APPENDIX A

Technical Specifications

This appendix provides the technical specifications (see Table A-1) and connector pinouts of the switch.

Table A-1 Technical Specifications

Specification	Catalyst 1900	Catalyst 2820
Reliability	50,000 hours MTBF	50,000 hours MTBF
Operating temperature	32–104˚F (0–40˚C)	32–104˚F (0–40˚C)
Operating humidity	10–90%	10–90%
Operating altitude	Up to 10,000 ft (3050 m)	Up to 10,000 ft (3050 m)
Power consumption	65W	110W
Input voltage	90–250V, 50–60 Hz	90–250V, 50–60 Hz
Weight	10.5 lb (4.78 kg)	13 lb (5.90 kg)
Width	17.5 in. (44.45 cm)	17.5 in. (44.45 cm)
Depth	15.3 in. (38.86 cm)	12.4 in. (31.50 cm)
Height	1.73 in. (4.39 cm)	3.34 in. (8.76 cm)

Connector Pinouts

This section describes the following connectors used by the switch:

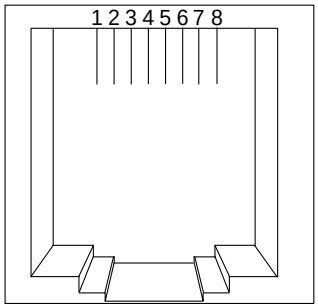
- 10BaseT RJ-45
- 100BaseT RJ-45
- 10Base-5 AUI
- Serial RS-232

10BaseT Connector Pinouts

Ports 1 through 25 use standard RJ-45 connectors and 10BaseT pinouts with internal cross-overs, as indicated by an X. These 10BaseT ports have their transmit (TD) and receive (RD) signals internally crossed, for attachment of an adapter using a straight-through cable. Figure A-1 shows the pinout.

Figure A-1 10BaseT Pinout and Connector (Crossed Port)

Pin	Label
1	RD+
2	RD-
3	TD+
4	NC
5	NC
6	TD-
7	NC
8	NC



H5318

100BaseTX

100BaseTX ports use an RJ-45 connector and pinout equivalent to the one shown in Figure A-1.

AUI Connector Pinouts

The AUI connector is a 15-pin female receptacle, as shown in Figure A-2 and described in Table A-2.

Figure A-2 AUI Connector

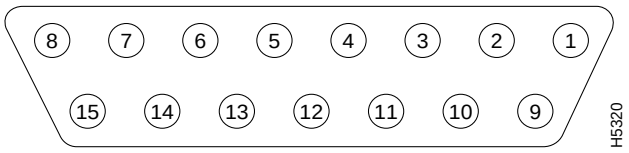


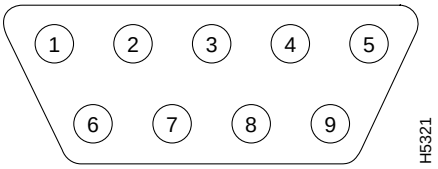
Table A-2 AUI Connector Pinouts

1	GND	Ground
2	CI+	Positive AUI differential collision-data input
3	TX+	Positive AUI differential transmit-data input
4	GND	Ground
5	RX+	Positive AUI differential receive-data output
6	GND	Ground
7	NC	
8	GND	Ground
9	CI-	Negative AUI differential collision data
10	TX-	Negative AUI differential transmit-data input
11	GND	Ground
12	RX-	Negative AUI differential receive data output
13	+12V	12V supply for external MAU
14	GND	Ground
15	NC	

Serial Connector Pinouts

The serial connector is a male 9-pin D-Sub connector, as shown in Figure A-3.

Figure A-3 Serial Connector



The pinouts are shown in Table A-3.

Table A-3 Serial Connector Pinouts

1	DCD
2	RD
3	TD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

The shell is connected to the chassis ground. Use a standard modem cable to connect to a modem. Use a null-modem cable to connect to a terminal.

Either piece of equipment can come with either 9- or 25-pin connectors, as shown in Figure A-4 and Figure A-5.

Figure A-4 Modem Cable Schematic with 9- and 25-Pin Devices

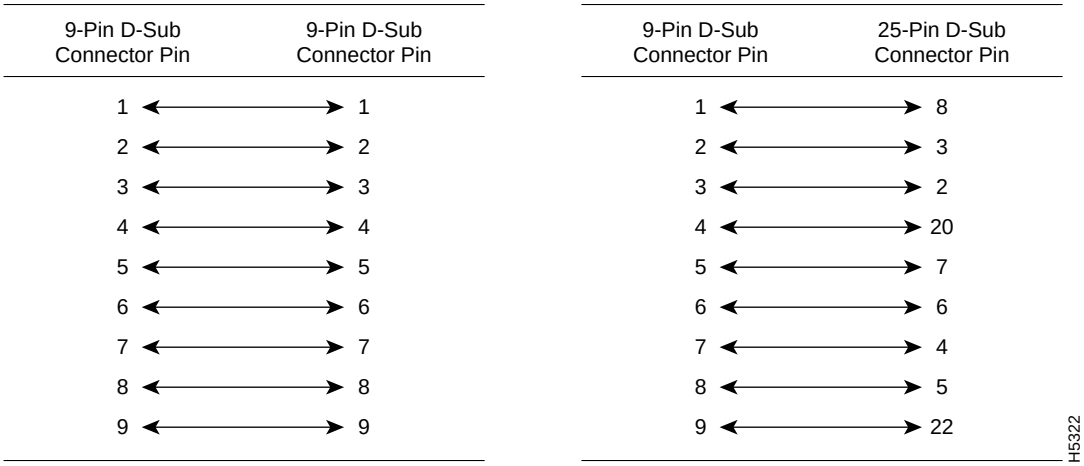


Figure A-5 Null-Modem Cable Schematic with 9- and 25-Pin Devices