



Technical Specifications

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Environmental and Physical Specifications

This table describes the environmental specifications.

Table 1: Environmental Specifications for the Switch

Environmental Ranges	
Operating temperature 1	23 to 113°F (–5 to 45°C)
Storage temperature	–40 to 158°F (–40 to 70°C)
Relative humidity	5 to 95% (noncondensing)
Operating altitude	Up to 10,000 ft (3000 m)
Storage altitude	Up to 15,000 ft (4500 m)

¹ Minimum ambient temperature for cold start is 32°F (0°C)

This table describes the environmental specifications.

Table 2: Environmental Specifications for the Power Supplies

Environmental Ranges	
Operating temperature	AC power supply: 23 to 113°F (–5 to 45°C) DC power supply: 23 to 131°F (–5 to 55°C)
Storage temperature	–40 to 158°F (–40 to 70°C)
Relative humidity	10 to 95% (noncondensing)

Environmental Ranges	
Altitude	AC power supply: up to 10,000 ft (3,000 m) DC power supply: up to 13,000 ft (4,000 m)

This table describes the physical specifications.

Table 3: Physical Specifications for the Switch

Physical Specifications	
Dimensions (H x W x D)	1.73 x 17.5 x 17.5 in. (4.4 x 44.5 x 44.5 cm) (with the FAN FRUs installed but without the power supplies installed)
Weight (weights do not include the functional network modules, the blank module, or the power supplies).	
Catalyst 3850 24-port PoE switches	13.3 lb (6.0 kg)
Catalyst 3850 24-port non-PoE switches	13.1 lb (6.0 kg)
Catalyst 3850 48-port non-PoE switches	14.2 lb (6.5 kg)
Catalyst 3850 48-port PoE switches	14.4 lb (6.5 kg)
WS-C3850-24S and WS-C3850-12S switches	12.4 lb (5.7 kg)
WS-C3850-12XS switches	12.9 lb (5.8 kg)
WS-C3850-24XS switches	13.5 lb (6.1 kg)
WS-C3850-48XS switches	16.42 lb (7.45 kg)

This table describes the physical specifications.

Table 4: Physical Specifications for the Power Supplies

Weight	
PWR-C1-1100WAC	3 lb (1.4 kg)
PWR-C1-715WAC	2.8 lb (1.3 kg)
PWR-C1-350WAC	2.4 lb (1.1 kg)
PWR-C1-440WDC=	2.6 lb (1.2 kg)
PWR-C3-750WAC-R	3.7 lb (1.68 kg)

PWR-C3-750WAC-F	3.7 lb (1.68 kg)
PWR-C3-750WDC-R	3.7 lb (1.68 kg)
PWR-C3-750WDC-F	3.7 lb (1.68 kg)
Dimensions (H x D x W)	
The dimensions shown include the extraction handle and the keying feature.	
PWR-C1-1100WAC	1.58 X 3.25 X 13.71 in. (40.1 X 82.55 X 348.2 mm)
PWR-C1-715WAC	1.58 X 3.25 X 12.21 in. (40.1 X 82.55 X 310.1 mm)
PWR-C1-350WAC	1.58 X 3.25 X 12.21 in. (40.1 X 82.55 X 310.1 mm)
PWR-C1-440WDC=	1.58 X 3.25 X 12.21 in. (40.1 X 82.55 X 310.1 mm)
PWR-C3-750WAC-R	1.58 X 2.15 X 14.28 in. (40.1 mm X 54.6 mm X 362.7 mm)
PWR-C3-750WAC-F	1.58 X 2.15 X 14.28 in. (40.1 mm X 54.6 mm X 362.7 mm)
PWR-C3-750WDC-R	1.58 X 2.15 X 14.28 in. (40.1 mm X 54.6 mm X 362.7 mm)
PWR-C3-750WDC-F	1.58 X 2.15 X 14.28 in. (40.1 mm X 54.6 mm X 362.7 mm)

Specifications for the Power Supplies, Switches, and Fan

Table 5: Power Specifications for the AC Power

Power Requirements	
Maximum output power	<ul style="list-style-type: none"> • PWR-C1-1100WAC: 1100 W • PWR-C1-715WAC: 715 W • PWR-C1-350WAC: 350 W • PWR-C3-750WAC-R: 750 W • PWR-C3-750WAC-F: 750 W
Input voltage and Frequency	<ul style="list-style-type: none"> • PWR-C1-1100WAC: 1100-W, 115 to 240 VAC (autoranging) 50-60 Hz • PWR-C1-715WAC: 715 W, 100 to 240 VAC (autoranging) 50-60 Hz • PWR-C1-350WAC: 350 W, 100 to 240 VAC (autoranging) 50-60 Hz • PWR-C3-750WAC-F: 750 W, 90 to 264 VAC (autoranging) 50-60 Hz • PWR-C3-750WDC-F: 750 W, 90 to 264 VAC (autoranging) 50-60 Hz

Input current	<ul style="list-style-type: none"> • PWR-C1-1100WAC: 12–6 A • PWR-C1-715WAC: 10–5 A • PWR-C1-350WAC: 4–2 A • PWR-C3-750WAC-R: 11 A @ 100 VAC (max), 6 A @ 200 VAC (max) • PWR-C3-750WAC-F: 11 A @ 100 VAC (max), 6 A @ 200 VAC (max)
Output ratings	<ul style="list-style-type: none"> • PWR-C1-1100WAC: –56 V@19.64 A • PWR-C1-715WAC: –56 V@12.8 A • PWR-C1-350WAC: –56 V@6.25 A • PWR-C3-750WAC-R: 12 VDC @ 62 A, 3.3 VDC @ 3 A • PWR-C3-750WAC-F: 12 VDC @ 62 A, 3.3 VDC @ 3 A
Total input BTU ²	<ul style="list-style-type: none"> • PWR-C1-1100WAC: 4263 BTUs per hour, 1250 W • PWR-C1-715WAC: 2742 BTUs per hour, 804 W • PWR-C1-350WAC: 1357 BTUs per hour, 398 W
Total output BTU ³	<ul style="list-style-type: none"> • PWR-C1-1100WAC: 3751 BTUs per hour, 1100 W • PWR-C1-715WAC: 2438 BTUs per hour, 715 W • PWR-C1-350WAC: 1194 BTUs per hour, 350 W • PWR-C3-750WAC-R: 1122 BTU/hour (nominal), 1365 BTU/hour (max) • PWR-C3-750WAC-F: 1122 BTU/hour (nominal), 1365 BTU/hour (max)

² The total input and total output BTU ratings refer to input power to the power supply and output power to the switch. The BTU ratings are based on 100 VAC for the 350-W and 715-W power supplies and 115 VAC for the 1100-W power supply.

³ The total input and total output BTU ratings refer to input power to the power supply and output power to the switch. The BTU ratings are based on 100 VAC for the 350-W and 715-W power supplies and 115 VAC for the 1100-W power supply.

Table 6: Power Specifications for DC-Power

Power Requirements	
Maximum output power	<ul style="list-style-type: none"> • PWR-C1-440WDC: 440 W • PWR-C3-750WDC-R: 750 W • PWR-C3-750WDC-F: 750 W
Input current	<ul style="list-style-type: none"> • PWR-C1-440WDC: 16–8 A • PWR-C3-750WDC-R: 25 A • PWR-C3-750WDC-F: 25 A

DC input voltage	<ul style="list-style-type: none"> • PWR-C1-440WDC: -36 to -72 VDC • PWR-C3-750WDC-R: -36 to -72 VDC • PWR-C3-750WDC-F: -36 to -72 VDC
Output ratings	<ul style="list-style-type: none"> • PWR-C1-440WDC: -56 V@7.86 A • PWR-C3-750WDC-R: 62 A @ 12 VDC, 3 A @ 3.3 VDC • PWR-C3-750WDC-F: 62 A @ 12 VDC, 3 A @ 3.3 VDC
Voltage range domestic	<ul style="list-style-type: none"> • PWR-C1-440WDC: -36 VDC (minimum), -48 VDC (nominal), -72 VDC (maximum) • PWR-C3-750WDC-R: -48 VDC (nominal) (-40.5 VDC to -56 VDC) • PWR-C3-750WDC-F: -48 VDC (nominal) (-40.5 VDC to -56 VDC)
Voltage range international	<ul style="list-style-type: none"> • PWR-C1-440WDC: -36 VDC (minimum), -48 VDC (nominal), -72 VDC (maximum) • PWR-C3-750WDC-R: -60 VDC (nominal) (-55 VDC to -72 VDC) • PWR-C3-750WDC-F: -60 VDC (nominal) (-55 VDC to -72 VDC)
Total input BTU ⁴	PWR-C1-440WDC 1841 BTUs per hour, 540 W
Total output BTU ¹	PWR-C1-440WDC: 1502 BTUs per hour, 440 W
Wire gauge for ground connection	PWR-C1-440WDC: 12 AWG or 8 AWG
Branch circuit protection	PWR-C1-440WDC: 20 A

⁴ The total input and total output BTU ratings refer to input power to the power supply and output power to the switch. The BTU ratings are based on -36 VDC.

Table 7: Fan Module Environmental and Physical Specifications for Catalyst WS-C3850 Switch Models

Environmental Ranges	
Operating temperature	23 to 176°F (-5 to 80°C)
Storage temperature	-40 to 185°F (-40 to 85°C) up to 15,000 ft (4500 m)
Relative humidity	5 to 95% (noncondensing)
Altitude	Up to 13,000 ft (4000 m)
Physical Specification	
Dimensions (H x D x W)	1.62 x 1.73 x 4.24 in. (4.11 x 4.39 x 10.76 cm)

Weight (for three fans)	0.48 lb (0.21 kg)
Operating Specification	
Airflow	20 cfm

Table 8: Fan Module Environmental and Physical Specifications for Catalyst WS-C3850-48XS Switch Models

Environmental Ranges	
Operating temperature	50 to 104°F (10 to 40°C)
Relative humidity	8 to 80% (noncondensing)
Altitude	-50 to 6500 feet (-16 to 1981 meters)
Physical Specification	
Dimensions (H x D x W)	2.25 x 7.00 x 8.50 in (5.72 x 17.78 x 21.59 cm)
Weight	0.7 lb (0.32 kg)