

Stratix 8000 and Stratix 8300 Ethernet Managed Switches

Table 15 - 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
Power consumption	15.2 W @ 24V DC @ 40°C (104°F), 22.9 W max (Expansion module power not included)	15.8 W @ 24V DC @ 40°C (104°F), 23.5 W max (Expansion module power not included)	15.2 W @ 24V DC @ 40°C (104°F), 22.9 W max (Expansion module power not included)	15.8 W @ 24V DC @ 40°C (104°F), 23.5 W max (Expansion module power not included)
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			
Torque	0.23 N·m (2.0 lb·in) on power and alarm connectors			
Wiring category ⁽²⁾	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			
SFP modules ⁽³⁾	1783-SFP100FX 1783-SFP100LX 1783-SFP100EXC 1783-SFP100ZXC 1783-SFP100T ⁽⁴⁾ 1783-SFP1GSX 1783-SFP1GLX 1783-SFP1GEXE 1783-SFP1GZX 1783-SFP1GTE		1783-SFP100FX 1783-SFP100LX 1783-SFP100EXC 1783-SFP100ZXC 1783-SFP1GSX 1783-SFP1GLX 1783-SFP1GEXE 1783-SFP1GZX 1783-SFP1GTE	
Memory card	1783-MCF		1783-RMCF	

(1) See [page 57](#) 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 supported only on switches with combo ports or SFP slots. For SFP specifications, see [page 55](#).

(4) The 1783-SFP100T module requires Stratix 8000 firmware revision 12.001 or later.

Table 16 - Environmental Specifications - Stratix 8000 and Stratix 8300 Switches

Attribute	1783-MS06T, 1783-MS10T, 1783-RMS06T, 1783-RMS10T
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)	20 g
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Emissions CISPR11 (IEC 61000-6-4)	Class A
ESD immunity IEC 61000-4-2	8 kV contact discharges 15 kV air discharges
Radiated RF immunity IEC 61000-4-3	20V/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 10V/m with 1 kHz sine-wave 80% AM from 1000...2700 MHz
EFT/B immunity IEC 61000-4-4	±4 kV at 2.5 kHz and ±2 kV at 5 kHz on power ports ±4 kV at 2.5 kHz and ±2 kV at 5 kHz on alarm ports ±4 kV at 2.5 kHz and ±2 kV at 5 kHz on Ethernet ports
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports ±1 kV line-line (DM) and ±2 kV line-earth (CM) on alarm 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
Magnetic field immunity IEC 61000-4-8	30 A/m long duration and 300 A/m short duration at 50 Hz and 60 Hz
Magnetic pulse immunity IEC 61000-4-9	—
Oscillatory surge withstand IEEE C37.90.1	2.5 kV
Voltage variation IEC 61000-4-29	10 ms interruption on DC supply ports
Environmental rating	IP20

Table 17 - Certifications - Stratix 8000 and Stratix 8300 Switches

Certifications (when product is marked)⁽¹⁾	1783-MS06T, 1783-MS10T, 1783-RMS06T, 1783-RMS10T
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 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
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

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

Optional Expansion Modules—Stratix 8000 and Stratix 8300 Switches

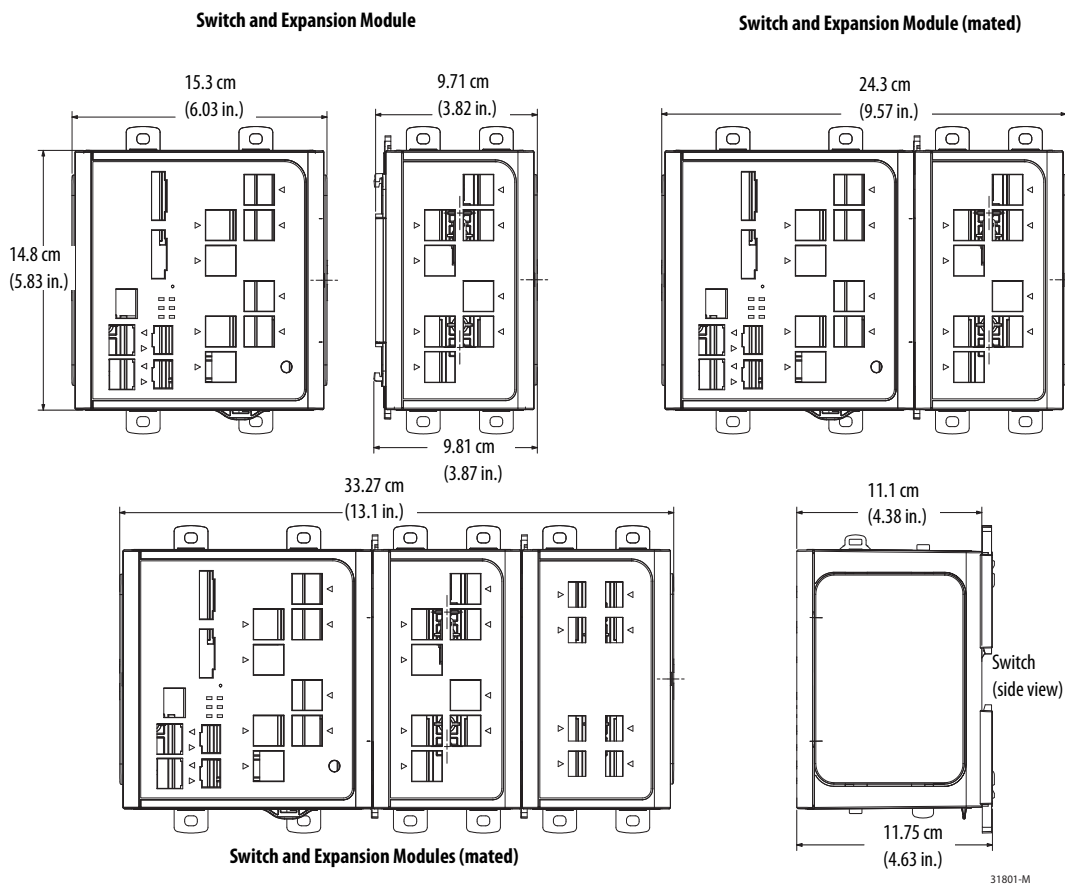
Cat. No.	Description
1783-MX08T	Expansion module with 8 10/100 Base-T copper Ethernet ports
1783-MX08F	Expansion module with 8 100 Base-F fiber-optic Ethernet ports
1783-MX04S	Expansion module with 4 100 FX fiber-optic SFP slots
1783-MX08S	Expansion module with 8 100 FX fiber-optic SFP slots
1783-MX04E	Expansion module with 4 Power over Ethernet ports
1783-MX04T04E	Ethernet expansion module with 4 10/100 Base-T copper Ethernet ports and 4 Power over Ethernet ports

Dimensions—Stratix 8000 and Stratix 8300 Switches

This illustration shows dimensions for the 1783-MS10T switch and the 1783-MX08T expansion module. Dimensions for the other switches are the same as the 1783-MS10T switch. Dimensions for the other expansion modules are the same as the 1783-MX08T expansion module.

Airflow around the switch and through the vents is unrestricted. To prevent the switch from overheating, these minimum clearances must be met:

- Top and bottom: 105 mm (4.13 in.)
- Left and right: 90 mm (3.54 in.)
- Front: 65 mm (2.56 in.)



For panel-mounting, the height of the center of the mounting holes on both the top and bottom latches measures 8.73 mm (0.34 in.) above the top surface (or below the bottom surface) of the switch.

On the switch base unit, the tab hole center-to-center spacing is 6.83 cm (2.69 in.).

For expansion modules, the tab hole center-to-center spacing is 4.36 cm (1.72 in.).