

Prepare for Installation

- Safety Recommendations and Warnings, on page 1
- Network Equipment-Building System (NEBS) Statements, on page 2
- General Safety Guidelines For Electrical Equipment, on page 3
- Site Requirements, on page 4
- Mounting Requirements, on page 5
- Power Guidelines and Requirements, on page 5
- Network Cabling Specification, on page 6
- Required Tools and Equipment, on page 6

Safety Recommendations and Warnings

Review the safety warnings listed in the Regulatory Compliance and Safety Information for the Cisco Catalyst 8300 Series Edge uCPE before installing, configuring, or maintaining the device.

Read the following safety guidelines before you install this product:

Warning

Statement 1071—Warning Definition

IMPORTANT SAFETY INSTRUCTIONS

Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Read the installation instructions before using, installing, or connecting the system to the power source. Use the statement number at the beginning of each warning statement to locate its translation in the translated safety warnings for this device.

SAVE THESE INSTRUCTIONS



Warning

Statement 1074—Comply with Local and National Electrical Codes

To reduce risk of electric shock or fire, installation of the equipment must comply with local and national electrical codes.

Warning **Statement 9001—**Product Disposal

Ultimate disposal of this product should be handled according to all national laws and regulations.

Always follow these electrostatic discharge (ESD) prevention procedures when removing and replacing modules:

- Ensure that the chassis is electrically connected to the ground.
- Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. Connect the clip to an unpainted surface of the chassis frame to channel unwanted ESD voltages safely to ground. To guard against ESD damage and shocks, the wrist strap and cord must operate effectively.
- If no wrist strap is available, ground yourself by touching a metal part of the chassis.

Note For the safety of your equipment, periodically check the resistance value of the anti-static strap. It should be between 1 and 10 megaohms (Mohm).

Network Equipment-Building System (NEBS) Statements

NEBS describes the environment of a typical United States Regional Bell Operating Company (RBOC) central office. NEBS is the most common set of safety, spatial, and environmental design standards applied to telecommunications equipment in the United States. It is not a legal or regulatory requirement, but rather an industry requirement.

The following NEBS statements apply to the Cisco Catalyst Edge uCPE 8300:

Warning **Statement 7003**—Shielded Cable Requirements for Intrabuilding Lightning Surge

The intrabuilding port(s) of the equipment or subassembly must use shielded intrabuilding cabling/wiring that is grounded at both ends.

The following port(s) are considered intrabuilding ports on this equipment:

RJ-45 Copper Ethernet Port

Warning **Statement 7005**—Intrabuilding Lightning Surge and AC Power Fault

The intrabuilding port(s) of the equipment or subassembly must not be metallically connected to interfaces that connect to the outside plant (OSP) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metallically to OSP wiring.

This statement applies to the intrabuilding ports listed below:

RJ-45 Copper Ethernet Port

Warning **Statement 7012—**Equipment Interfacing with AC Power Ports

Connect this equipment to AC mains that are provided with a surge protective device (SPD) at the service equipment that complies with NFPA 70, the National Electrical Code (NEC).

Note **Statement 7013—**Equipment Grounding Systems—Common Bonding Network (CBN)

This equipment is suitable for installations using the CBN.

Note **Statement 7016—**Battery Return Conductor

Treat the battery return conductor of this equipment as Isolated DC return (DC-I).

Note **Statement 7018—**System Recover Time

The equipment is designed to boot up in less than 30 minutes provided the neighboring devices are fully operational.

Note **Statement 8015—**Installation Location Network Telecommunications Facilities

This equipment is suitable for installation in network telecommunications facilities.

Note **Statement 8016—**Installation Location Where the National Electric Code (NEC) Applies

This equipment is suitable for installation in locations where the NEC applies.

General Safety Guidelines For Electrical Equipment

Follow these general guidelines when working on equipment that is powered by electricity:

- Locate the emergency power-off switch in the room in which you are working. If an electrical accident occurs, you can quickly turn off the power.
- Disconnect all power before doing the following:
  - Installing or removing a chassis.
  - Working near power supplies.

- Look carefully for possible hazards in your work area, such as moist floors, ungrounded power extension cables, frayed power cords, and missing safety grounds.
- Do not work alone if hazardous conditions exist.
- Never assume that power is disconnected from a circuit. Always check.
- Never open the enclosure of the internal power supply.
- If an electrical accident occurs, proceed as follows:
  - Turn off power to the device.
  - Call for help.
  - Determine if the person needs rescue breathing or external cardiac compressions; then take appropriate action.

Follow these guidelines when working with any equipment that is disconnected from a power source but is still connected to ethernet wiring or other network cabling:

- Never install ethernet wiring during a lightning storm.
- Never install ethernet jacks in wet locations unless the jack is specifically designed for it.
- Never touch uninsulated ethernet wires or terminals unless the ethernet line is disconnected atthe network interface.
- Use caution when installing or modifying ethernet lines.
- Remove power cables from all installed power supplies before opening the chassis.

Always follow these electrostatic discharge (ESD) prevention procedures when removing and replacing modules:

- Ensure that the router chassis is electrically connected to ground.
- Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. Connect the clip to an unpainted surface of the chassis frame to channel unwanted ESD voltages safely to ground. To guard against ESD damage and shocks, the wrist strap and cord must operate effectively.
- If no wrist strap is available, ground yourself by touching a metal part of the chassis.



Caution For the safety of your equipment, periodically check the resistance value of the anti-static strap. It should be between 1 and 10 megaohms (Mohm).

Site Requirements

Follow the general precautions listed below when installing or working with your device:

- Do not block cooling vents.
- Route system cables, and the power supply cable and plug so that they cannot be stepped on ortripped over. Be sure that nothing else rests on your system component cables or power cable.

- If you turn off your system, wait at least 30 seconds before turning it on again to avoid system component damage.

Warning

Statement 1005—Circuit Breaker

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 20A

Mounting Requirements

The following table provides the height, width, depth and weight of the chassis:

Characteristic	Measurement
Height	1 RU (1.73 inches, 4.39 cm)
Width	17.5 inches (44.45 cm)
Depth	17.5 inches (44.45 cm)
Weight	19 lb (9.015 kg) when fully configured

You can mount the Cisco Catalyst 8300 Edge uCPE using the following ways:

- On a desktop
- In a rack or cabinet (optional 4-point kit to use if rear support is required)
- On a wall

The positioning of your device and the arrangement of your equipment rack or wiring room are crucial factors for optimal functionality. Placing equipment too closely, poor ventilation, and panels that are hard to reach can lead to malfunctions, shutdowns, and pose challenges for maintenance. Ensure that both the front and rear panels of the device are easily accessible during your planning process.

This information can help you plan the rack configuration for your equipment:

- Allow clearance around the rack for maintenance.
- Enclosed racks must have adequate ventilation. Ensure that the rack is not congested, because each device generates heat. An enclosed rack should have louvered sides and a fan to provide cooling air. Heat generated by equipment near the bottom of the rack can be drawn upward into the intake ports of the equipment above it.
- When mounting a chassis in an open rack, ensure that the rack frame does not block the intake or exhaust ports. If the chassis is installed on slides, check the position of the chassis when it is seated in the rack.

Power Guidelines and Requirements

Check the power at your site to ensure that you are receiving "clean" power (free of spikes and noise). Install a power conditioner if necessary.

Note **Statement 407—**Japanese Safety Instruction

You are strongly advised to read the safety instruction before using the product.

https://www.cisco.com/web/JP/techdoc/pldoc/pldoc.html

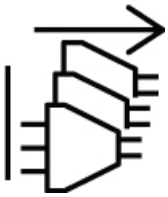
When installing the product, use the provided or designated connection cables/power cables/AC adapters.

〈製品仕様における安全上の注意〉
www.cisco.com/web/JP/techdoc/index.html

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Warning **Statement 1028—**More Than One Power Supply

This unit might have more than one power supply connection. To reduce risk of electric shock, remove all connections to de-energize the unit.



Network Cabling Specification

- Ethernet cables for RJ45 ports
- Serial or console cables used to connect devices like routers
- Shielded USB cables with properly terminated shields for the USB port

Required Tools and Equipment

Have the following equipments available to install the uCPE 8300 device and its equipment:

- ESD-preventive cord and wrist strap
- Phillips screwdrivers: small, 3/16-in. (4 to 5 mm), and medium, 1/4-in. (6 to 7mm)
- Screws that fit your rack
- Wire crimper for chassis grounding - to be used along with the ground lug kit
- One 14 AWG cable for the ground lug kit

In addition, depending on the type of modules you plan to use, you might need the following equipment to connect a port to an external network

- Cables for connection to the WAN and LAN ports (depending on the configuration)



Note If you order the required cables when you purchase the device, the cables ship along with the product.