CHAPTER 3

Rack Mounting the Cisco Unified Videoconferencing 5200 Series Chassis

This section describes how to mount a Cisco Unified Videoconferencing 5200 Series MCU onto a 19-inch rack.

Before you can rack-mount a Cisco Unified Videoconferencing 5200 MCU chassis, you need to install brackets that form a shelf on which to place it. The brackets and screws are supplied in the Cisco Unified Videoconferencing 5200 Series MCU Rack Mounting Kit.

Once you have installed the brackets, you can then mount the Cisco Unified Videoconferencing 5200 MCU chassis.

Note The Cisco Unified Videoconferencing 5200 MCU chassis is heavy (44 lbs/20 kg) so do not attempt to lift it by yourself. Have someone assist you.

This document covers both how to install the brackets and how to rack-mount the Cisco Unified Videoconferencing 5200 MCU chassis.

What to Consider Before Installing the Brackets

When planning your rack installation, consider the following guidelines:

- Install the MCU in an open rack whenever possible. If installation in an enclosed rack is unavoidable, ensure that the rack has adequate ventilation.
- Avoid placing the MCU in an overly congested rack or directly next to another equipment rack. Otherwise, the heated exhaust air from other equipment can enter the inlet air vents and cause the MCU to overheat.
- The height of the chassis is 5.25 inches (13.34 cm)
- Maintain a minimum clearance of 3 inches (7.62 cm) on the left and right of the chassis for the cooling air inlet and exhaust vents.

- Keep a 1U space between adjacent units and ensure that this space is not blocked on the front and rear sides to preserve the above flow.
- Keep a 2-3U space above the rack top cover and ensure that this space is not blocked to prevent air from short circuiting front-to-rear.
- Allow sufficient clearance around the rack for maintenance. If the rack is mobile, you can push it back near a wall or cabinet for normal operation and pull it out when necessary for maintenance (installing or moving port adapters, connecting cables, or replacing or upgrading components). Otherwise, allow 19 inches (48.3 cm) of clearance to remove MCU Field Replaceable Units.
- To mount the MCU between two posts or rails using the rail kit, the inner clearance (the width between the inner sides of the two posts or rails) must be at least 17.7 inches (45 cm).

Mounting Kit Description

The Cisco Unified Videoconferencing 5200 Series MCU Rack Mounting Kit contains brackets; screws and nuts; and an Allen wrench as shown in Figure 3-1. The contents are listed in Table 3-1.

Figure 3-1 Cisco Unified Videoconferencing 5200 Series MCU Rack Mounting Kit

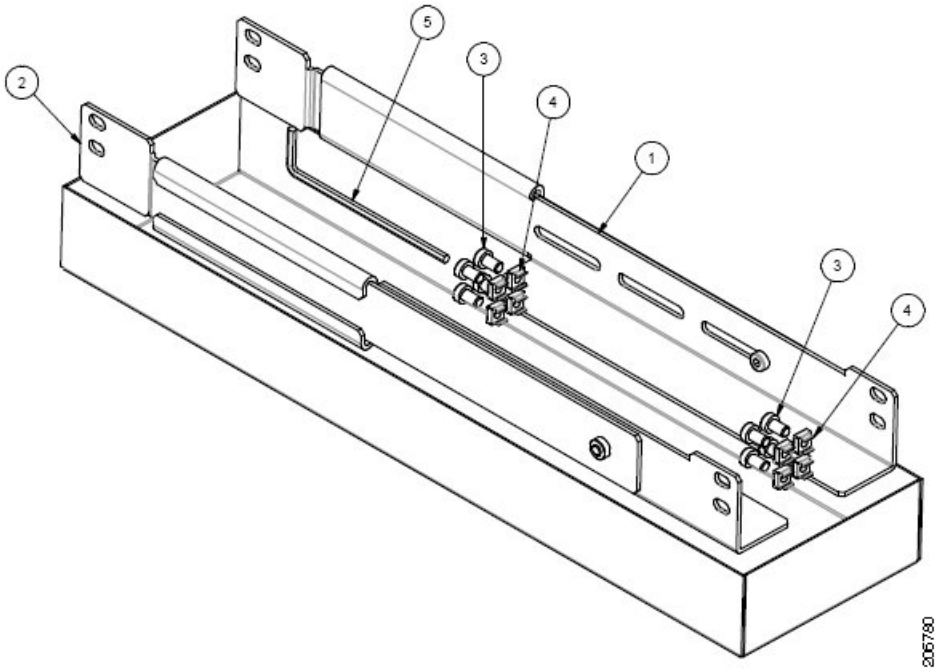


Table 3-1 Rack-Mount Kit Parts

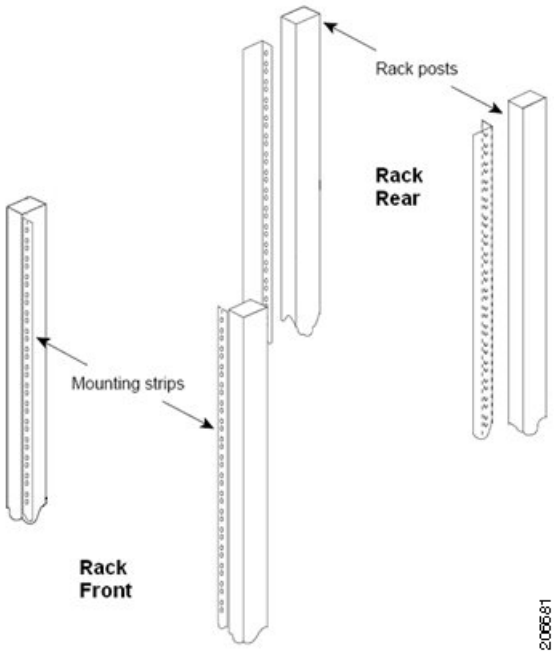
Item	Quantity	Part Description
1	1	Right Mounting Bracket
2	1	Left Mounting Bracket
3	8	Hexagon socket cap screw M6x10 (Din 7984)
4	8	Cage nut M6
5	1	Allen wrench 4 mm

How to Install the Brackets

Rack Attachment Location

After you have decided where to mount the Cisco Unified Videoconferencing 5200 MCU chassis on the rack, you need to locate the corresponding holes in the mounting strips that are connected to the rack posts, as shown in Figure 3-2. You secure the brackets through these holes.

Figure 3-2 Mounting Strips on the Rack Posts



Identifying the Brackets Parts

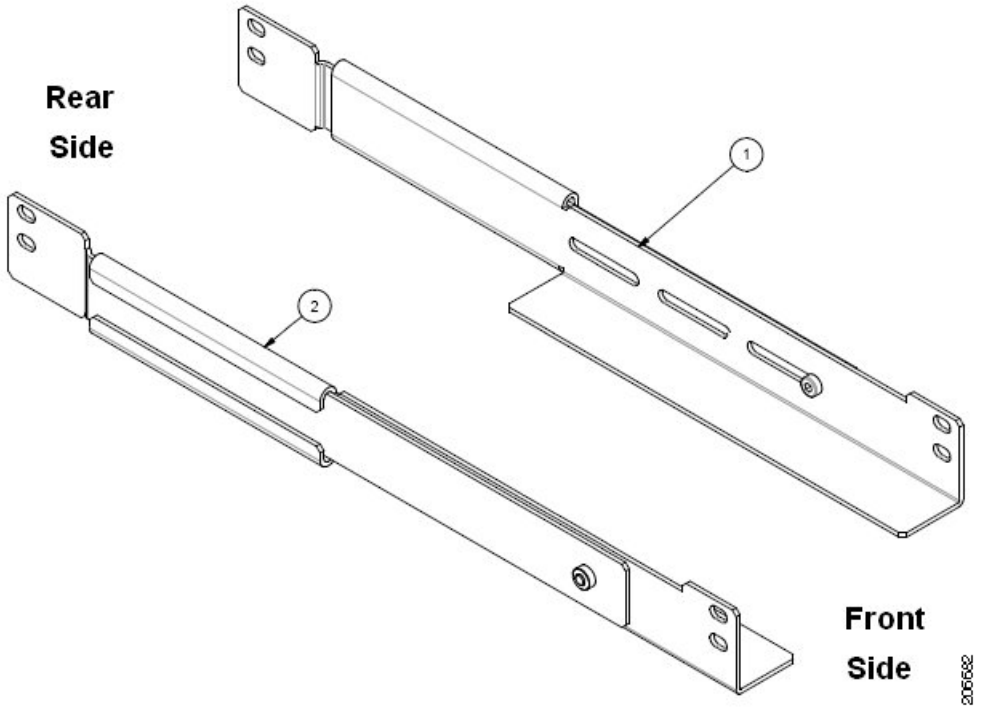
The inner side of each bracket has a turned ledge at the bottom that forms a shelf to support the chassis.

You can tell the brackets apart as follows:

- The bracket that goes on the rack's left side is the one whose ledge faces right.
- The bracket that goes on the rack's right side is the one whose ledge faces left.

Figure 3-3 shows how to identify the left and right brackets and which side to attach to the front and rear sides of the rack.

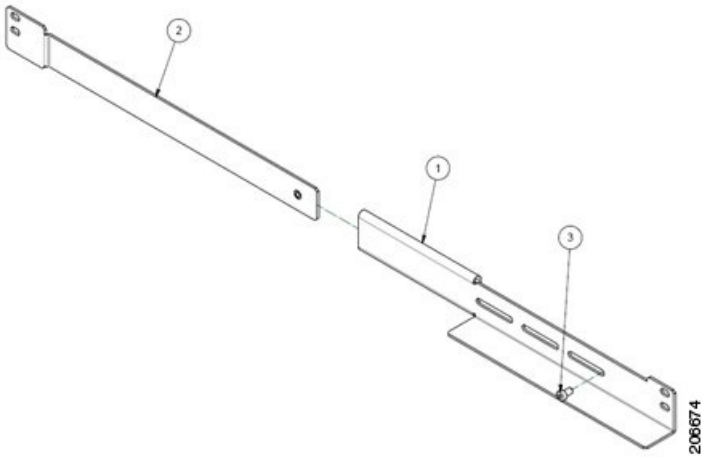
Figure 3-3 Rack-Mounting Brackets



Adjusting the Bracket Length

You need to adjust the length of each bracket to correspond with the depth of your rack. Each bracket has two pieces that slide one inside the other, with three elliptic hole settings for adjusting the length, as shown in Figure 3-4.

Figure 3-4 Adjusting Bracket Length—Open View



1	Bracket part that attaches to the rear post
2	Bracket part that attaches to the front post
3	Allen screw—three elliptic hole options for adjusting the length

Adjusting the Bracket Length

To adjust the bracket length to correspond with the rack's depth, from the mounting kit, you need:

- Both left and right brackets
- The Allen wrench

Procedure

Step 1 Use the provided Allen wrench to release the bracket's Allen screw.

Step 2 For each bracket, slide the two bracket parts until the round hole meets the elliptic hole corresponding to the depth of the rack.

Step 3 Insert the Allen screw where both holes meet.

Installing the Brackets

Once you have:

- Identified the left and right brackets
- Located the front and rear side of each bracket
- Adjusted the length according to the rack depth
- Located the corresponding holes in the rack post's mounting strips and made sure they are at the same height

you are ready to install the brackets.

To attach the brackets, you need all the parts from the Mounting Kit, including:

- The right and left brackets, pre-adjusted to the rack's depth, as explained in the "Adjusting the Bracket Length" section on page 3-6
- The eight Hexagon socket cap screw M6x10 (Din 7984)
- The eight Cage nuts M6
- The Allen wrench 4 mm

Procedure

Step 1 Locate the holes in the rack post mounting strips, that you have selected to attach the brackets and make sure that they are all at the same height.

Step 2 Locate the two mounting holes at each side of each bracket, as shown in Figure 3-3. Make sure to first identify which bracket you are working on, as the left and right sides are different for each bracket.

Step 3 Using the Hexagon socket cap screw M6x10 (Din 7984) and the Allen Wrench, secure the front and rear sides of the left bracket to the corresponding holes in the rack post's mounting strips.

Note Because the Cisco Unified Videoconferencing 5200 MCU chassis is heavy make sure to use both screws for each connection and fully tighten them.

Step 4 Repeat Step 3 for the right bracket.

How to Rack-Mount the Cisco Unified Videoconferencing 5200 MCU

Safety Guidelines

Warning **Only trained and qualified personnel should be allowed to install, replace, or service this equipment.**

Follow these basic guidelines when working with any electrical equipment:

- Before beginning any procedures requiring access to the chassis interior, locate the emergency power-off switch for the room in which you are working.
- Disconnect all power and external cables before moving a chassis.
- Do not work alone when potentially hazardous conditions exist.
- Never assume that power has been disconnected from a circuit; always check.

- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Carefully examine your work area for possible hazards such as moist floors, ungrounded power extension cables, and missing safety grounds.
- To prevent the MCU from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 113°F (45° C).

Chassis Lifting Guidelines

A fully configured Cisco Unified Videoconferencing 5200 MCU chassis weighs approximately 44lbs (20 kg). The chassis is not intended to be moved frequently.

Before you install the MCU, ensure that your site is properly prepared, so you can avoid having to move the chassis later to accommodate for power sources and network connections.

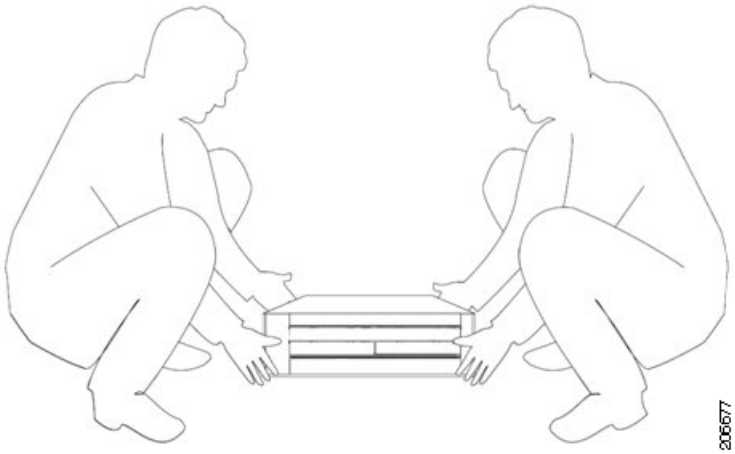
Whenever you lift the chassis or any heavy object, follow these guidelines:

- Always disconnect all external cables before lifting or moving the chassis.
- Do not attempt to lift the chassis by yourself; have someone assist you.
- Ensure that your footing is solid, and balance the weight of the object between your feet.
- Lift the chassis slowly; never move suddenly or twist your body as you lift.
- Keep your back straight and lift with your legs, not your back. If you must bend down to lift the chassis, bend at the knees, not at the waist, to reduce the strain on your lower back muscles.

Lift the chassis from the bottom. Grasp the underside of the chassis exterior with both hands.

Figure 3-5 shows how to lift the Cisco Unified Videoconferencing 5200 MCU chassis.

Figure 3-5 How to Lift the Cisco Unified Videoconferencing 5200 MCU Chassis



Rack-Mounting the Cisco Unified Videoconferencing 5200 MCU Chassis

After you have installed the brackets to form a shelf, you can now mount the Cisco Unified Videoconferencing 5200 MCU chassis.

Before mounting the chassis, read the "Safety Guidelines" section on page 3-7 and the "Chassis Lifting Guidelines" section on page 3-8.

To rack mount the Cisco Unified Videoconferencing 5200 MCU chassis, you need:

- Installed brackets in the location on the rack in which to mount the chassis, as explained in the "How to Install the Brackets" section on page 3-3
- A Cisco Unified Videoconferencing 5200 MCU chassis
- Two people. This is not a one-person job.

Procedure

Step 1 Lift the Cisco Unified Videoconferencing 5200 MCU chassis as shown in Figure 3-5 and according to the instructions in the "Chassis Lifting Guidelines" section on page 3-8.

Step 2 Make sure the front of the chassis faces front and place the chassis on the shelf brackets.

Step 3 Secure the chassis to the rack posts through the holes in the integral mounting brackets, as shown in Figure 3-6. Make sure to use all the screws provided to secure the chassis to the rack posts.

Figure 3-6 Integral Mounting Brackets