1F/B, 1783-US4T1H/B, 1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B, 1783-US6T2TG2H/B, 1783-US8TG2GX/B, 1783-US16T2S/B
KC	Korean Certification of Broadcasting and Communications Equipment, compliant with: • Framework Act on Telecommunications and Radio Waves Act	
EtherNet/IP™	ODVA conformance tested to EtherNet/IP specifications	
BSMI	CNS 13438 (95); CNS14336-1 (99) Taiwan	—

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

Dimensions—Stratix 2000 Switches, Series B

To prevent the switch from overheating, observe the following minimum clearances:

- Top and bottom: 51 mm (2.0 in.)
- Sides: 51 mm (2.0 in.)
- Front: 64 mm (2.5 in.)

Figure 1 - 1783-US5T/B, 1783-US5TG/B, 1783-US4T1F/B, 1783-US4T1H/B

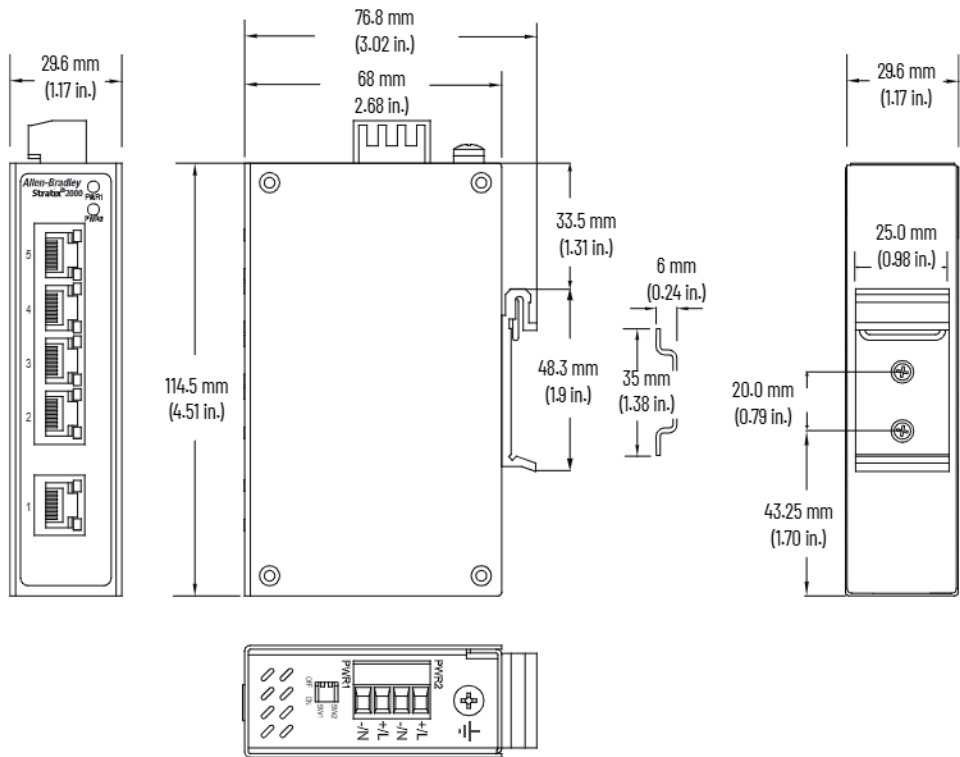


Figure 2 - 1783-US8T/B, 1783-US6T2F/B, 1783-US6T2H/B, 1783-US7T1F/B, 1783-US7T1H/B

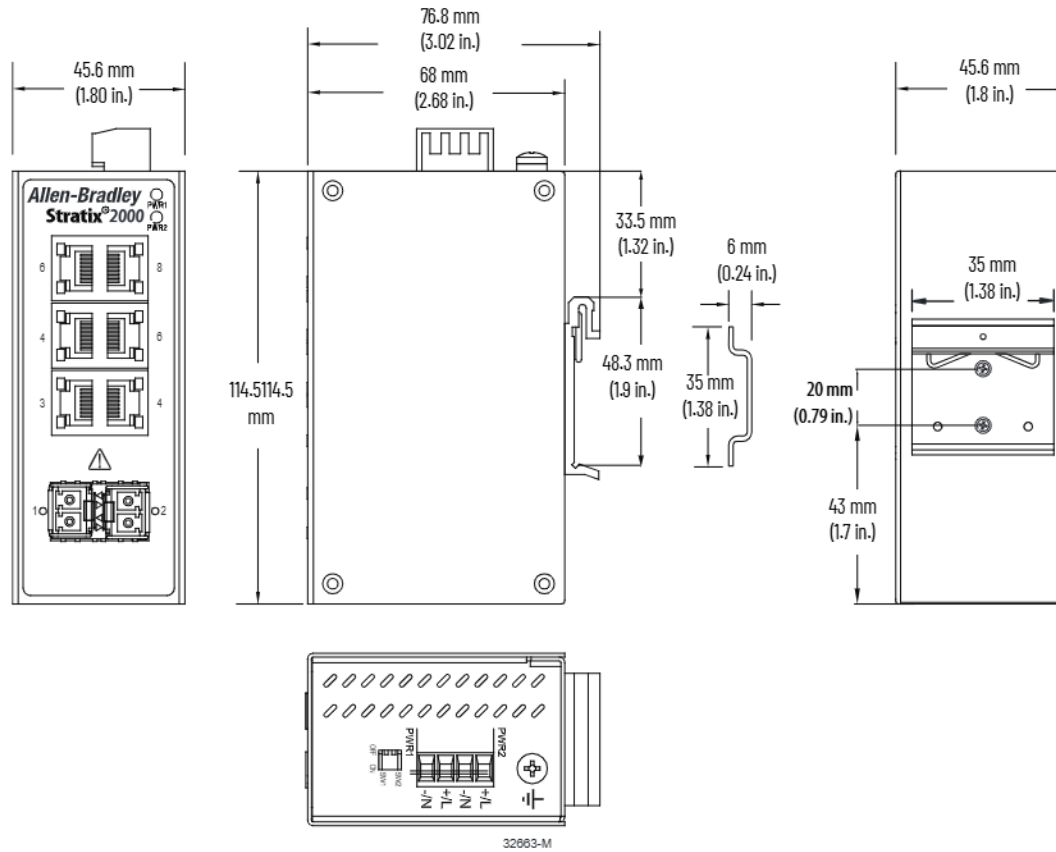


Figure 3 - 1783-US6T2T62F/B, 1783-US6T2T62H/B, 1783-US8T62GX/B

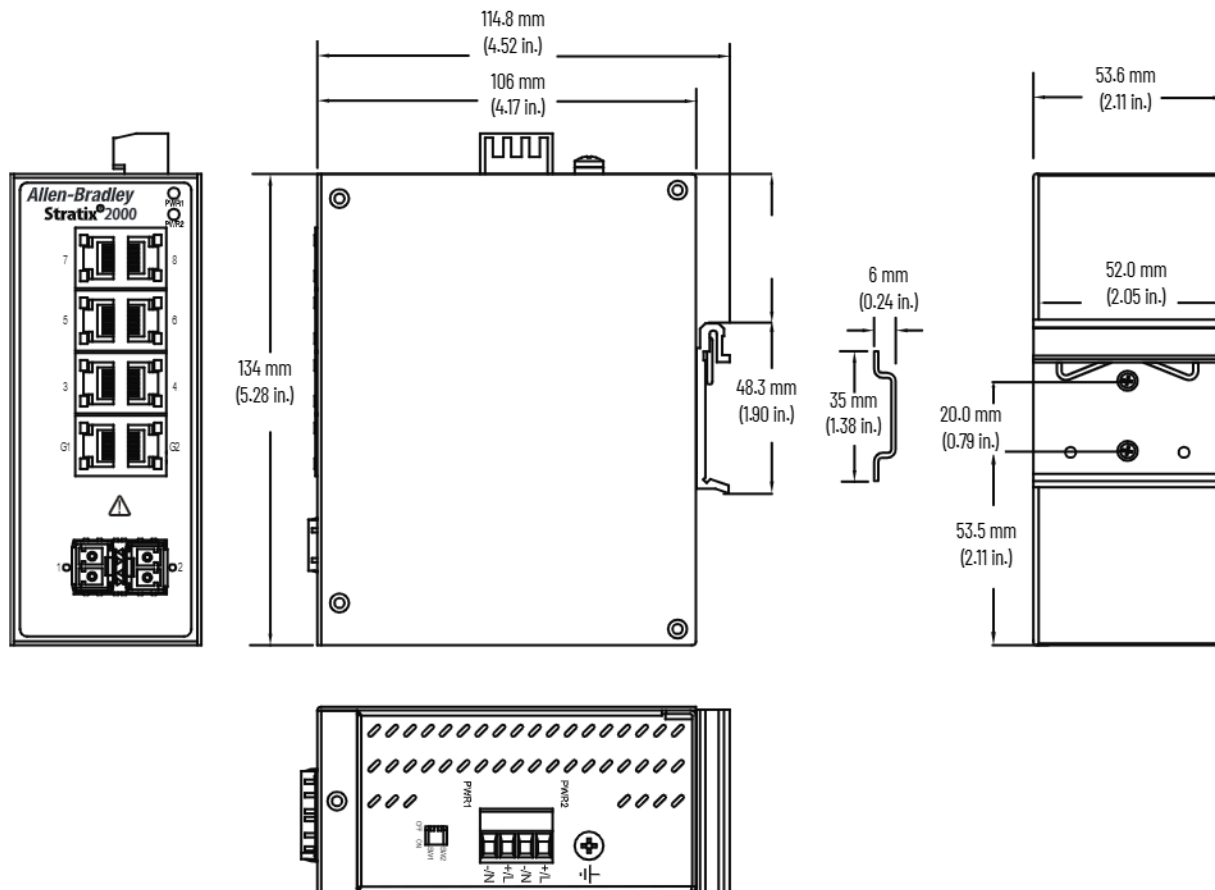
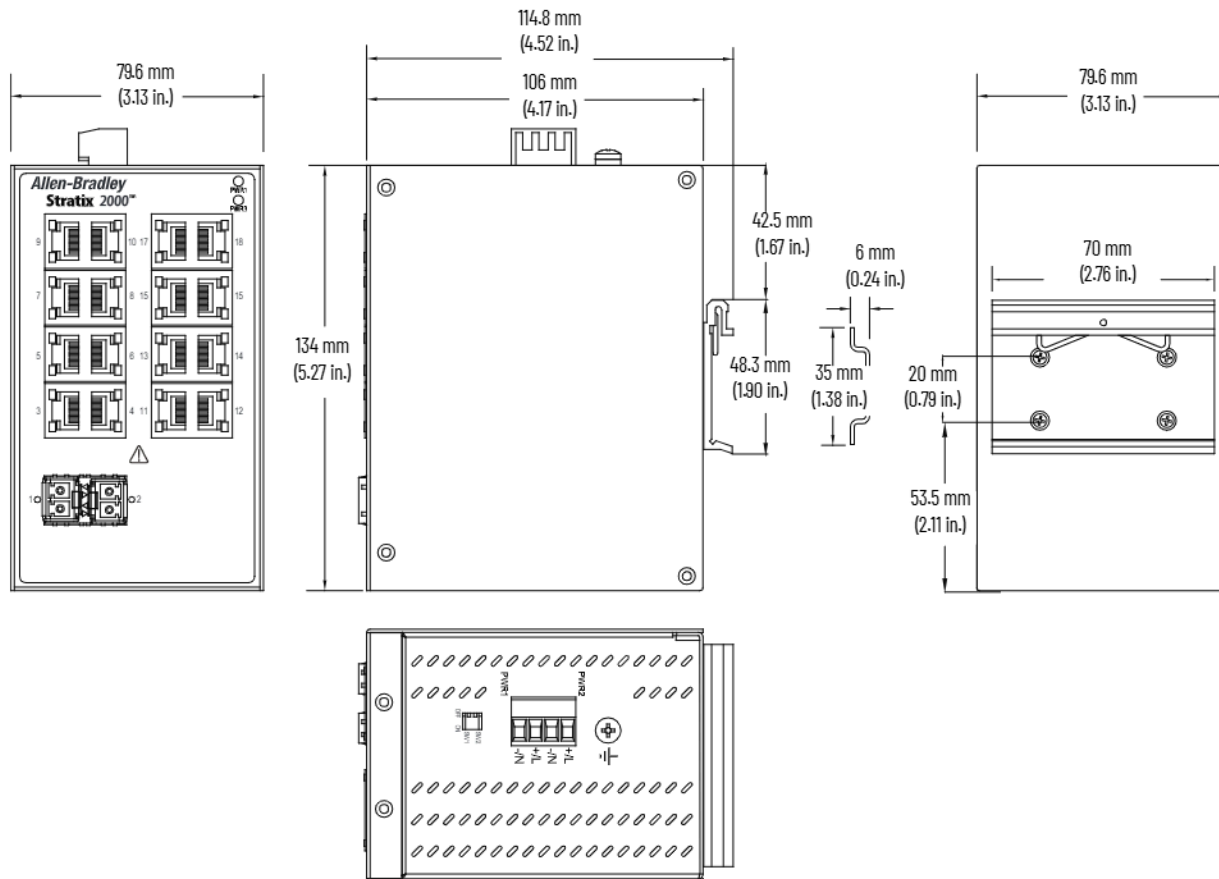


Figure 4 - 1783-US16T/B, 1783-US16T2S/B



Stratix 2000 Ethernet Unmanaged Switches—Series A

Cat. No.	Total Ports	RJ45 Ports ⁽¹⁾	Combo Ports ⁽¹⁾	SFP Ports ⁽¹⁾
1783-US4T1F/A	5	4 FE	—	1 FE multimode preinstalled fiber SFP module
1783-US4T1H/A	5	4 FE	—	1 FE singlemode preinstalled fiber SFP module
1783-US5T/A	5	5 FE	—	—
1783-US5TG/A	5	5 GE	—	—
1783-US6T2F/A	8	6 FE	—	2 FE multimode preinstalled fiber SFP modules
1783-US6T2H/A	8	6 FE	—	2 FE singlemode preinstalled fiber SFP modules
1783-US6TG2CG/A	8	6 GE	2 GE ⁽²⁾	—
1783-US7T1F/A	8	7 FE	—	1 FE multimode preinstalled fiber SFP module
1783-US7T1H/A	8	7 FE	—	1 FE singlemode preinstalled fiber SFP module
1783-US8T/A	8	8 FE	—	—
1783-US14T2S/A	16	14 FE	—	2 FE ⁽²⁾
1783-US16T/A	16	16 FE	—	—
1783-US16TA/A	16	16 FE	—	—

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

(2) SFP modules must be ordered separately.

The following table lists Stratix 2000 series A switches and their series B replacements. For specifications of series B switches, see [page 3](#).

Table 5 - Stratix 2000 Series Change

Series A Cat. No.	Series B Replacement Cat. No.	Change ⁽¹⁾
1783-US4T1F/A	1783-US4T1F/B	Same catalog number and configuration
1783-US4T1H/A	1783-US4T1H/B	Same catalog number and configuration
1783-US5T/A	1783-US5T/B	Same catalog number and configuration
1783-US5TG/A	1783-US5TG/B	Same catalog number and configuration
1783-US6T2F/A	1783-US6T2F/B	Same catalog number and configuration
1783-US6T2H/A	1783-US6T2H/B	Same catalog number and configuration
1783-US7T1F/A	1783-US7T1F/B	Same catalog number and configuration
1783-US7T1H/A	1783-US7T1H/B	Same catalog number and configuration
1783-US8T/A	1783-US8T/B	Same catalog number and configuration
1783-US16T/A	1783-US16T/B	Same catalog number and configuration
1783-US14T2S/A	1783-US16T2S/B	New catalog number Replaced 2 GE combo ports with 2 GE copper ports on series B replacement Added 2 GE SFP slots to series B replacement
1783-US6TG2CG/A	1783-US8TG2GX/B	New catalog number Added 2 FE copper ports to series B replacement

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

Technical Specifications - Stratix 2000 Switches, Series A

Attribute	1783-US4T1F/A 1783-US4T1H/A	1783-US5TG/A	1783-US6T2F/A 1783-US6T2H/A	1783-US7T1F/A 1783-US7T1H/A	1783-US6TG2CG/A
Inrush current, max	0.11 A	0.25 A	0.86 A	1.06 A	0.66 A
Power input	24V (18...60V DC, 18...30V AC 50/60 Hz), Class 2/SELV				
Current rating	230.5 mA	432.1 mA	442.3 mA		1242.7 mA
Power dissipation, max	2.841 W	5.491 W	5.927 W		13.643 W
Isolation voltage	30V (continuous), basic insulation type, power to network channels No isolation between individual network channels Type tested at 500V AC for 60 s				
Wire size, Ethernet connection ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2-pair or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702 rated 82 °C (180 °F) min				
Wire size, DC power connection	0.82...2.5 mm ² (18...14 AWG) twisted-pair copper wire suitable for 82 °C (180 °F) above surrounding ambient temperature outside the enclosure				
Wire size, ground connection	2.5 mm ² (14 AWG) copper wire suitable for 82 °C (180 °F) above surrounding ambient temperature outside the enclosure, with a suitable ring terminal				
Screw torque, ground terminal, max	1.82 N•m (16 in•lb)				
Screw torque, power terminals	0.4...0.5 N•m (3.5...4.4 in•lb)				
Wiring category ⁽²⁾	1 - on power ports 2 - on communication ports				
Enclosure type rating	None (open-style)				
North American temp code	T4				

(Continued)Technical Specifications - Stratix 2000 Switches, Series A (Continued)

Attribute	1783-US4T1F/A 1783-US4T1H/A	1783-US5TG/A	1783-US6T2F/A 1783-US6T2H/A	1783-US7T1F/A 1783-US7T1H/A	1783-US6TG2CG/A
IEC temp code	T4				
MAC addresses, max supported	1 K	1 K	8 K		8 K
SFP modules ⁽³⁾	Preinstalled	No SFP slots	Preinstalled	Preinstalled	Ordered separately: 1783-SFP1GSX 1783-SFP1GLX 1783-SFP1GEXE 1783-SFP1GZX

- (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) For specifications of preinstalled SFP modules, see [Table 6](#). For specifications of SFP modules ordered separately, see [Table 76](#).