# **Technical Specifications**

This appendix describes the physical characteristics and connector pinouts of the Catalyst 2800.

## **Physical Characteristics**

Table A-1 **Technical Specifications** 

Reliability	50,000 hours MTBF
Operating temperature	0 to 40 degrees Celsius
Operating humidity	10% to 90%
Operating altitude	Up to 10,000 feet
Power consumption	100 watts
Input voltage	90 to 250 volts, 50 to 60 Hz
Weight	23 lbs (10.4 Kg)
Width	19 in. (48.26 cm)
Depth	12.28 in. (31.19 cm)
Height	5.25 in. (13.34 cm)

## **Catalyst 2800 Connector Pinouts**

This section describes the following connectors used by the Catalyst 2800:

- 10Base-T RJ-45
- 10Base-5 AUI
- Serial RS-232

#### 10Base-T Connector Pinouts

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

Table A-2 10Base-T Pinout and Connector

Pin	Label	
1	RD+	12345678
2	RD-	
3	TD+	
4	NC	
5	NC	
6	TD-	
7	NC	
8	NC	

### **AUI Connector Pinouts**

The AUI connector is a 15-pin female receptacle, as shown in Figure A-1; the pinouts are shown in Table A-3.

Figure A-1 **AUI Connector** 

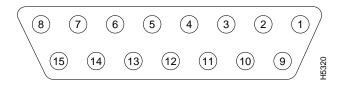


Table A-3 **AUI Connector Pinouts** 

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	12 Volt supply for external MAU
14	GND	Ground
15	NC	

#### **Serial Connector Pinouts**

The serial connector is a male 9-pin D sub-miniature connector, as shown in Figure A-2.

Figure A-2 **Serial Connector** 



The pinouts are shown in Table A-4.

Table A-4 **Serial Connector Pinouts** 1 DCD 2 RD 3 TD 4 DTR 5 **GND** 6 DSR 7 RTS 8 CTS 9 RΙ

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 may come with either 25-pin or 9-pin connectors.

Figure A-3 Modem Cable Schematic with 9-Pin and 25-Pin Devices

9-Pin D-Sub Connector Pin#	9-Pin D-Sub Connector Pin#	9-Pin D-Sub Connector Pin#	25-Pin D-Sub Connector Pin#
1 🗨	<b>→</b> 1	1 ←	→ 8
2	<b>→</b> 2	2	→ 3
3 ◀	<b>→</b> 3	3 ◀	<b>→</b> 2
4	<b>→</b> 4	4	→ 20
5	<b>→</b> 5	5	<b>→</b> 7
6 ◀	<b>→</b> 6	6 ◀	<b>→</b> 6
7	<b>→</b> 7	7	<b>→</b> 4
8 🗲	→ 8	8 ◀	<b>→</b> 5
9 🗲	→ 9	9  ←	<b>→</b> 22

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

9-Pin D-Sub Connector Pin#	9-Pin D-Sub Connector Pin#	9-Pin D-Sub Connector Pin#	25-Pin D-Sub Connector Pin#
1 ←	<b>→</b> 1	1 ←	<b>→</b> 8
2	<b>2</b>	2	<b>3</b>
3	<b>3</b>	3	<b>&gt;</b> 2
4 🗸	<b>→</b> 4	4 🗸	→ 20
5 🗲	<b>→</b> 5	5 🗨	<b>→</b> 7
6 ←	<b>→</b> 6	6 ◀	<b>→</b> 6
7 🔨	<b>7</b>	7 🔨	<b>→</b> 4
8	▶ 8	8	<b>&gt;</b> 5
9	9	9	22