

Preparing for Installation

This chapter includes the following preinstallation information:

- Safety Recommendations
- Safety with Electricity
- Preventing Electrostatic Discharge Damage
- General Site Requirements
- Cable Requirements
- Power Guidelines
- Modem Requirements
- Tools and Equipment Required

Safety Recommendations

Follow these guidelines to ensure general safety:

- Keep the chassis area clear and dust-free during and after installation.
- Keep tools away from walk areas where you and others could fall over them.
- Do not wear loose clothing that could get caught in the chassis. Fasten your tie or scarf, and roll-up your sleeves.
- Wear safety glasses when working under any conditions that might be hazardous to your eyes.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.

Safety Recommendations



Warning Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals. To turn OFF power you must disconnect the power cord; there is no ON/OFF switch.

Safety with Electricity

Follow these guidelines when working on equipment powered by electricity.

- Locate the emergency power-off switch for the room in which you are working. Then, if an electrical accident occurs, you can act quickly to turn OFF the power.
- Before working on the system, unplug the power cord.
- Disconnect all power before doing the following:
 - Installing or removing a chassis
 - Working near power supplies
 - Changing a PCMCIA modem
- Do not work alone if potentially hazardous conditions exist.
- Never assume that power is disconnected from a circuit. Always check.
- Look carefully for possible hazards in your work area, such as moist floors, ungrounded power extension cables, and missing safety grounds.
- If an electrical accident occurs, proceed as follows:
 - Use caution; do not become a victim yourself.
 - Unplug power to the system.
 - If possible, send another person to get medical aid. Otherwise, assess the condition of the victim and then call for help.
 - Determine if the person needs rescue breathing or external cardiac compressions; then take appropriate action.



Caution If the internal components of the Cisco 1020 are handled, electrostatic discharge can occur, resulting in damage to its circuitry and followed by complete or intermittent failures. Because there are no user-serviceable parts inside of the Cisco 1020, do not open the case.

Preventing Electrostatic Discharge Damage

Electrostatic Discharge (ESD) can damage equipment and impair circuitry. To avoid ESD damage, and because there are no user serviceable components, do not open the Cisco 1020 case.

General Site Requirements

This section describes the requirements your site must meet for safe installation and operation of your system. Ensure that your site is properly prepared before beginning installation.

Site Environment

Choose a clean, dust-free, (preferably) air-conditioned location. Avoid direct sunlight, heat sources, or areas with high levels of electromagnetic interference (EMI).

Chassis Accessibility

Make sure that the front panel of the Cisco 1020 is visually accessible so that you can monitor the LED indicators. Leave at least three (3) inches (8 cm) clearance at the rear of the Cisco 1020 for easier cabling and service, and for proper airflow.

Cooling and Airflow



Caution To prevent overheating the Cisco 1020, do not operate it in an area that exceeds the maximum recommended ambient temperature of 104°F (40°C). For proper airflow, you must allow at least 3 inches (8 cm) of clearance around the vent openings.

Cable Requirements

The following are cable requirements for Cisco 1020 installation.

The Cisco 1020 ships with a RJ-45 to DB-25 (female) cable for connection of the console port to a PC serial port. You may also connect a standard ASCII terminal or an external modem to this port. Pinouts for the required cables/adapters are listed in the appendix “Cabling Specifications.”

Console Cable (Async 1)

This cable is included with the unit and is used to configure the Cisco 1020. This cable has an RJ-45 connector that plugs into the Console (Async 1) port on the Cisco 1020, and a DB-25 female connector that plugs into the serial port on a PC. Pinouts for this cable are shown in the appendix “Cabling Specifications.” Use a DB-25 male-male adapter to connect this cable to an ASCII terminal.

Ethernet 10BaseT Port (Ether 0) Cable

The Ethernet 10BaseT port accepts modular RJ-45 connectors. 10BaseT requires a minimum Category 3 UTP cable as specified by the EIA/TIA-568-B wiring standard. The distance limitation for 10BaseT is a maximum of 328 feet (100 m). For pinouts of the Ethernet 10BaseT port, refer to the appendix “Cabling Specifications.”

PCMCIA Modem Slot (Async 2)

The PCMCIA slot accepts a Type-2 PCMCIA modem card. The PCMCIA modem will include the appropriate telephone cable.

Power Guidelines

Power should come from a building branch circuit. Before you connect the unit to a power source, note its power consumption ratings, as follows:

- The external power supply provides +5 and -5 volts direct current (VDC) to the Cisco 1020.
- The power supply accepts 100 through 270 volts alternating current (VAC), 50 to 60 Hz.

To apply power, attach the power cord. To disconnect power, unplug the power cord. There is no ON/OFF switch.



Timesaver Locate the source electrical outlet near the Cisco 1020 and ensure that the outlet is easily accessible and properly grounded.

Modem Requirements

The Cisco 1020 can use a PCMCIA Type-2 modem that you provide. See the list of verified PCMCIA modems in the appendix “Modems.”

External modems and modem tips are also covered in the appendix “Modems.”

Tools and Equipment Required

The following are the tools and equipment required to install the Cisco 1020:

- Mounting screws and anchors that you provide (only required if you will be mounting the unit on a wall)
- Flat-blade screwdriver, 1/4-inch (0.625 cm), (only required if you will be mounting the unit on a wall)
- A straight-through twisted-pair 10BaseT cable with RJ-45 connectors
- The appropriate PCMCIA modem or external modem with a modular phone cable

In addition, you might need the following equipment:

- External modem
- RJ-45 to DB-25 cable