

# Product Details and Certifications

## Cross Reference RA Part Number: PN-118360

 **Product: 1783-EMS08T**

Description: Stratix 6000 Switch, Entry-Level Managed, 8-port 1 Fiber SFP Slot



Representative Photo Only (actual product may vary based on configuration sections)

### **STRATIX DATA**

---

Bulletin Number	1783 Stratix Device
Stratix Ethernet Family	Stratix 6000
Environment	IP20
Ethernet Switch	Stratix 6000 Switch, Entry-Level Managed, 8-port
Switch Type	Managed Switch
Indicators	16 Port Indicators, 3 Status Indicators
No. of Copper Ports	8
No. of Fiber SFP Slots	1
Inrush Current Max	2.2 A
Power Requirements	250mA @ 24V DC(12...48VDC) CL 2/SELV
Power Dissipation, Max	5.8W

### **ADDITIONAL DETAILS**

---

Mounting	Din Rail
Operating Temperature	0...60°C (32...140°F)
Ports per Module	8
Network Media	Male RJ45 to Male RJ45 Patchcord, Unshielded Twisted Pair, Teal TPE Cable, 1.9 m

### **CERTIFICATIONS AND APPROVALS**

---

UL  
CE  
IEC

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

## Stratix 6000 Ethernet Managed Switches


**Table 23 - Technical Specifications - Stratix 6000 Switches**

Attribute	1783-EMS08T	1783-EMS04T
Description	Stratix 6000™ managed switch <ul style="list-style-type: none"> <li>• 8 ports</li> <li>• 1 fiber SFP slot</li> </ul>	Stratix 6000 managed switch <ul style="list-style-type: none"> <li>• 4 ports</li> </ul>
Power requirements	250 mA @ 24V DC (12...48V DC) CL 2/SELV	100 mA @ 24V DC (12...48V DC) CL 2/SELV
Power dissipation, max	5.8 W	2.6 W
Thermal dissipation, max	24.6 BTU/hr @ 60 °C (140 °F)	
Network ports	8 RJ45 10/100 full/half duplex ports, optional SFP transceiver port	4 RJ45 10/100 full/half duplex ports
Protocols	TCP/IP, EtherNet/IP, Telnet, Http, DHCP, BOOTP, FTP, IGMP, SMTP	
Indicators	16 port indicators 3 status indicators	8 port indicators 2 status indicators
EtherNet/IP features	MAC ID management, bandwidth alarming, port control, link status, scaled bandwidth information, and connections active	
Switch features	VLAN, IGMP snooping, IGMP query V1 and V2, DHCP server, BOOTP server, QoS, port mirroring	IGMP snooping, IGMP query V1 and V2, DHCP server, BOOTP server, QoS, port mirroring
Options	1 GB fiber-optic transceiver	—
Inrush current, max	2.2 A	
Isolation voltage	50V (continuous), basic insulation type, power to ground and power to network channels No isolation between individual network channels Routine tested at 707V AC for 1 s	
Ethernet connections <sup>(1)</sup>	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	0.33...3.3 mm <sup>2</sup> (22...12 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max	
Functional ground connection	3.3 mm <sup>2</sup> (12 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater	
SFP modules <sup>(2)</sup>	1783-SFP1GSX 1783-SFP1GLX	
Terminal block torque	1.36 N•m (12 lb•in) on DC power and functional ground	
Wiring category <sup>(3)</sup>	2 - on DC power ports 2 - on communication ports	
Enclosure type rating	None (open-style)	
North American temp code	T4	
ATEX temp code	T4	

(1) See [page 56](#) for recommended products.

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

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

**Table 24 - Environmental Specifications - Stratix 6000 Switches**

Attribute	1783-EMS04T, 1783-EMS08T
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)	0 °C < Ta < +60 °C (+32 °F < Ta < +140 °F)
Temperature, ambient, max	60 °C (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
Operating shock IEC 60068-2-27 (Test Ea, Unpackaged Shock)	15 g
Nonoperating shock IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Emissions 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 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 2000...2700 MHz
EFT/B immunity IEC 61000-4-4	±2 kV at 5 kHz on power ports ±1 kV at 5 kHz on communication ports
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on AC 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
Magnetic field immunity IEC 61000-4-8	30 A/m long duration and 300 A/m short duration at 50 Hz and 60 Hz
Voltage variation IEC 61000-4-29	10 ms interruption on DC supply ports
Environmental rating	IP20

**Table 25 - Certifications - Stratix 6000 Switches**

<b>Certifications (when product is marked)<sup>(1)</sup></b>	<b>1783-EMS08T, 1783-EMT</b>
c-UL-us	UL Listed Information Technology Equipment, certified for US and Canada. See UL File E151729.
c-ETL-us	ETL Listed Industrial Control Equipment, certified for US and Canada.
c-ETL-us	ETL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada
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
RCM	Australian Radiocommunications Act, compliant with: EN 61000-6-4; Industrial Emissions
Ex	EN 60079-0; General Requirements EN 60079-11; Explosive Atmospheres, Protection "I" EN 60079-15; Potentially Explosive Atmospheres, Protection "n" II 3 Ex ic nA IIC T4 Gc
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 [www.ab.com](http://www.ab.com) for Declarations of Conformity, Certificates, and other certification details.

**Dimensions—Stratix 6000 Switches**

Mount the switches, as shown, in the vertical position only. We do not recommend horizontal mounting due to thermal considerations. Follow these guidelines:

- Provide 50 mm (2 in.) of space on all sides for adequate heat dissipation.
- Leave 100 mm (4 in.) for installation and removal if using the fiber-optic port on the bottom of the 1783-EMS08T switch.

