Cisco ASR 1000 Series Router Specifications

This appendix provides router specifications and cable assemblies and pinouts for the cables shipped with the Cisco ASR 1000 Series Aggregation Services Routers.

This appendix contains the following sections:

Cisco ASR 1001-HX and Cisco ASR 1002-HX Router Specifications

For information about specifications for Cisco ASR 1001-HX and Cisco ASR 1002-HX Router, see Cisco ASR 1001-HX Router and Cisco ASR 1002-HX Router Hardware Installation Guide.

Cisco ASR 1006X and Cisco ASR 1009X Router Specifications

For information about specifications for Cisco ASR 1006X and Cisco ASR 1009X Router, see Cisco ASR 1009-X Router and Cisco ASR 1006-X Hardware Installation Guide.

Cisco ASR 1006 Router Specifications

This section lists the specifications for the Cisco ASR 1006 Router.

The following table lists the Cisco ASR 1006 Router physical specifications.

Table 1: Cisco ASR 1006 Router Specifications

Description	Specification
Midplane	Connects the Cisco ASR 1000 Series RP1, Cisco ASR 1000 Series ESP, Cisco ASR 1000 Series SPA Interface (SIP), SPAs, and power supplies together in the system
Dimensions (H x W x D)	Height = 10.5 in. (25.4 cm) Width = 17.25 in.(43.815 cm) Depth = 22.50 in. (57.15 cm)
Weight	• Fully loaded chassis: 109.1 pounds (49.5 kg) • Only chassis: 25 pounds (11.33kg) **Note** Using the Cisco ASR1000-ESP100 instead of the Cisco ASR1000-ESP40 adds 2.1 lbs to the total weight of the router.
Nominal operating temperature	• 41° to 104° F • 5° to 40° C
Nominal operating humidity	10% to 85%
Storage temperature	• –38° to 150° F • –40° to 70° C
Power consumption	• Maximum DC: 1700W • Maximum AC: 1600W • Maximum (Out): 1275W

Cisco ASR 1006 Router Memory and Storage Options

The following table lists the hardware memory and storage options supported on the Cisco ASR 1006 Router.

Table 2: Memory and Storage Options for Cisco ASR 1006 Router

Memory Type	Default	Maximum System Support
RP1	2 GB DRAM	4 GBDRAM
eUSB	1 GB (Partitioned: 2x32MB for NVRAM and the remaining for mass storage	Hard disk drive 40 GB for code storage or solid-state drive 32 GB support

Cisco ASR 1006 Router Ethernet RJ-45 Port Pinouts

The Cisco ASR 1006 Router has an RJ-45 port for the 10/100/1000 Ethernet connection. The RJ-45 port supports IEEE 802.3ab (Gigabit Ethernet) and IEEE 802.3u (Fast Ethernet) interfaces compliant with 10BASET, 100BASETX, and 1000BASET specifications.

The RJ-45 port supports standard straight-through and crossover Category 5 UTP cables with RJ-45 connectors. Cisco does not supply Category 5 UTP cables; these cables are available commercially.

The following figure shows an RJ-45 port and connector.

Figure 1: RJ-45 Port and Connector for Cisco ASR 1006 Router
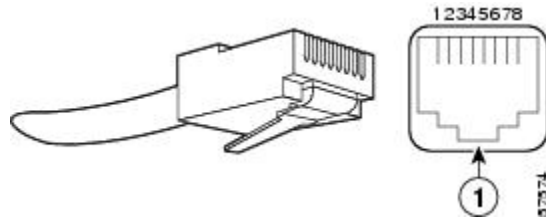
| 1 | RJ-45 connector | — | — |

Cisco ASR 1006 Router MGMT Ethernet Port Pinouts

The following table lists the RJ-45 port pinout for the front panel Management Ethernet port.

Table 3: RJ-45 Management Ethernet Port Pinouts

Pin	Signal	Direction	Description
1	TX Data+	Out	Transmit Data
2	TX Data–	Out	Transmit Data
3	RX Data+	In	Receive Data
4, 5	NC	—	—
6	RX Data–	In	Receive Data
7,8	NC	—	—

Cisco ASR 1006 Router BITS Port Signals and Pinouts

The following table lists the pinouts of the Building Integrated Timing Supply (BITS) RJ45 port on the Cisco ASR 1006 Router.

Table 4: BITS RJ-45 Receptacle Pinouts for Cisco ASR1000-RP1

Pin	Signal	Direction	Description
1	RX Ring	Input	Receive Ring
2	RX	Input	Receive (T1/E1)
3, 4	N/C	—	—
5	TX Ring	Unused	—

Pin	Signal	Direction	Description
6	TX	Unused	—
7,8	N/C	—	—

The following table lists the pinouts of the Building Integrated Timing Supply (BITS) and the DOCSIS Timing Interface (DTI) RJ45 port on the Cisco ASR1000-RP2 front panel.

Table 5: BITS RJ-45 Receptacle Pinouts for Cisco ASR1000-RP2

Pin	Signal	Direction	Description
1	RX Ring	Input/Bi (DTI)	Receive Ring/Bidirectional DTI
2	RX TIP	Input/Bi (DTI)	Receive TIP (T1/E1) Bidirectional DTI
3, 4	N/C	—	—
5	TX Ring	Output	Transmit Ring/Bidirectional DTI
6	TX	Output	Transmit TIP (T1/E1) Bidirectional DTI
7,8	N/C	—	—

Cisco ASR 1006 Router Console Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the front panel console port.

Table 6: Console Port Pinouts for Cisco ASR 1006 Router

Pin	Signal	Direction	Description
1	RTS	Out	Request to Send (tied to pin 8, CTS)
2	DTR	Out	Data Terminal Ready (always On)
3	TXD	Out	Transmit Data
4	GND	—	Ring Indicator
5	GND	—	—
6	RXD	In	Receive Data
7	DSR	In	Data Terminal Ready
8	CTS	In	Clear to Send (tied to pin 1, RTS)

Cisco ASR 1006 Router Auxiliary Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the auxiliary port signals.

Table 7: Auxiliary Port Pinouts for Cisco ASR 1006 Router

Pin	Signal	Direction	Description
1	RTS	Out	Request to Send
2	DTR	Out	Data Terminal Ready (always On)
3	TXD	Out	Transmit Data
4	RI	—	Ring Indicator
5	GND	—	—
6	RXD	In	Receive Data
7	DSR/DCD	In	Data Set Ready/Data Carrier Detect
8	CTS	In	Clear to Send

Cisco ASR 1006 Router DB-25 Pinout Assignments for Alarm Relays

The alarm ports for the Cisco ASR 1006 Router (Cisco ASR 1004 Router and Cisco ASR 1013 Router) power supplies reside on the DB-25 connector on the face of the power supply. The alarm ports are relay contact closures that the IOS environmental software controls. The environmental monitoring functions of the system can include voltage and temperature monitoring for the router installed components and failure sensing for power supply fan tray.

Any alarms that light the front panel LEDs on the Cisco ASR1000-RP1 causes a contact closure between the corresponding pins within the DB-25 alarm port of both power supplies. In the DB-25 connector, each alarm consists of a three-pin set containing a common pin, a normally open pin, and a normally closed pin. The connections that describe alarm activity are Alarm off (Common is connected to normally closed and normally open is disconnected) and Alarm on (Common is connected to normally open and normally closed is disconnected).

The following table lists the common, normally open, and normally closed relay contacts accessible to an external alarm monitoring facility by means of the DB-25 connector.

Table 8: Cisco ASR 1006 Router DB-25 Alarm Connector Pinout Assignments

Signal	Description	Common (CM)	Normally Open (NO)	Normally Closed (NC)	SPARE
CRTAA	Critical Audible Alarm	2	1	14	—
MAJAA	Major Audible Alarm	16	3	15	—
MINAA	Minor Audible Alarm	5	4	17	—
CRTVA	Critical Visual Alarm	19	6	18	—
MAJVA	Major Visual Alarm	8	7	20	—
MINVA	Minor Visual Alarm	22	9	21	—

Signal	Description	Common (CM)	Normally Open (NO)	Normally Closed (NC)	SPARE
SPARE	SPARE—unused pin reserved for future use	—	—	—	10, 11, 12, 13, 23, 24, 25

Cisco ASR 1004 Router Specifications

This section lists the specifications for the Cisco ASR 1004 Router.

The following table lists the Cisco ASR 1004 Router physical specifications.

Table 9: Cisco ASR 1004 Router Specifications

Description	Specification
Midplane	Connects the Cisco ASR 1000 Series RP1, ASR 1000 Series ESP, Cisco ASR 1000 Series SPA Interface (SIP), SPAs, and power supplies together in the system
Dimensions (H x W x D)	Height = 7 in. (17.8 cm) (4RU rack-mount per EIA RS-310) Width = 17.25 in. (43.815 cm) (19 inch rack-mount or optional 23 Telco rack- mount) Depth = 22.50 in. (57.15 cm) (including card handles, cable-management brackets and power supply handles)
Weight	• Fully loaded chassis: 50 pounds (22.6796 kg) • Only chassis: 18 pounds (8.16 kg)
Nominal operating temperature	• 41° to 104° F • 5° to 40° C
Nominal operating humidity	10% to 85%
Storage temperature	• –38° to 150° F • –40° to 70° C
Power consumption	• Maximum DC: 1020W • Maximum AC: 960W • Maximum (Out): 765W

Cisco ASR 1004 Router Memory and Storage Options

The following table lists the hardware memory and storage options supported on the Cisco ASR 1004 Router.

Table 10: Memory and Storage Options for Cisco ASR 1004 Router

Memory Type	Default	Maximum System Support
RP1	2 GB DRAM	4 GBDRAM

Memory Type	Default	Maximum System Support
eUSB	1 GB (Partitioned: 2x32MB for NVRAM and the remaining for mass storage	For mass storage: hard disk drive 40 GB or solid-state drive 32Gb support

Cisco ASR 1004 Router Ethernet RJ-45 Port Pinouts

The Cisco ASR 1004 Router has RJ-45 port for the 10/100/1000 Ethernet connection. The RJ-45 port supports IEEE 802.3ab (Gigabit Ethernet) and IEEE 802.3u (Fast Ethernet) interfaces compliant with 10BASET, 100BASETX, and 1000BASET specifications.

The RJ-45 port supports standard straight-through and crossover Category 5 UTP cables with RJ-45 connectors. Cisco does not supply Category 5 UTP cables; these cables are available commercially. See xref Figure A-1 to see an RJ-45 port and connector.

Cisco ASR 1004 Router MGMT Ethernet Port Signals and Pinouts

The following table lists the RJ-45 port pinouts for the front panel Management Ethernet port.

Table 11: RJ-45 Management Ethernet Port Pinouts for the Cisco ASR 1004 Router

Pin	Signal	Direction	Description
1	TX Data+	Output	Transmit Data
2	TX Data–	Output	Transmit Data
3	RX Data+	Input	Receive Data
4, 5	NC	—	—
6	RX Data–	Input	Receive Data
7,8	NC	—	—

Cisco ASR 1004 Router Console Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the front panel console port.

Table 12: Console Port Pinouts for Cisco ASR 1004 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send (tied directly to CTS)
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	GND	—	Ring Indicator

Pin	Signal	Direction	Description
5	GND	—	—
6	RXD	Input	Receive Data
7	DSR	Input	Unused
8	CTS	Input	Clear to Send (tied to RTS)

Cisco ASR 1004 Router Auxiliary Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the auxiliary port signals.

Table 13: Auxiliary Port Pinouts for Cisco ASR 1004 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	RI	—	Ring Indicator
5	GND	—	
6	RXD	Input	Receive Data
7	DSR/DCD	Input	Data Set Ready/Data Carrier Detect
8	CTS	Input	Clear to Send

Cisco ASR 1004 Router BITS Port Signals and Pinouts

The following table lists the pinouts of the front panel Building Integrated Timing Supply (BITS) RJ45 port.

Table 14: BITS RJ-45 Receptacle Pinouts for Cisco ASR 1004 Router

Pin	Signal	Direction	Description
1	RX Ring	Input	Receive Ring
2	RX TIP	Input	Receive TIP (T1/E1)
3, 4	N/C	—	—
5	TX Ring	Unused	—
6	TX TIP	Unused	—

Pin	Signal	Direction	Description
7,8	N/C	—	—

Cisco ASR 1004 Router DB-25 Pinout Assignments for Alarm Relays

The following table lists the common, normally open, and normally closed relay contacts accessible to an external alarm monitoring facility by means of the DB-25 connector.

For more information about the DB-25 alarm connector, see .

Table 15: Cisco ASR 1004 Router DB-25 Alarm Connector Pinout Assignments

Signal	Description	Common (CM)	Normally Open (NO)	Normally Closed (NC)	SPARE
CRTAA	Critical Audible Alarm	2	1	14	—
MAJAA	Major Audible Alarm	16	3	15	—
MINAA	Minor Audible Alarm	5	4	17	—
CRTVA	Critical Visual Alarm	19	6	18	—
MAJVA	Major Visual Alarm	8	7	20	—
MINVA	Minor Visual Alarm	22	9	21	—
SPARE	SPARE—unused pin reserved for future use	—	—	—	10, 11, 12, 13, 23, 24, 25

Cisco ASR 1002 Router, Cisco ASR 1002-F Router, and Cisco ASR 1002-X Router Specifications

This section lists the specifications for the Cisco ASR 1002 Router, Cisco ASR 1002-F Router, and Cisco ASR 1002-X Router.

Note Unless stated otherwise, the specifications for the Cisco ASR 1002-F Router are the same as those for the Cisco ASR 1002 Router except where limited by constrained throughput of 2.5G on the Cisco ASR 1002-F Router.Similarly, most of the specifications for the Cisco ASR 1002-X Router are the same as the specifications for the Cisco ASR 1002 Router. The differences in specifications have been called out at the relevant places in this section. Some of the Cisco ASR 1002-X Router specifications that are covered in this section are for ports that are specific to that router.

The following table lists the Cisco ASR 1002 Router physical specifications.

Table 16: Cisco ASR 1002 Router Specifications

Description	Specification
Midplane	Connects the Cisco integrated ASR1000-RP1, the ASR 1000 ESP5 or ESP10, SPAs, and power supplies together in the system
Dimensions (H x W x D)	Height: 3.5 in. (8.9 cm) Width: 17.25 in. (19-inch rack-mount or optional 23 Telco adaptor brackets) Depth: 22.50 in. (including card handles, cable-management brackets, and power supply handles) for mounting in a 600mm-enclosed cabinet
Weight	• 40 lbs (18.143 kg) for a fully loaded Cisco ASR 1002 Router or Cisco ASR 1002-F Router • 43.35 lbs (19.662 kg) for a fully loaded Cisco ASR 1002-X Router
Nominal operating temperature	• 41° to 104° F • 5° to 40° C
Nominal operating humidity	10% to 85%
Storage temperature	• –38° to 150° F • –40° to 70° C
Power consumption	• Maximum DC: 590W • Maximum AC: 560W • Maximum (Out): 470W

Cisco ASR 1002 Router Mgmt Ethernet RJ-45 Port Pinouts

✎

Note Unless stated otherwise, the specifications for the Cisco ASR 1002-X Router are the same as the Cisco ASR 1002 Router specifications listed in this section.

The Cisco ASR 1002 Router has RJ-45 port for the 10/100/1000 Ethernet connections. The RJ-45 port supports IEEE 802.3ab (Gigabit Ethernet) and IEEE 802.3u (Fast Ethernet) interfaces compliant with 10BASET, 100BASETX, and 1000BASET specifications.

The RJ-45 port supports standard straight-through and crossover Category 5 UTP cables with RJ-45 connectors. Cisco does not supply Category 5 UTP cables; these cables are available commercially.

The following table lists the RJ-45 port pinout for the front panel Management Ethernet port.

Table 17: Management Ethernet 10/100/1000 RJ-45 Port Pinouts for Cisco ASR 1002 Router

Pin	Signal	Direction	Description
1	TX Data+	Output	Transmit Data
2	TX Data–	Output	Transmit Data

Pin	Signal	Direction	Description
3	RX Data+	Input	Receive Data
4, 5	NC	—	—
6	RX Data–	Input	Receive Data
7,8	NC	—	—

Cisco ASR 1002 Router Console Port Signals and Pinouts

✎

Note Unless stated otherwise, the specifications for the Cisco ASR 1002-X Router are the same as the Cisco ASR 1002 Router specifications listed in this section.

The following table lists the pinout of the dual RJ-45 ports for the front panel console port.

Table 18: Console Port Pinouts for Cisco ASR 1002 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send (tied to CTS)
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	GND	—	Ring Indicator
5	GND	—	—
6	RXD	Input	Receive Data
7	DSR	Input	unused
8	CTS	Input	Clear to Send (tied to RTS)

Cisco ASR 1002 Router Auxiliary Port Signals and Pinouts

✎

Note Unless stated otherwise, the specifications for the Cisco ASR 1002-X Router are the same as the Cisco ASR 1002 Router specifications listed in this section.

The following table lists the pinout of the dual RJ-45 ports for the auxiliary port signals.

Table 19: Auxiliary Port Pinouts for Cisco ASR 1002 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	RI	—	Ring Indicator
5	GND	—	—
6	RXD	Input	Receive Data
7	DSR/DCD	Input	Data Set Ready/Data Carrier Detect
8	CTS	Input	Clear to Send

Cisco ASR 1002 Router BITS Port Signals and Pinouts

The following table lists the pinout of the front panel Building Integrated Timing Supply (BITS) RJ45 port.

Table 20: BITS RJ-45 Interface Pinouts for Cisco ASR 1002 Router

Pin	Signal	Direction	Description
1	RX Ring	Input	Receive Ring
2	RX TIP	Input	Receive TIP (T1/E1)
3, 4	N/C	—	Not used
5	TX Ring	—	Not used
6	TX TIP	—	Not used
7,8	N/C	—	—

Cisco ASR 1002-X Router BITS Port Signals and Pinouts

The following table lists the pinout of the front panel Building Integrated Timing Supply (BITS) RJ45 port on the Cisco ASR 1002-X Router.

Table 21: BITS RJ-45 Interface Pinouts for Cisco ASR 1002-X Router

Pin	Signal	Direction	Description
1	RX Ring	Input	Receive Ring
2	RX TIP	Input	Receive TIP (T1/E1)

Pin	Signal	Direction	Description
3, 4	N/C	—	Not used
5	TX Ring	Output	Transmit Ring
6	TX TIP	Output	Transmit TIP (T1/E1)
7,8	N/C	—	—

Cisco ASR 1002-X Router BNC GPS Ports

The following table describes the BNC GPS ports on the Cisco ASR 1002-X.

Table 22: GPS Port Pinout

Signal Attribute	10 Mhz (input and output)	1PPS (input and output)
Waveform	Input—Sine wave Output—Square wave	Input—Pulse shape Output—Pulse shape
Amplitude	Input—> 1.7 volt p-p(+8 to +10 dBm) Output—> 2.4 volts TTL compatible	Input—> 2.4 volts TTL compatible Output—> 2.4 volts TTL compatible
Impedance	50 ohms	50 ohms
Pulse Width	50% duty cycle	26 microseconds
Rise Time	Input—AC coupled Output—5 nanoseconds	40 nanoseconds

Cisco ASR 1002-X Router Time of Day Port Pinout

The following table summarizes the pinout of the ToD/1PPS port pinout on the Cisco ASR 1002-X.

Table 23: RJ45 1PPS/ToD Port Pinout

Pin	Signal Name	Direction	Description
1	1PPS_P	Output or Input	1PPS RS422 signal
2	1PPS_N	Output or Input	1PPS RS422 signal
3	RESERVED	Output	Do not use this pin.
4	GND		
5	GND		Time of Day character
6	RESERVED	Input	Do not use this pin.

Pin	Signal Name	Direction	Description
7	TOD_P	Output or Input	Time of Day character
8	TOD_N	Output or Input	Time of Day character

Cisco ASR 1013 Router Specifications

This section lists the specifications for the Cisco ASR 1013 Router. The following table lists the Cisco ASR 1013 Router physical specifications.

Table 24: Cisco ASR 1013 Router Specifications

Description	Specification
Midplane	Connects Cisco ASR1000-RP2, Cisco ASR 1000-ESP40 or Cisco ASR 1000-ESP100, Cisco ASR1000-SIP10 and Cisco ASR1000-SIP40, and power supplies together in the system
Dimensions (H x W x D)	Height: 22.8 in. (579.1 cm) Width: 17.2 in. (437.4 cm) Depth: 22 in (558.8 cm) with cable-management bracket and power supply handles included

Weight	• 184.0 lb (83.46 kg) (with redundant AC power supply, SPA and route processor and SIP blank covers, two embedded services processors, two route processors, six SIPs, and no SPAs)
	• 190.60 pounds (loaded with DC power supplies) (86.45 kg)
	• Total with estimated superslot weights with:
	    • AC power supplies—202 pounds (91.62 kg)
	    • DC power supplies —208.60 (94.61 kg)
	
	Note Using the Cisco ASR1000-ESP100 instead of the Cisco ASR1000-ESP40 adds 2.1 lbs to the total weight of the router.

Nominal operating temperature	5° to 40° C
Nominal operating humidity	10% to 85%
Storage temperature	• –38° to 150° F • –40° to 70° C
Power consumption (2x Zones)	• Maximum input (DC): 4,200W • Maximum input (AC – High Line): 4,000 W • Maximum output (DC and AC – High Line): 3,390 W
Per Power Supply Power Consumption	• Maximum input (DC): 2100W • Maximum input (AC – High Line): 2,000WMaximum input (AC – Low Line): 1,760W • Maximum output (DC and AC – High Line): 1,695W • Maximum output (AC – Low Line): 1,415W

Cisco ASR 1013 Router Memory and Storage Options

The following table lists the hardware memory and storage options supported on the Cisco ASR 1013 Router.

Table 25: Memory and Storage Options for Cisco ASR 1013 Router

Memory Type	Default	Maximum System Support
R21– DRAM	8 GB	8 GB
FECP – DRAM	1 GB for ASR1000-ESP-5 2 GB for ASR1000-ESP10	2 GB
eUSB – Internal Flash + NVRAM	8 GB on the integrated RP on the Cisco ASR 1002 Router (partitioned: 1 GB for bootflash; 7 GB for mass storage)	8 GB – Not Field Upgradeable

Cisco ASR 1013 Router Ethernet RJ-45 Port Pinouts

The Cisco ASR 1013 Router has RJ-45 port for the 10/100/1000 Ethernet connections. The RJ-45 port supports IEEE 802.3ab (Gigabit Ethernet) and IEEE 802.3u (Fast Ethernet) interfaces compliant with 10BASET, 100BASETX, and 1000BASET specifications.

The RJ-45 port supports standard straight-through and crossover Category 5 UTP cables with RJ-45 connectors. Cisco does not supply Category 5 UTP cables; these cables are available commercially.

Cisco ASR 1013 Router MGMT Ethernet Port Signals and Pinouts

The following table lists the RJ-45 port pinout for the front panel Management Ethernet port.

Table 26: Management Ethernet 10/100/1000 RJ-45 Port Pinouts for Cisco ASR 1013 Router

Pin	Signal	Direction	Description
1	TX Data+	Output	Transmit Data
2	TX Data–	Output	Transmit Data
3	RX Data+	Input	Receive Data
4, 5	NC	—	—
6	RX Data–	Input	Receive Data
7,8	NC	—	—

Cisco ASR 1013 Router Console Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the front panel console port.

Table 27: Console Port Pinouts for Cisco ASR 1013 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send (tied to CTS)
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	GND	—	Ring Indicator
5	GND	—	—
6	RXD	Input	Receive Data
7	DSR	Input	unused
8	CTS	Input	Clear to Send (tied to RTS)

Cisco ASR 1013 Router Auxiliary Port Signals and Pinouts

The following table lists the pinouts of the dual RJ-45 ports for the auxiliary port signals.

Table 28: Auxiliary Port Pinouts for Cisco ASR 1013 Router

Pin	Signal	Direction	Description
1	RTS	Output	Request to Send
2	DTR	Output	Data Terminal Ready (always On)
3	TXD	Output	Transmit Data
4	RI	—	Ring Indicator
5	GND	—	—
6	RXD	Input	Receive Data
7	DSR/DCD	Input	Data Set Ready/Data Carrier Detect
8	CTS	Input	Clear to Send

Cisco ASR 1013 Router BITS Port Signals and Pinouts

The following table lists the pinouts of the front panel Building Integrated Timing Supply (BITS) RJ45 port.

Table 29: BITS RJ-45 Interface Pinouts for Cisco ASR 1013 Router

Pin	Signal	Direction	Description
1	RX Ring	Input	Receive Ring

Pin	Signal	Direction	Description
2	RX TIP	Input	Receive TIP (T1/E1)
3, 4	N/C	—	—
5	TX Ring	Unused	—
6	TX TIP	Unused	—
7,8	N/C	—	—

Cisco ASR 1013 Router DB-25 Pinout Assignments for Alarm Relays

The following table lists the common, normally open, and normally closed relay contacts accessible to an external alarm monitoring facility by means of the DB-25 connector.

For more information about the DB-25 alarm connector, see xref c_Cisco_ASR_1006_Router_DB-25_Pinout_Assignments_for_Alarm_Relays_1018881.xml.

Table 30: Cisco ASR 1013 Router DB-25 Alarm Connector Pinout Assignments

Signal	Description	Common (CM)	Normally Open (NO)	Normally Closed (NC)	SPARE
CRTAA	Critical Audible Alarm	2	1	14	—
MAJAA	Major Audible Alarm	16	3	15	—
MINAA	Minor Audible Alarm	5	4	17	—
CRTVA	Critical Visual Alarm	19	6	18	—
MAJVA	Major Visual Alarm	8	7	20	—
MINVA	Minor Visual Alarm	22	9	21	—
SPARE	SPARE—unused pin reserved for future use	—	—	—	10, 11, 12, 13, 23, 24, 25

Cisco ASR 1001 Router Specifications

This section lists the specifications for the Cisco ASR 1001 Router. The following table lists the Cisco ASR 1001 Router physical specifications.

Note The Cisco ASR 1001 Router has the route processor, embedded services processor, and SIP integrated in the chassis.

Table 31: Cisco ASR 1001 Router Specifications

Description	Specification
Dimensions (H x W x D)	Height: 1.71 in. (43.43 mm) Width: 17.3 in. (439.42 mm) Depth: 22.50 in. (571.5 mm) including card handles, cable-management brackets, and power supply handles)
Weight	• 23.30 lb (10.6 kg) (with dual AC power and integrated daughter card) • 22.70 lb (10.3 kg) (with dual DC power and integrated daughter card) • 25 lb fully loaded
Operating temperature	Nominal 5° to 40° C
Nominal operating humidity	10% to 90% non-condensing
Storage temperature	• –38° to 150° F • –40° to 70° C
Power consumption	• Maximum (DC): 500 W • Maximum (AC): 471 W • Maximum (Out): 400 W

Cisco ASR 1001 Router Memory and Storage Options

The following table lists the hardware memory and storage options supported on the Cisco ASR 1001 Router.

Table 32: Memory and Storage Options for Cisco ASR 1001 Router

Memory Type	Default	Maximum System Support
ESP	1 GB DRAM default	1 GB DRAM maximum
Route Processor	• Cisco ASR 1001 Route Processor comes with 4 GB DRAM (default) • Cisco ASR 1001 offers 8 GB Embedded USB memory (EUSB) support (partitioned: two 32-MB for nonvolatile RAM [NVRAM] and the rest for mass storage)	16 GB DRAM maximum
External USB flash memory	1 GB USB flash memory support	—