



# APPENDIX 1

## Technical Specifications

---

*Table 1-1 Environmental Specifications for All Catalyst 2960-S Switches*

Environmental Ranges	
Operating temperature	23 to 113°F (–5 to 45°C) up to 5,000 ft (1500 m) 23 to 104°F (–5 to 40°C) up to 10,000 ft (3000 m)
Storage temperature	–13 to 158°F (–25 to 70°C)
Relative humidity	10 to 85% (noncondensing)
Storage altitude	Up to 15,000 ft (4573 m)

**Table 1-2** Catalyst 2960S-48FPD-L, 2960S-48LPD-L, 2960S-24PD-L, 2960S-48FPS-L, 2960S-F48FPS-L, 2960S-48LPS-L, 2960S-F48LPS-L, 2960S-24PS-L, and 2960S-F24PS-L Switch Specifications

<b>Power Requirements</b>	
AC input voltage	100 to 240 VAC (autoranging) 9 to 4 A, 50 to 60 Hz (Catalyst 2960S-48FPD-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-48LPD-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-24PD-L) 9 to 4 A, 50 to 60 Hz (Catalyst 2960S-48FPS-L) 9 to 4 A, 50 to 60 Hz (Catalyst 2960S-F48FPS-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-48LPS-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-F48LPS-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-24PS-L) 5 to 2 A, 50 to 60 Hz (Catalyst 2960S-F24PS-L)
DC input voltage for RPS 2300	+12 V $\equiv$ @ 4 A, -52 V $\equiv$ @ 15 A (Catalyst 2960S-48FPD-L) +12 V $\equiv$ @ 4 A, -52 V $\equiv$ @ 8 A (Catalyst 2960S-48LPD-L) +12 V $\equiv$ @ 3 A, -52 V $\equiv$ @ 8 A (Catalyst 2960S-24PD-L) +12 V $\equiv$ @ 4 A, -52 V $\equiv$ @ 15 A (Catalyst 2960S-48FPS-L) +12 V $\equiv$ @ 4 A, -52 V $\equiv$ @ 8 A (Catalyst 2960S-48LPS-L) +12 V $\equiv$ @ 3 A, -52 V $\equiv$ @ 8 A (Catalyst 2960S-24PS-L)
Power consumption <sup>1</sup>	129 W, 440 BTUs per hour (Catalyst 2960S-48FPD-L) 100 W, 341 BTUs per hour (Catalyst 2960S-48LPD-L) 84 W, 286 BTUs per hour (Catalyst 2960S-24PD-L) 131 W, 447 BTUs per hour (Catalyst 2960S-48FPS-L) 61 W, 208 BTUs per hour (Catalyst 2960S-F48FPS-L) 100 W, 341 BTUs per hour (Catalyst 2960S-48LPS-L) 54 W, 184 BTUs per hour (Catalyst 2960S-F48LPS-L) 84 W, 286 BTUs per hour (Catalyst 2960S-24PS-L) 47 W, 160 BTUs per hour (Catalyst 2960S-F24PS-L)
Power rating <sup>2</sup>	0.89 KVA (Catalyst 2960S-48FPD-L) 0.48 KVA (Catalyst 2960S-48LPD-L) 0.46 KVA (Catalyst 2960S-24PD-L) 0.89 KVA (Catalyst 2960S-48FPS-L) 0.89 KVA (Catalyst 2960S-F48FPS-L) 0.48 KVA (Catalyst 2960S-48LPS-L) 0.48 KVA (Catalyst 2960S-F48LPS-L) 0.46 KVA (Catalyst 2960S-24PS-L) 0.46 KVA (Catalyst 2960S-F24PS-L)
<b>PoE+</b>	
30 W-per-port maximum, 740-W switch maximum (Catalyst 2960S-48FPD-L, 2960S-48FPS-L, and 2960S-F48FPS-L switches)	
30 W-per-port maximum, 370-W switch maximum (Catalyst 2960S-48LPD-L, 2960S-24PD-L, 2960S-48LPS-L, 2960S-F48LPS-L, 2960S-24PS-L, and 2960S-F24PS-L switches)	

**Table 1-2** *Catalyst 2960S-48FPD-L, 2960S-48LPD-L, 2960S-24PD-L, 2960S-48FPS-L, 2960S-F48FPS-L, 2960S-48LPS-L, 2960S-F48LPS-L, 2960S-24PS-L, and 2960S-F24PS-L Switch Specifications*

Physical Dimensions	
Weight	13 lb (5.89 kg) (Catalyst 2960S-48FPD-L) 12.5 lb (5.66 kg) (Catalyst 2960S-48LPD-L) 12.5 lb (5.66 kg) (Catalyst 2960S-24PD-L) 13 lb (5.89 kg) (Catalyst 2960S-48FPS-L) 13 lb (5.89 kg) (Catalyst 2960S-F48FPS-L) 12.5 lb (5.66 kg) (Catalyst 2960S-48LPS-L) 12.5 lb (5.66 kg) (Catalyst 2960S-F48LPS-L) 12.5 lb (5.66 kg) (Catalyst 2960S-24PS-L) 12.5 lb (5.66 kg) (Catalyst 2960S-F24PS-L)
Dimensions (H x D x W)	1.75 x 15.19 x 17.5 in. (4.45 x 38.6 x 44.5 cm). Applies to all PoE switches.

1. Power consumption values for the power consumed internally by the switch at 120 VAC 60 Hz.
2. Power rating values for the switch input power.

**Table 1-3** *Catalyst 2960S-48TD-L, 2960S-24TD-L, 2960S-48TS-L, 2960S-F48TS-L, 2960S-24TS-L, 2960S-F24TS-L, 2960S-48TS-S, 2960S-F48TS-S, 2960S-24TS-S, and 2960S-F24TS-S Switch Specifications*

<b>Power Requirements</b>	
AC input voltage	100 to 240 VAC (autoranging) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-48TD-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-24TD-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-48TS-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-F48TS-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-24TS-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-F24TS-L) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-48TS-S) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-F48TS-S) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-24TS-S) 1 to 0.5 A, 50 to 60 Hz (Catalyst 2960S-F24TS-S)
DC input voltage for RPS 2300	+12 V $\overline{\text{---}}$ @ 4 A, (Catalyst 2960S-48TD-L) +12 V $\overline{\text{---}}$ @ 3 A, (Catalyst 2960S-24TD-L) +12 V $\overline{\text{---}}$ @ 4 A, (Catalyst 2960S-48TS-L) +12 V $\overline{\text{---}}$ @ 4 A, (Catalyst 2960S-24TS-L) +12 V $\overline{\text{---}}$ @ 4 A, (Catalyst 2960S-48TS-S) +12 V $\overline{\text{---}}$ @ 3 A, (Catalyst 2960S-24TS-S)
Power consumption <sup>1</sup>	55 W, 188 BTUs per hour (Catalyst 2960S-48TD-L) 40 W, 136 BTUs per hour (Catalyst 2960S-24TD-L) 52 W, 177 BTUs per hour (Catalyst 2960S-48TS-L) 35 W, 119 BTUs per hour (Catalyst 2960S-F48TS-L) 40 W, 136 BTUs per hour (Catalyst 2960S-24TS-L) 27 W, 92 BTUs per hour (Catalyst 2960S-F24TS-L) 53 W, 181 BTUs per hour (Catalyst 2960S-48TS-S) 35 W, 119 BTUs per hour (Catalyst 2960S-F48TS-S) 36 W, 123 BTUs per hour (Catalyst 2960S-24TS-S) 27 W, 92 BTUs per hour (Catalyst 2960S-F24TS-S)
Power rating <sup>2</sup>	0.09 KVA (Catalyst 2960S-48TD-L) 0.09 KVA (Catalyst 2960S-24TD-L) 0.13 KVA (Catalyst 2960S-48TS-L) 0.13 KVA (Catalyst 2960S-F48TS-L) 0.09 KVA (Catalyst 2960S-24TS-L) 0.09 KVA (Catalyst 2960S-F24TS-L) 0.10 KVA (Catalyst 2960S-48TS-S) 0.10 KVA (Catalyst 2960S-F48TS-S) 0.08 KVA (Catalyst 2960S-24TS-S) 0.08 KVA (Catalyst 2960S-F24TS-S)

**Table 1-3** *Catalyst 2960S-48TD-L, 2960S-24TD-L, 2960S-48TS-L, 2960S-F48TS-L, 2960S-24TS-L, 2960S-F24TS-L, 2960S-48TS-S, 2960S-F48TS-S, 2960S-24TS-S, and 2960S-F24TS-S Switch Specifications (continued)*

Physical Dimensions	
Weight	9.5 lb (4.30 kg) (Catalyst 2960S-48TD-L, Catalyst 2960S-24TD-L, 2960S-48TS-S, and 2960S-F48TS-S) 10.5 lb (4.76 kg) (Catalyst 2960S-48TS-L and 2960S-F48TS-L) 10 lb (4.53 kg) (Catalyst 2960S-24TS-L, 2960S-F24TS-L, 2960S-24TS-S, and 2960S-F24TS-S)
Dimensions (H x D x W)	<ul style="list-style-type: none"> <li>Catalyst 2960S-48TD-L, 2960S-24TD-L, 2960S-48TS-L, 2960S-24TS-L, 2960S-48TS-S, 2960S-24TS-S models: 1.75 x 11.77 x 17.50 in. (4.45 x 29.9 x 44.5 cm)</li> <li>Catalyst 2960S-F48TS-L, 2960S-F24TS-L, 2960S-F48TS-S, and 2960S-F24TS-S models: 1.75 x 12.37 x 17.50 in. (4.45 x 31.4 x 44.5 cm)</li> </ul>

1. Power consumption values for the power consumed internally by the switch at 120 VAC 60 Hz.
2. Power rating values for the switch input power.

