



Specifications

This appendix provides management port and technical specifications for the Catalyst 2948G, 2948G-GE-TX, and 2980G switches.

Console Serial Port

The console serial port is an RJ-45 receptacle. Data terminal ready (DTR) and data set ready (DSR) handshake signals are supported on this port. The Request To Send (RTS) signal tracks the state of the Clear To Send (CTS) input. [Table A-1](#) lists the console port pinouts.

Table A-1 Console Port Pinouts

Pin	Signal	Direction	Description
1	RTS	output	request to send
2	DTR	output	data terminal ready
3	TXD	output	transmit data
4	GND		
5	GND		
6	RXD	input	receive data
7	DSR	input	data set ready
8	CTS	input	clear to send

10BASE-T and 10/100BASE-T Ethernet Management Ports

The Ethernet management port on each switch is an RJ-45 receptacle with a Link Status LED. [Table A-2](#) lists the port pinouts.

Table A-2 10BASE-T Port Pinouts

Pin	Signal	Direction	Description
1	RXD+	input	receive data
2	RXD-	input	receive data
3	TXD+	output	transmit data
4	unused		
5	unused		
6	TXD-	output	transmit data
7	unused		
8	unused		

Catalyst 2948G Switch Specifications

[Table A-3](#) lists the Catalyst 2948G specifications.

Table A-3 Catalyst 2948G Switch Specifications

Item	Specification
Environmental	
Temperature, ambient operating	32°F (0°C) to 104°F (40°C)
Temperature, ambient nonoperating and storage	-40°F (-40°C) to 167°F (75°C)
Humidity (RH), ambient (noncondensing) operating	10% to 90%

Table A-3 Catalyst 2948G Switch Specifications (continued)

Item	Specification
Environmental (continued)	
Humidity (RH), ambient (noncondensing) nonoperating and storage	5% to 95%
Altitude, operating and nonoperating	0 to 65621.7 ft (0 to 2,000 m)
Switching Components	
Backplane	12 Gbps full duplex
Microprocessor	150-MHz R5000 RISC–Y2K compliant
Memory	64 MB SDRAM, 12 MB Flash (onboard), 512 KB NVRAM, 8 MB synchronous SRAM, 256 bytes serial EEPROM
Physical Characteristics	
Dimensions (H x W x D)	2.625 x 17.5 x 15 in. (6.6 x 44 x 38 cm)
Weight	13 lb. (5.9 kg)
AC Power	
Power supply output	120 W
System power dissipation	189 W
System heat dissipation	645 BTU/hr.
AC input current	2.5 A maximum at 100 VAC 1.3 A maximum at @ 240 VAC
AC frequency	50 to 60 Hz
KVA rating	0.20
Airflow	Front side in, back side out

Table A-3 Catalyst 2948G Switch Specifications (continued)

Item	Specification
Standards Compliance	
Compliance	CE Marking
Safety	UL ¹ 1950, CSA ² -C22.2 No. 950, EN ³ 60950, IEC ⁴ 60950
EMI ⁵	CFR ⁶ 47, part 15 Class A (FCC), ICES ⁷ 003 Class A with UTP cables, EN55022 Class A with UTP cables, CISPR22 ⁸ Class A with UTP cables, AS/NZS 3548 Class A with UTP cables, and VCCI ⁹ Class A with UTP cables EN55024, ETS 300 386 EN55022 Class B with FTP cables, CISPR22 Class B with FTP cables, AS/NZS 3548 Class B with FTP cables, and VCCI Class B with FTP cables

1. UL = Underwriters Laboratory
2. CSA = Canadian Standards Association
3. EN = European Norm
4. IEC = International Electrotechnical Commission
5. EMI = electromagnetic interference
6. CFR = Code of Federal Regulations
7. ICES = International Commerce Exchange Systems
8. CISPR = Comite International Special des Perturbation Radioelectriques
9. VCCI = Voluntary Control Council for Information Technology Equipment

Catalyst 2948G-GE-TX Switch Specifications

Table A-4 lists the Catalyst 2948G-GE-TX specifications.

Table A-4 Catalyst 2948G-GE-TX Switch Specifications

Item	Specification
Environmental	
Temperature, ambient operating	32°F (0°C) to 104°F (45°C)
Temperature, ambient nonoperating and storage	−40°F (−40°C) to 167°F (75°C)
Humidity (RH), ambient (noncondensing) operating	10% to 90%
Humidity (RH), ambient (noncondensing) nonoperating and storage	5% to 95%
Altitude, operating and nonoperating	0 to 65621.7 ft (0 to 2,000 m)
Physical Characteristics	
Dimensions (H x W x D)	1.75 x 17.5 x 17 in. (4.45 x 44.5 x 43.1 cm)
Weight	13 lb. (5.9 kg)
AC Power	
Power supply output	110 W
System power dissipation	130 W
System heat dissipation	445 BTU/hr.
AC input current	1.5 A maximum at 100 VAC 0.8 A maximum at 240 VAC
AC frequency	50 to 60 Hz
KVA rating	0.13
Airflow	Front side in, back side out

Table A-4 Catalyst 2948G-GE-TX Switch Specifications (continued)

Item	Specification
Standards Compliance	
Compliance	CE Marking
Safety	UL ¹ 1950, CSA ² -C22.2 No. 950, EN ³ 60950, IEC ⁴ 60950
EMI ⁵	CFR ⁶ 47, part 15 Class A (FCC), ICES ⁷ 003 Class A with UTP cables, EN55022 Class A with UTP cables, CISPR22 ⁸ Class A with UTP cables, AS/NZS 3548 Class A with UTP cables, and VCCI ⁹ Class A with UTP cables EN55024, ETS 300 386

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Catalyst 2980G Switch Specifications

[Table A-5](#) lists the Catalyst 2980G switch specifications.

Table A-5 Catalyst 2980G Switch Specifications

Item	Specification
Environmental	
Temperature, ambient operating	32°F (0°C) to 104°F (40°C)
Temperature, ambient nonoperating and storage	-4°F (-20°C) to 149°F (65°C)

Table A-5 Catalyst 2980G Switch Specifications (continued)

Item	Specification
Humidity (RH), ambient (noncondensing) operating	10% to 90%
Humidity (RH), ambient (noncondensing) nonoperating and storage	5% to 95%
Altitude, operating and nonoperating	6561.7 ft. (0 to 2,000 m)
Switching Components	
Backplane	12 Gbps full duplex
Microprocessor	150-MHz R5000 RISC–Y2K compliant
Memory	64 MB SDRAM, 16 MB Flash (onboard), 512 KB NVRAM, 8 MB synchronous SRAM, 256 bytes serial EEPROM
Physical Characteristics	
Dimensions (H x W x D)	3.38 x 17.17 x 14.3 in. (8.6 x 43.6 x 36.3 cm)
Weight	13 lb. (5.9 kg)
AC Power	
Power supply output	175 W (156 W on the Catalyst 2980G-A)
System power dissipation	270 W
System heat dissipation	950 BTU/hr. (670 BTU/hr. on the Catalyst 2980G-A)
AC input current	3 A maximum at 100 VAC 1 A maximum at 240 VAC
AC frequency	50 to 60 Hz
KVA rating	0.30
Airflow	Right side in, left side out
Standards Compliance	
Compliance	CE Marking

Table A-5 Catalyst 2980G Switch Specifications (continued)

Item	Specification
Safety	UL ¹ 1950, CSA ² -C22.2 No. 950, EN ³ 60950, IEC ⁴ 60950
EMI ⁵	FCC ⁶ Class A (CFR ⁷ 47, part 15), ICES ⁸ -003 Class A, EN55022 Class A, CISPR22 ⁹ Class A, AS/NZS 3548 Class A, and VCCI ¹⁰ Class A with FTP ¹¹ cables EN55022 Class B, CISPR22 Class B, AS/NZS 3548 Class B, and VCCI Class B with FTP cables

1. UL = Underwriters Laboratories
2. CSA = Canadian Standards Association
3. EN = European Norm
4. IEC = International Electrotechnical Commission
5. EMI = electromagnetic interference
6. FCC = Federal Communications Commission
7. CFR = Code of Federal Regulations
8. ICES = International Commerce Exchange Systems
9. CISPR = Comite International Special des Perturbation Radioelectriques
10. VCCI = Voluntary Control Council for Information Technology Equipment
11. FTP = foil-twisted pair