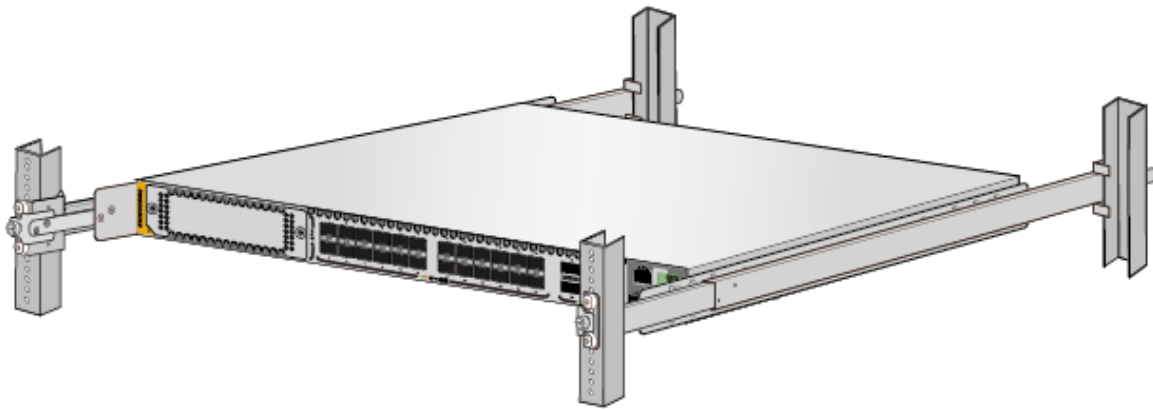


RKMT-SL01

Rack Mount Kit



Installation Guide

Copyright © 2020 Allied Telesis, Inc.

All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesis, Inc.

Allied Telesis, VCStack, and the Allied Telesis logo are trademarks of Allied Telesis, Incorporated. All other product names, company names, logos or other designations mentioned herein are trademarks or registered trademarks of their respective owners.

Allied Telesis, Inc. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesis, Inc. be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesis, Inc. has been advised of, known, or should have known, the possibility of such damages.

Contents

- Preface**9
- Document Conventions10
- Contacting Allied Telesis11

- Chapter 1: Overview**13
- Introduction14
- Rack Mount Kit Components15
 - Adjustable Outer Rails15
 - Inner Rails15
 - Extension Brackets15
- Equipment Rack Requirements17

- Chapter 2: Installation**19
- Reviewing Safety Precautions20
- Installation Overview22
- Unpacking the Shipping Container23
- Installing the Outer Rails on the Equipment Rack25
- Installing the Extension Brackets on the Inner Rails.....27
 - Measuring for the Extension Bracket Lengths27
 - Assembling the Extension Brackets29
- Installing the Inner Rails on the Switch.....33
 - DC2552XS33
 - x510DP-52GTX and IX5-28GPX.....34
 - x930.....34
 - x950.....34
- Installing the Switch in the Equipment Rack.....35

Figures

Figure 1: Outer Rails	15
Figure 2: Inner Rails	15
Figure 3: Extension Brackets.....	16
Figure 4: Shipping Container Contents.....	23
Figure 5: FRONT and REAR Labels on the Outer Rails.....	25
Figure 6: Installing the Outer Rails on the Equipment Rack.....	26
Figure 7: Extension Brackets.....	27
Figure 8: Example of a Switch Recessed in an Equipment Rack.....	27
Figure 9: Inserting an Inner Rail into an Outer Rail	28
Figure 10: Example of Positioning the Inner Rail.....	28
Figure 11: Measuring for the Extension Brackets.....	28
Figure 12: Removing the Inner Rail	29
Figure 13: Extension Bracket Parts	29
Figure 14: Extension Bracket Configurations	30
Figure 15: Example of Attaching the Extension Brackets to the Inner Rails.....	31
Figure 16: Testing the Inner Rails with the Extension Brackets	32
Figure 17: Verifying the Length of the Extension Bracket.....	32
Figure 18: Example of Attaching the Inner Rails to the Switch.....	33
Figure 19: Inner Rail Screw Holes for the DC2552XS Switch	33
Figure 20: Inner Rail Screw Holes for the x510DP-52GTX and IX5-28GPX Switches.....	34
Figure 21: Inner Rail Screw Holes for the -x930 Switch	34
Figure 22: Inner Rail Screw Holes for the x950 Switch	34
Figure 23: Sliding the Inner Rails on the Switch into the Outer Rails	35
Figure 24: Affixing the Warning Labels.....	36
Figure 25: Tightening the Two Screws on the Fixed Brackets	36
Figure 26: Tightening the Screws on the Outer Rails.....	37

Tables

Table 1: Extension Bracket Parts29

Preface

This guide contains the installation instructions for the RKMT-SL01 19 Inch Sliding Rack Mount Kit. This preface contains the following sections:

- “Document Conventions” on page 10
- “Contacting Allied Telesis” on page 11

Document Conventions

This document uses the following conventions:

Note

Notes provide additional information.



Caution

Cautions inform you that performing or omitting a specific action may result in equipment damage or loss of data.



Warning

Warnings inform you that performing or omitting a specific action may result in bodily injury.

Contacting Allied Telesis

If you need assistance with this product, you can contact Allied Telesis technical support by going to the Support & Services section of the Allied Telesis web site at www.alliedtelesis.com/support. The site has links for the following services:

- ❑ 24/7 Online Support — Enter our interactive support center to search for answers to your product questions in our knowledge database, to check support tickets, to learn about Return Merchandise Authorizations (RMAs), and to contact Allied Telesis technical experts.
- ❑ USA and EMEA phone support — Select the phone number that best fits your location and customer type.
- ❑ Hardware warranty information — Learn about Allied Telesis warranties and register your product online.
- ❑ Replacement Services — Submit an RMA request via our interactive support center.
- ❑ Documentation — View the most recent installation and user guides, software release notes, white papers, and data sheets for your products.
- ❑ Software Downloads — Download the latest software releases for your managed products.

For sales or corporate information, go to www.alliedtelesis.com/purchase and select your region.

Chapter 1

Overview

This chapter contains the following sections:

- ❑ “Introduction” on page 14
- ❑ “Rack Mount Kit Components” on page 15
- ❑ “Equipment Rack Requirements” on page 17

Introduction

The RKMT-SL01 Rack Mount Kit is a slide-rail type rack-mount kit for Allied Telesis switches installed in EIA standard 19-inch equipment racks. The kit makes installation and maintenance of network equipment easier by letting you slide switches into or out of equipment racks, including server racks with deep dimensions.

This product is compatible with the following Allied Telesis products:

- DC2552XS Layer 2 Ethernet Data Center Switch
- x510DP-52GTX Layer 3 Ethernet Switch
- IX5-28GPX High Availability Video Surveillance Switch
- x930-28GTX Layer 3 Ethernet Switch
- x930-28GPX Layer 3 Ethernet Switch
- x930-28GSTX Layer 3 Ethernet Switch
- x930-52GTX Layer 3 Ethernet Switch
- x930-52GPX Layer 3 Ethernet Switch
- x950-28XSQ Advanced Layer 3 Ethernet Switch
- x950-28XTQm Advanced Layer 3 Ethernet Switch

Note

The RKMT-SL01 Kit should only be used with approved Allied Telesis products.

Rack Mount Kit Components

The kit has three main components.

Adjustable Outer Rails

Two adjustable outer rails attach to the equipment rack. They are suitable for racks with depths of 600 mm (23.6 in) to 900 mm (35.4 in). Refer to Figure 1.

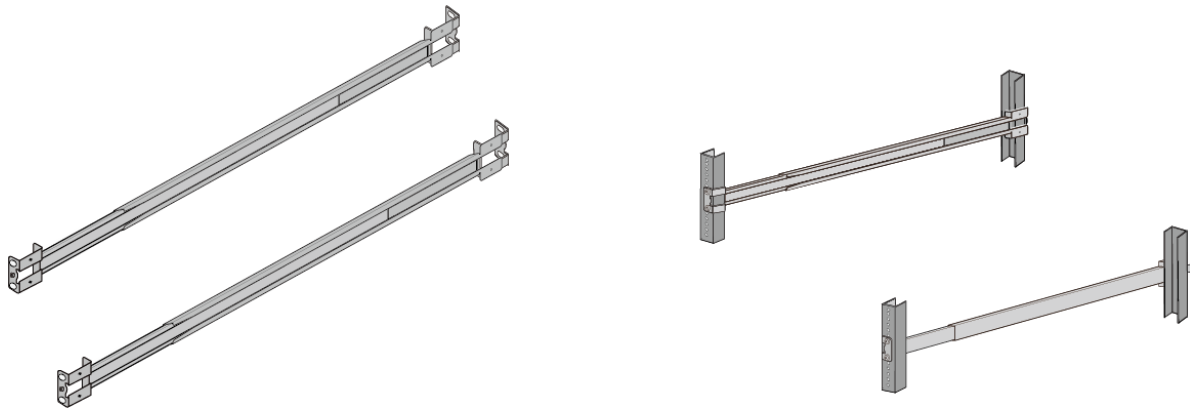


Figure 1. Outer Rails

Inner Rails

Two Inner rails attach to the sides of the switch. Refer to Figure 2.

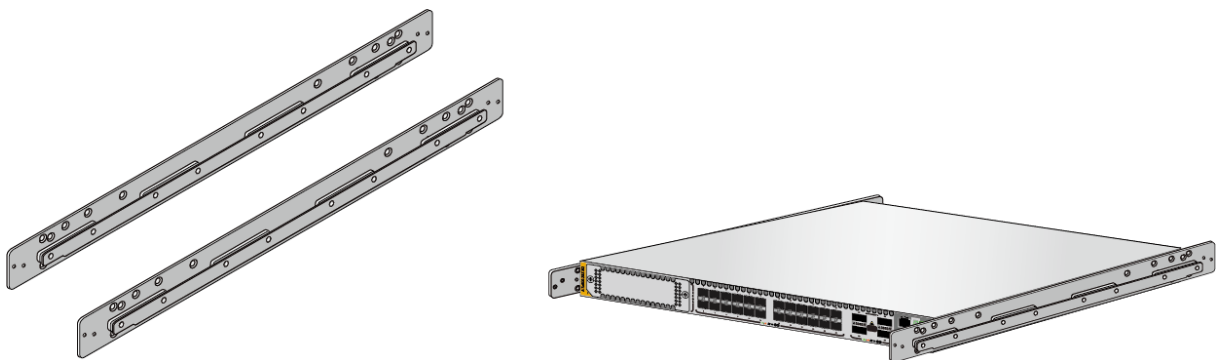


Figure 2. Inner Rails

Extension Brackets

Two extension brackets attach to the front of the inner rails and control the amount the switch is recessed in the equipment rack. The brackets also have a captive screw for securing the switch in the equipment rack. Refer to Figure 3 on page 16.



Figure 3. Extension Brackets

Equipment Rack Requirements

The Rack Mount Kit is designed for equipment racks that meet the following requirements:

- ❑ The depth can be from 600 mm (23.6 in) to 900 mm (35.4 in).
- ❑ The width should be a minimum of 452 mm (17.8 in).
- ❑ There should be 35 mm (1.4 in) depth within the rack post for the outer rail mounting.
- ❑ The distance between the left and right wall (for the outer rail mounting) should be a minimum of 10 mm (0.4 in) from the screw hole in the center of the rack posts.

Chapter 2

Installation


This chapter contains the following sections:

- “Reviewing Safety Precautions” on page 20
- “Installation Overview” on page 22
- “Unpacking the Shipping Container” on page 23
- “Installing the Outer Rails on the Equipment Rack” on page 25
- “Installing the Extension Brackets on the Inner Rails” on page 27
- “Installing the Inner Rails on the Switch” on page 33
- “Installing the Switch in the Equipment Rack” on page 35

Reviewing Safety Precautions


Review these safety precautions before installing the RKMT-SL01 Kit.

Note

The  indicates that a translation of the safety statement is available in a PDF document titled **Translated Safety Statements** posted on the Allied Telesis website at www.alliedtelesis.com/support.




Warning

Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading.  E25




Warning

Do not pull the rear of the switch out past the front rack posts. If you need to position the rear of the switch out past the front of the rack, you should remove it completely from the rack.  E58




Warning

Pull the switch out slowly if you must remove it from the rack for maintenance. If you pull the switch out past the front of the rack posts, or if you pull it out too quickly, there is a risk that the weight of the switch will cause the sliding rail assemblies to fail and cause the switch to fall out.  E59




Caution

Avoid applying excessive force to the cables.  E60




Caution

If using long extension bracket(s), secure between the fixed bracket and short extension bracket - the long extension bracket(s) cannot be attached directly to the inner rail.  E61



Caution

Use the adjustment bracket screws supplied with the inner rail. Using screws other than those supplied may result in equipment damage.  E62

**Warning**

When installing the outer and inner rails, and adjustment bracket, ensure the components are securely attached with the appropriate screws. If not securely attached, a serious accident may occur due to falling equipment. ⚡ E63

**Warning**

When installing and removing the switch from the rack, disconnect the media and power cables. ⚡ E64

**Warning**

A built-in stopper prevents the outer rail from extending beyond its maximum length of 960 mm (37.8 in). Do not extend the rail by force beyond this point, otherwise, the outer bracket will be weakened, and the switch may fall from the rack; equipment could be damaged. ⚡ E65

**Warning**

Ensure the front and rear of both outer rails are attached at the same distance from the floor, otherwise the switch may fall from the rack. ⚡ E66

**Warning**

Be careful to not drop the switch when lifting and not to pinch your fingers when inserting the switch into the rack. ⚡ E67

**Warning**

Other than maintenance work, secure the switch to the outer rail (via the adjustment bracket): If the switch is not secured properly, there is a risk of the switch falling out during movement caused by an earthquake. ⚡ E68

**Warning**

Do not pull the switch out past the front rack posts. ⚡ E69

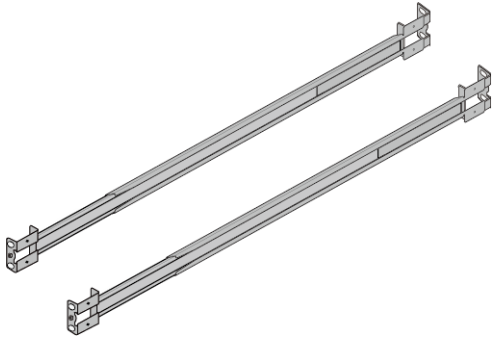
Installation Overview

The following steps summarize the installation procedure for the RKMT-SL01 Rack Mount Kit:

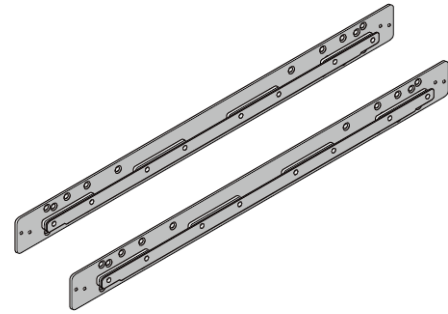
1. Verify the contents of the shipping box. Refer to “Unpacking the Shipping Container” on page 23.
2. Attach the outer rails to the equipment rack. Refer to “Installing the Outer Rails on the Equipment Rack” on page 25.
3. Determine the lengths of the extension brackets and install the brackets on the inner rails. Refer to “Installing the Extension Brackets on the Inner Rails” on page 27.
4. Attach the inner rails to the switch. Refer to “Installing the Inner Rails on the Switch” on page 33.
5. Slide the switch into the outer rails. Refer to “Installing the Switch in the Equipment Rack” on page 35.

Unpacking the Shipping Container

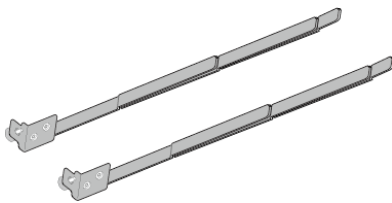
The contents of the shipping container are shown in Figure 4.



Two outer rails - They attach to the equipment rack. Their lengths are adjustable from 600 to 960 mm (23.6 - 37.8 in).



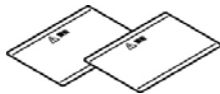
Two inner rails - They attach to the sides of the switch.



Two extension brackets - They set the distance the switch is recessed in the equipment rack and secure the switch to the rack.



- 16 inner rail screws (M4 x 8 countersunk) - They attach the inner rails to the switch. Screw holes and number of screws vary depending on the switch.
- Four extension bracket screws (M3 x 4 countersunk) - They attach the extension brackets to the inner rails.



Two warning labels - They are affixed to the top and bottom of the switch and warn against pulling the switch out past the equipment rack posts.

Figure 4. Shipping Container Contents

Note

Store the packaging material in a safe location. You should use the original shipping material if you need to return the kit to Allied Telesis.



Warning

When installing the outer and inner rails, and extension brackets, ensure the components are securely attached with the appropriate screws. If not securely attached, a serious accident may occur due to falling equipment. ⚡ E63

Installing the Outer Rails on the Equipment Rack

To install the outer rails to the equipment rack, perform the following procedure.

1. Locate the FRONT and REAR labels on the sides of the rails. You have to install the rails with the FRONT labels at the front of the equipment rack and the REAR Labels at the back. Refer to Figure 5.



Figure 5. FRONT and REAR Labels on the Outer Rails

2. Attach the outer rails to the equipment rack using the supplied screws. Use four screws per rail. Refer to Figure 6 on page 26. Installing the switch can be easier if you leave the screws slightly loosened now and fully tightened them after the switch is installed.



Warning

Built-in stoppers prevent the outer rails from extending beyond their maximum length of 960 mm (37.8 in). Do not force the rails beyond the maximum length. Otherwise, the brackets will be weakened, and the switch may fall from the rack and be damaged. ⚡ E65



Warning

Verify that the front and rear of both outer rails are attached at the same distance from the floor, otherwise the switch may fall from the rack. ⚡ E66

3. Go to “Installing the Extension Brackets on the Inner Rails” on page 27.

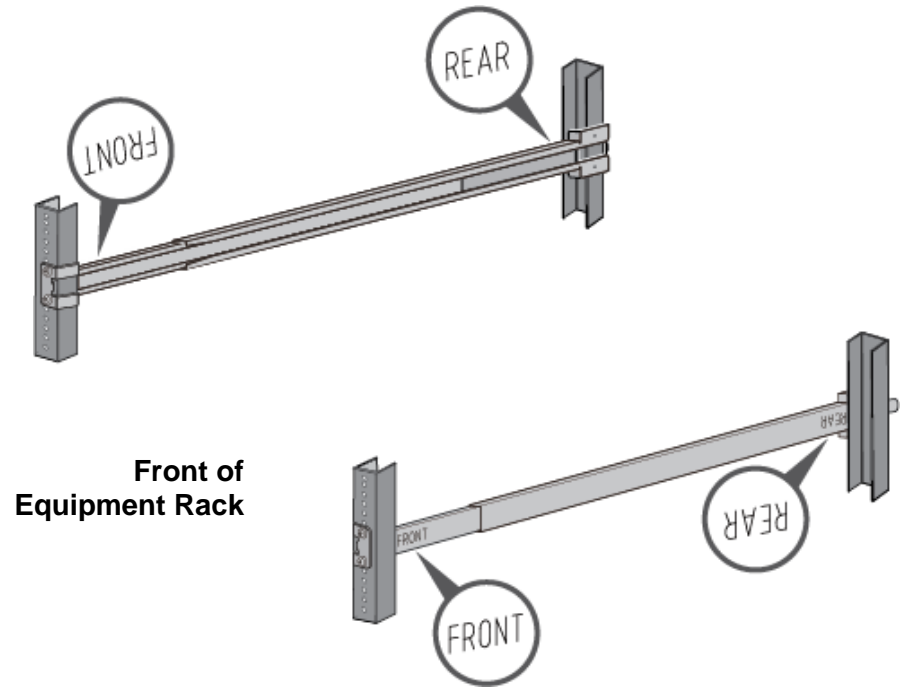


Figure 6. Installing the Outer Rails on the Equipment Rack

Installing the Extension Brackets on the Inner Rails

The kit comes with two extension brackets. Refer to Figure 7.

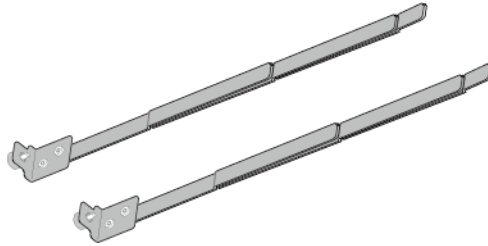


Figure 7. Extension Brackets

You use the brackets to recess the switch in the equipment rack. The maximum distance will depend on the depth of the equipment rack. The deeper the equipment rack, the more the switch can be recessed. The range is approximately 40mm (1.6 in.) to 453mm (17.8 in.). Figure 8 is an example.

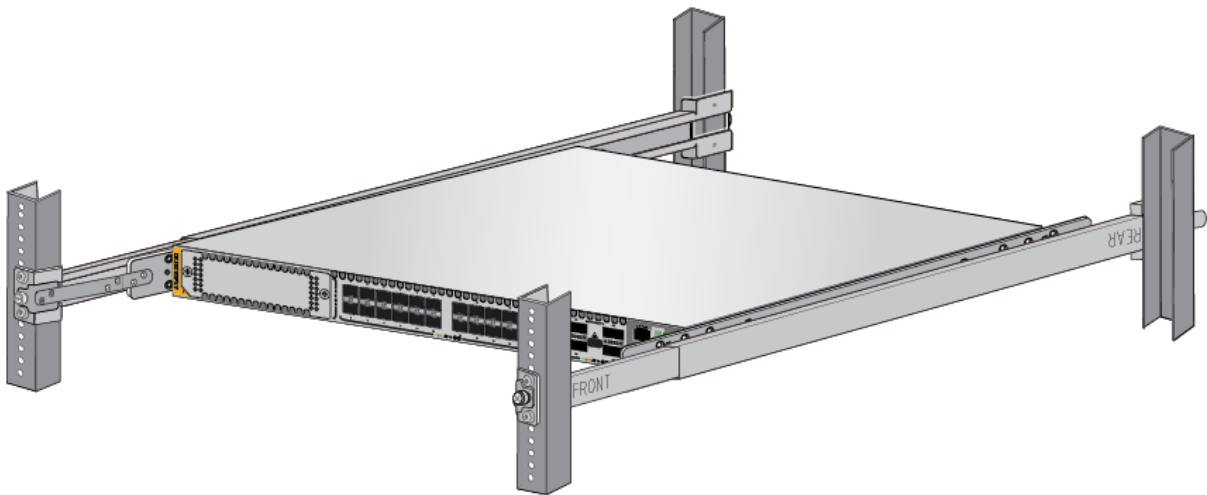


Figure 8. Example of a Switch Recessed in an Equipment Rack

Measuring for the Extension Bracket Lengths

The first step is to decide how much you want to recess the front panel of the switch in the rack and then measure the distance. That will tell you the approximate lengths of the extension brackets. Perform the following procedure:

1. Slide one of the inner rails into an outer rail. Be sure that the UP arrow on the inner rail is pointing up. Refer to Figure 9 on page 28.

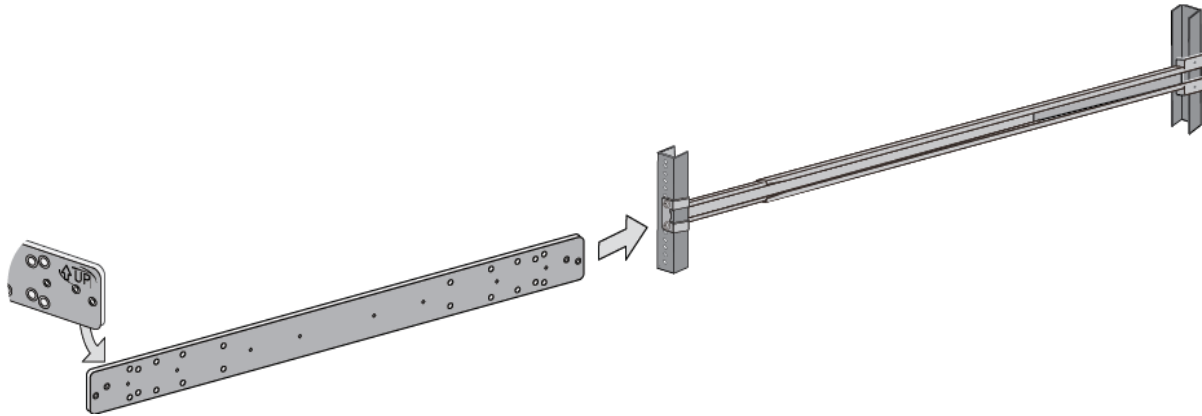


Figure 9. Inserting an Inner Rail into an Outer Rail

2. Position the inner rail at the planned location for the front panel of switch in the sliding rack. Refer to Figure 10.

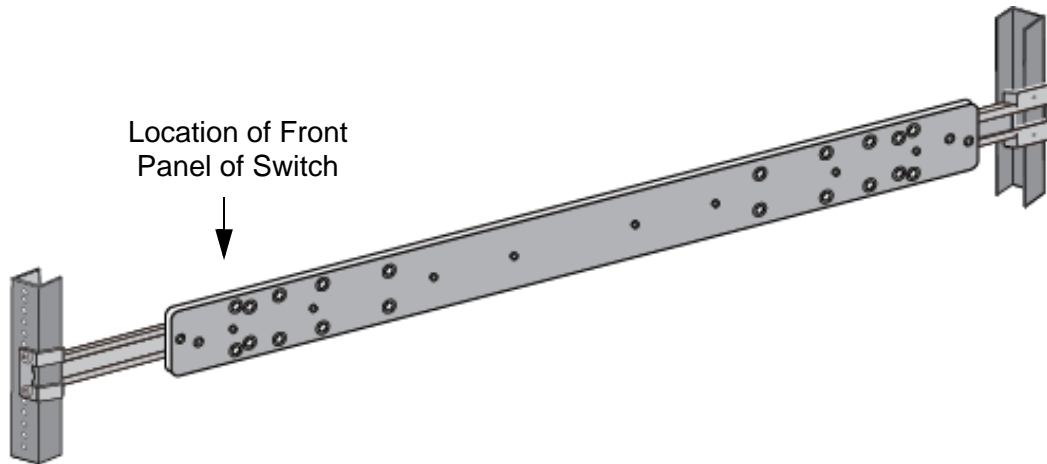


Figure 10. Example of Positioning the Inner Rail

3. Measure the distance from the front of the equipment rack to the front of the inner rail. This will be the approximate length of the extension brackets. Refer to Figure 11.

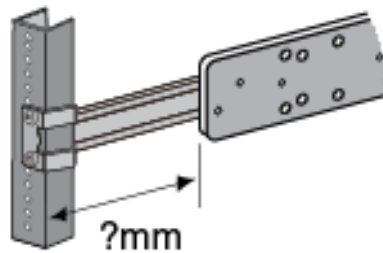


Figure 11. Measuring for the Extension Brackets

- Remove the inner rail from the outer rail. Refer to Figure 12.

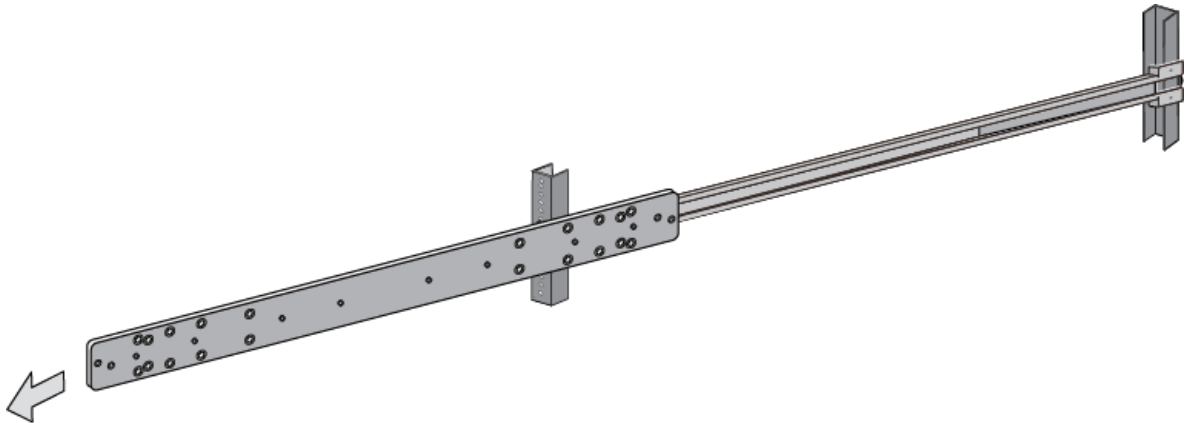


Figure 12. Removing the Inner Rail

- Go to “Assembling the Extension Brackets” on page 29.

Assembling the Extension Brackets

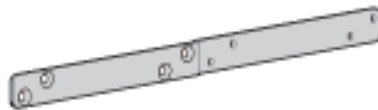
Now that you know the approximate length for the extension brackets, you are ready to assemble them. The brackets consist of four parts. Refer to Table 1 and Figure 13.

Table 1. Extension Bracket Parts

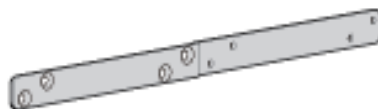
A	Fixed Bracket	1 ea
B	Long Extension Brackets	2 ea
C	Short Extension Bracket	1 ea



A - Fixed Bracket



B - Long Extension Bracket



B - Long Extension Bracket



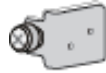
C - Short Extension Bracket

Figure 13. Extension Bracket Parts

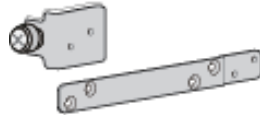
You adjust the lengths of the brackets by connecting them in different combinations. There are seven possible configurations. Refer to Figure 14. The default configuration is number 5. To adjust the extension brackets, perform the following procedure:

1. Review Figure 14 to find the bracket length that most closely matches the measurement taken in step 3 in the previous procedure.

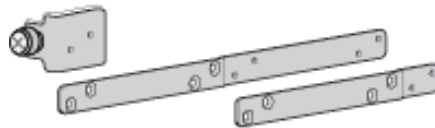
Config #1



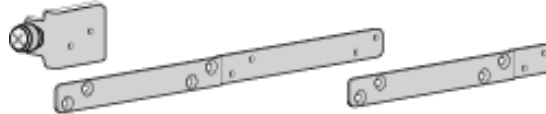
Config #2
Length:101mm (3.8 in.)



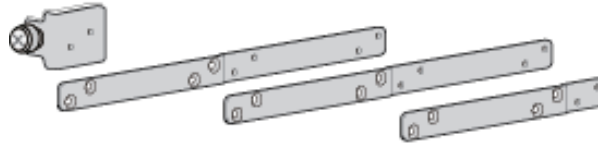
Config #3
Length:202mm (8.0 in.)



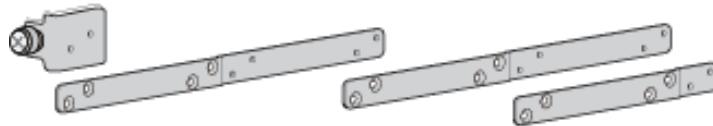
Config #4
Length:277mm (10.9 in.)



Config #5
Length:303mm (11.9 in.)
(Factory default)



Config #6
Length:378mm (14.9 in.)



Config #7
Length:453mm (17.8 in.)

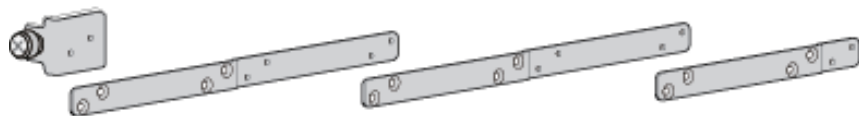


Figure 14. Extension Bracket Configurations

Note

The long brackets have to be used between the fixed and short brackets. You cannot connect them directly to the inner rails.

2. Assemble the extension brackets to match the selected length in the table.
3. Attach the extension brackets to the inner rails. Observe the following:
 - Attach the brackets to the sides of the inner rails with the UP arrows.
 - Attach the screws through the holes on the sides opposite the sides with the UP arrows.

**Caution**

Use the extension bracket screws supplied with the inner rail. Using screws other than those supplied may result in equipment damage.

↪ E62

Figure 15 shows an example.

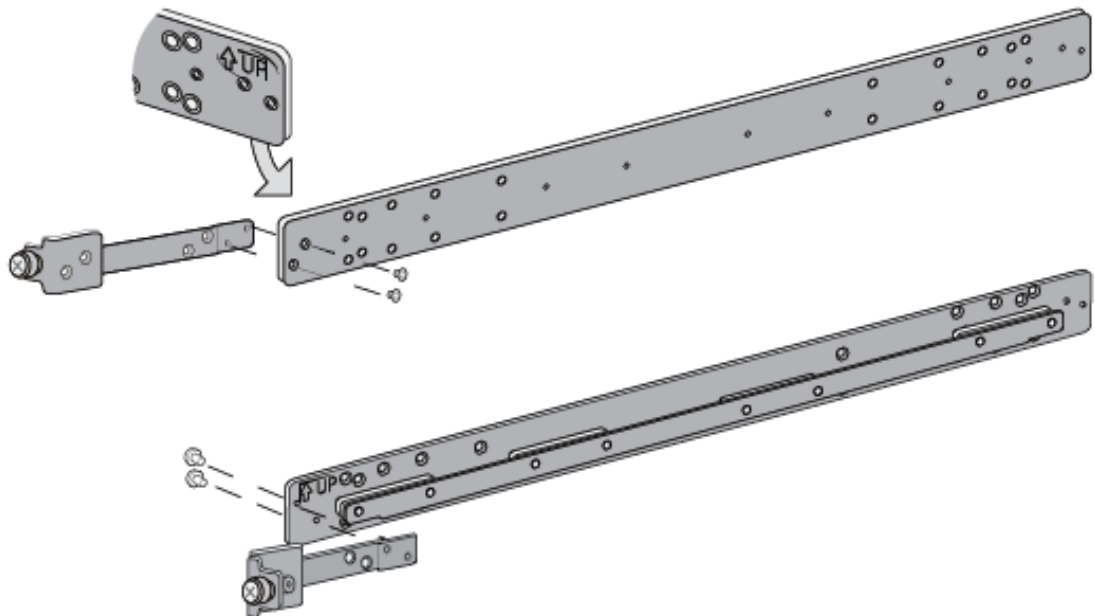


Figure 15. Example of Attaching the Extension Brackets to the Inner Rails

4. To test the lengths of the extension brackets, slide the inner rails into the outer rails in the equipment rack. Refer to Figure 16.

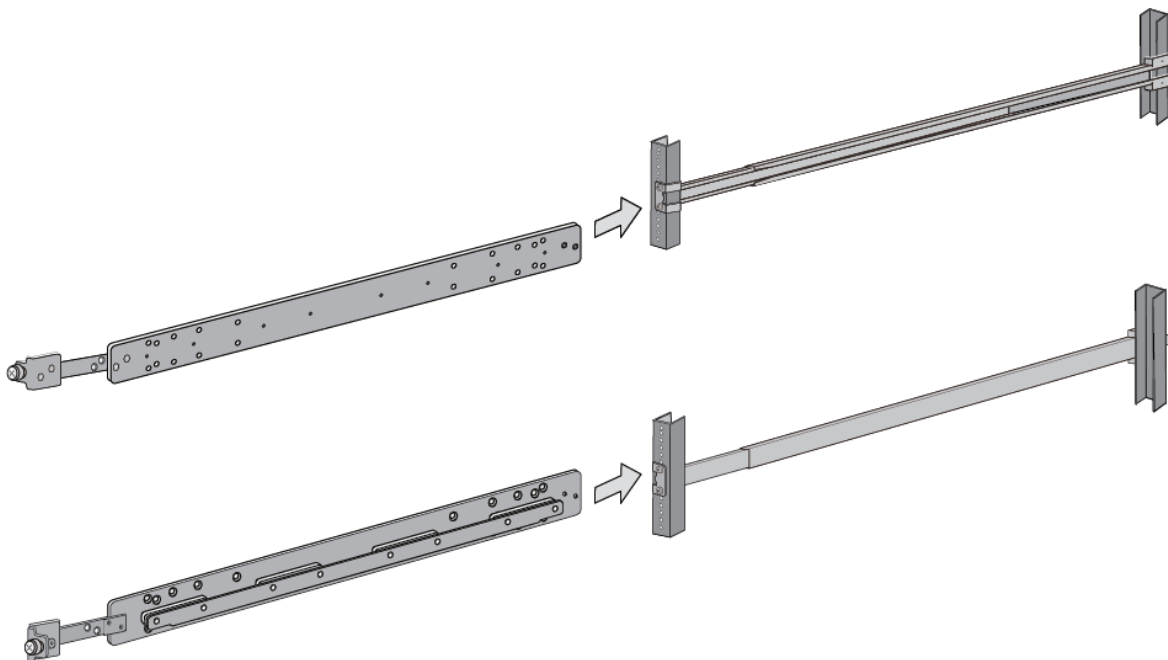


Figure 16. Testing the Inner Rails with the Extension Brackets

5. Measure the distance from the front of the equipment rack to the front of the inner rail. Refer to Figure 17. This should approximately match the value you measured in “Measuring for the Extension Bracket Lengths” on page 27.

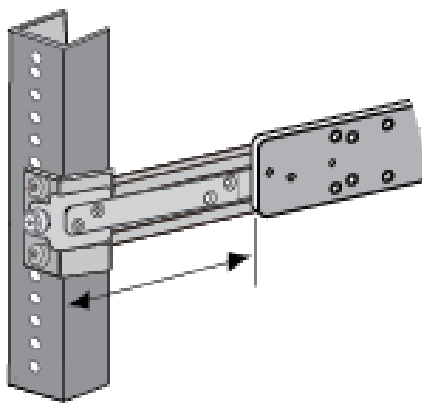


Figure 17. Verifying the Length of the Extension Bracket

6. If the extension brackets are the correct length, remove the inner brackets from the outer brackets and go to “Installing the Inner Rails on the Switch” on page 33.
7. If the brackets are not the correct length, repeat this procedure.

Installing the Inner Rails on the Switch

Before you can install the inner rails on the switch, you should first identify the appropriate number and locations of screw holes for the rails on the sides of the switch. This varies depending on the switch model. Refer to the following subsections to identify the correct screw-hole pattern for your switch.

After identifying the inner rail screw holes for the switch, attach the rails using the provided screws. Be sure that the UP arrows on the rails are pointing up and that the extension brackets extend in front of the switch. Refer to Figure 18 for an example.

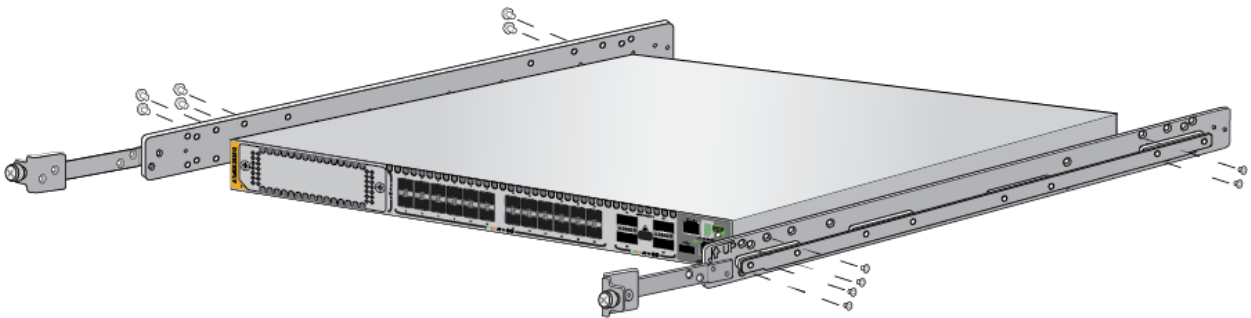


Figure 18. Example of Attaching the Inner Rails to the Switch

DC2552XS Use eight screws on each side. Refer to Figure 19.

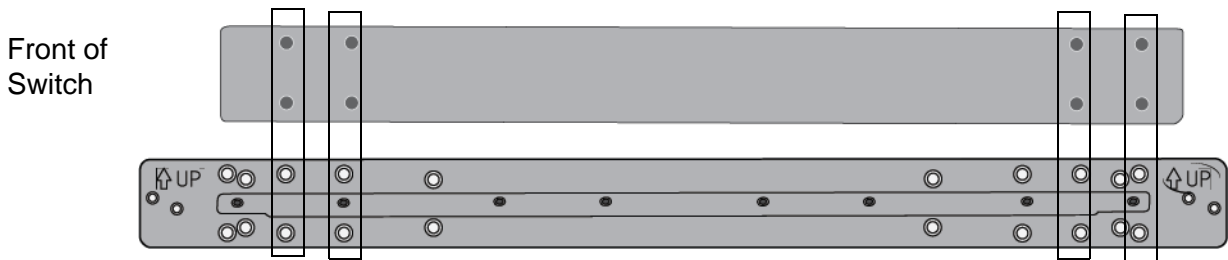


Figure 19. Inner Rail Screw Holes for the DC2552XS Switch

**x510DP-52GTX
and IX5-28GPX**

Use eight screws on each side. Refer to Figure 20.

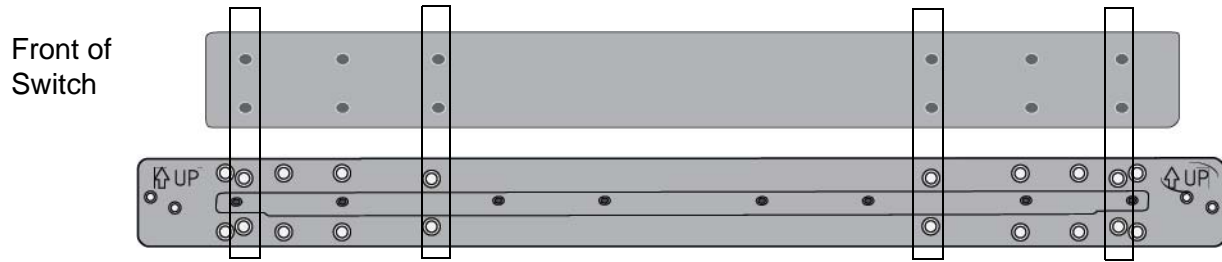


Figure 20. Inner Rail Screw Holes for the x510DP-52GTX and IX5-28GPX Switches

x930

Use four screws on each side. Refer to Figure 21.

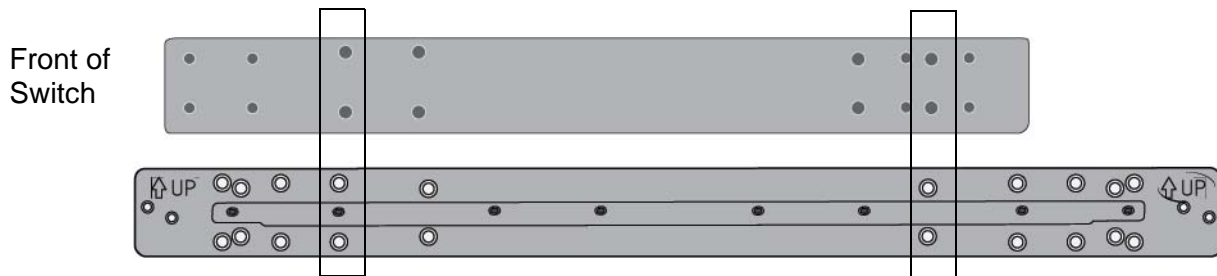


Figure 21. Inner Rail Screw Holes for the -x930 Switch

x950

Use six screws on each side. Refer to Figure 22.

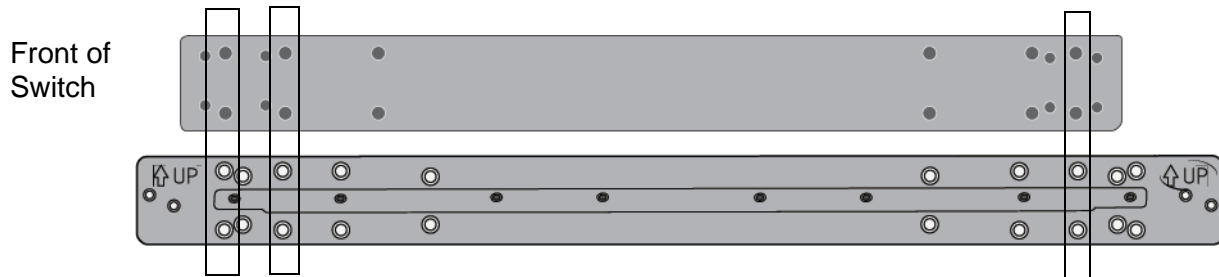


Figure 22. Inner Rail Screw Holes for the x950 Switch

Installing the Switch in the Equipment Rack

After attaching the inner rails and extension brackets to the switch, perform the following procedure to install the switch in the sliding rack:



Warning

When installing or removing the switch from the rack, disconnect the media and power cables. ⚡ E64

1. Install the switch in the sliding rack by sliding the inner rails into the outer rail grooves. Refer to Figure 23.

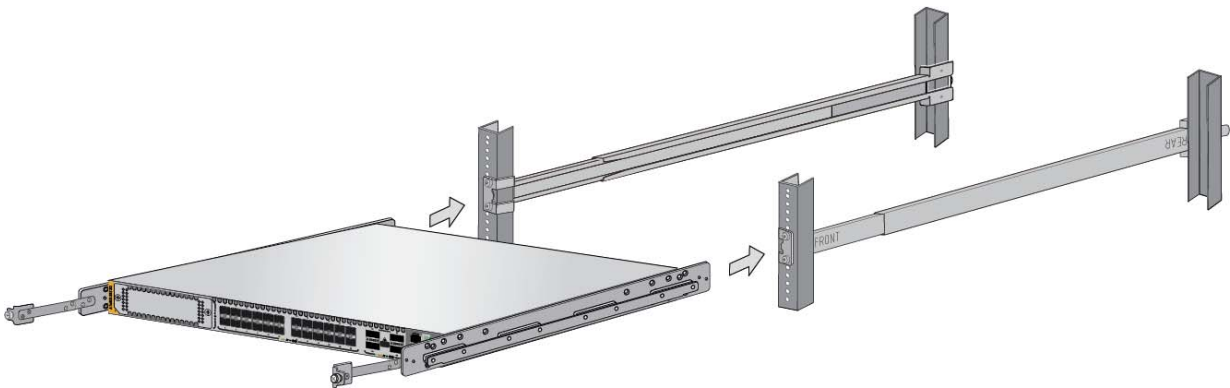


Figure 23. Sliding the Inner Rails on the Switch into the Outer Rails



Warning

Be careful to not drop the switch or pinch your fingers when inserting it into the sliding rack. ⚡ E67

2. Affix the provided warning labels to the top and bottom of the switch, in locations immediately visible when removing the device from the rack. Refer to Figure 24 on page 36.

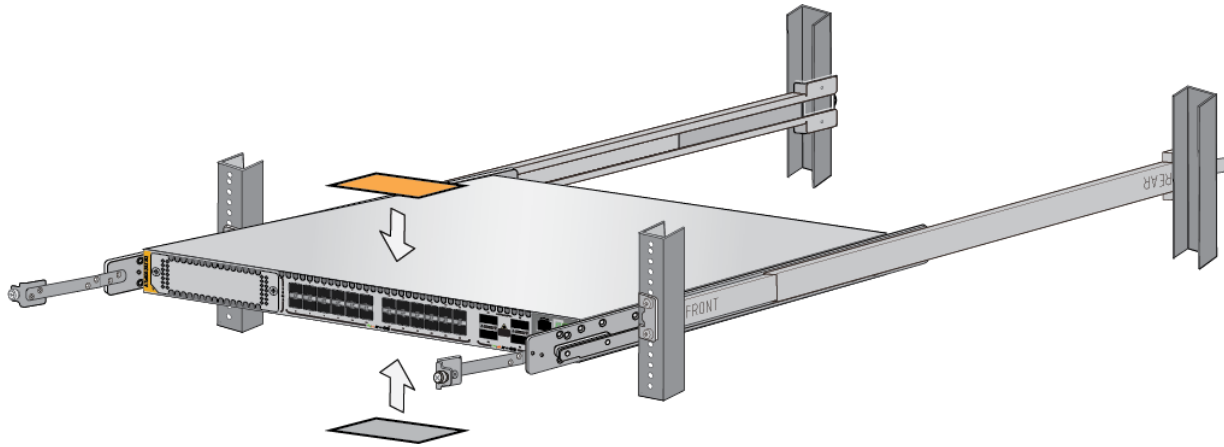


Figure 24. Affixing the Warning Labels

3. Slide the switch fully into the rack.
4. Tighten the two screws on the fixed brackets to secure the switch to the equipment rack. Refer to Figure 25.



Figure 25. Tightening the Two Screws on the Fixed Brackets



Warning

Always be sure to secure the switch to the outer rail (via the adjustment bracket). If the switch is not secured properly, there is a risk of it falling out during an earthquake. ⚡ E68



Warning

Do not pull the switch out past the front rack posts. ⚡ E69

**Warning**

Pull the switch out slowly if you must remove it from the rack for maintenance. If you pull the switch out past the front of the rack posts, or if you pull it out too quickly, there is a risk that the weight of the switch will cause the sliding rail assemblies to fail and cause the switch to fall out. ⚡ E59

5. Finish tightening the eight screws on the outer rails to secure the rails to the equipment rack. Refer to Figure 26.

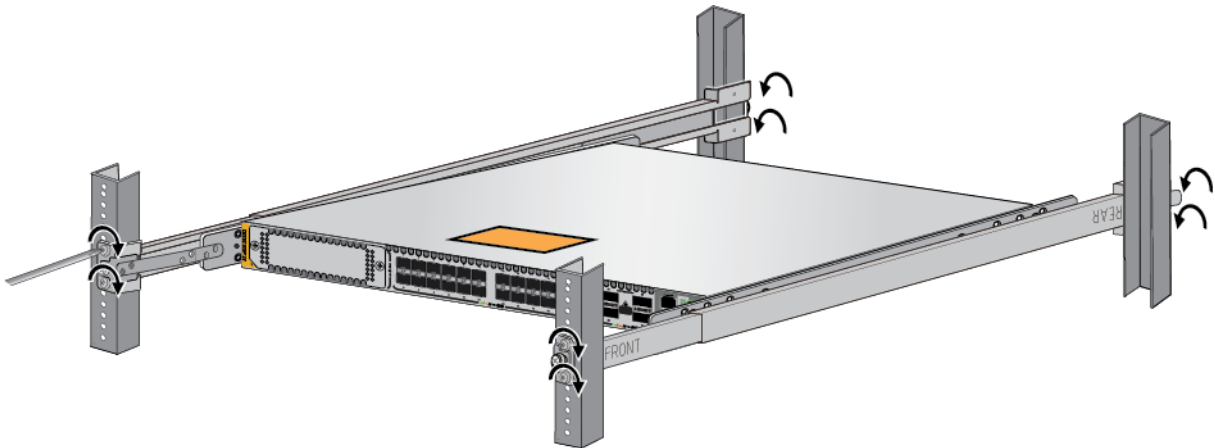


Figure 26. Tightening the Screws on the Outer Rails

This completes the installation procedure. Refer to the appropriate switch installation guide for further instructions.

