



QUANTUM

11 January 2026

**RACK MOUNTING FOR
CHECK POINT
APPLIANCES**



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Rack Mounting for Check Point Appliances



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Revision History

Date	Description
7 December 2025	Updated <i>"General Requirements for Racks" on page 13, "General Requirements for Racks" on page 26, "General Requirements for Racks" on page 38</i>
22 October 2025	Updated <i>"General Requirements for Racks" on page 13, "General Requirements for Racks" on page 26, "General Requirements for Racks" on page 38</i>
28 September 2025	Updated rack mount shelf instructions for 2530 / 2550, 2560 / 2570, and 2580 Appliances
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Introduction

This guide applies to these Check Point Appliances:

Appliance	U	In This Document
29200 Base/Plus Security Appliance	2U	29200
29100 Base/Plus Security Appliance	2U	29100
19200 Base/Plus Security Appliance	2U	19200
19100 Base/Plus Security Appliance	2U	19100
9800 Base/Plus Security Appliance	1U	9800
9700 Base/Plus Security Appliance	1U	9700
9400 Base/Plus Security Appliance	1U	9400
9300 Base/Plus Security Appliance	1U	9300
9200 Base/Plus Security Appliance	1U	9200
9100 Base/Plus Security Appliance	1U	9100
Maestro LightSpeed Appliance MLS400	1U	MLS400
Maestro LightSpeed Appliance MLS200	1U	MLS200
Quantum LightSpeed Appliance QLS800	3U	QLS800
Quantum LightSpeed Appliance QLS650	3U	QLS650
Quantum LightSpeed Appliance QLS450	3U	QLS450
Quantum LightSpeed Appliance QLS250	2U	QLS250
SandBlast Threat Emulation TE2000XN	1U	TE2000XN
SandBlast Threat Emulation TE250XN	1U	TE250XN
Quantum Smart-1 7000-UL Appliance	2U	Smart-1 7000-UL
Quantum Smart-1 7000-XL Appliance	2U	Smart-1 7000-XL
Quantum Smart-1 7000-L Appliance	2U	Smart-1 7000-L

Appliance	U	In This Document
Quantum Smart-1 700-M Appliance	1U	Smart-1 700-M
Quantum Smart-1 700-S Appliance	1U	Smart-1 700-S
Quantum 3920 Appliance	Desktop	3920
Quantum 3950 Appliance	Desktop	3950
Quantum Spark 2530 / 2550 Appliances	Desktop	2530 / 2550
Quantum Spark 2560 / 2570 Appliances	Desktop	2560 / 2570
Quantum Spark 2580 Appliance	Desktop	2580

Smart-1 7000-L, Smart-1 7000-XL, and Smart-1 7000-UL

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliances:

Legend

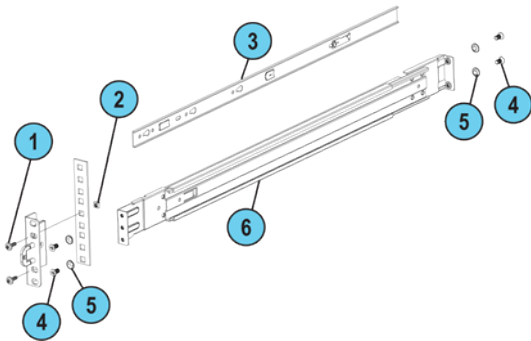
Management Appliance	Width	Depth	Height	U
Smart-1 7000-UL	438 mm	607.55 mm	88.60 mm	2U
Smart-1 7000-XL	438 mm	607.55 mm	88.60 mm	2U
Smart-1 7000-L	438 mm	607.55 mm	88.60 mm	2U

Telescopic Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use	Bag Label
1	Ear mount locking screws	4	Attaches to the ear mount to lock it into place on the rack post.	M5x13L-P0.8 Shipping 4 PCS
2	Cage nut	2	Attaches to the front rack post.	M5-NUT Shipping 2 PCS
3	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance.	N / A
4	Rack mounting screws	8	Secures the outer rail to the front and rear of the rack post together with the rack mounting washers.	M5x10L-P0.8 F/R Bracket 8 PCS
5	Rack mounting washers	8	Secures the outer rail to the front and rear of the rack post together with the rack mounting screws.	Washer F/R Bracket 8 PCS

Legend (continued)

Item	Hardware Description	Qty	Use	Bag Label
6	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack.	N / A

Installation Overview

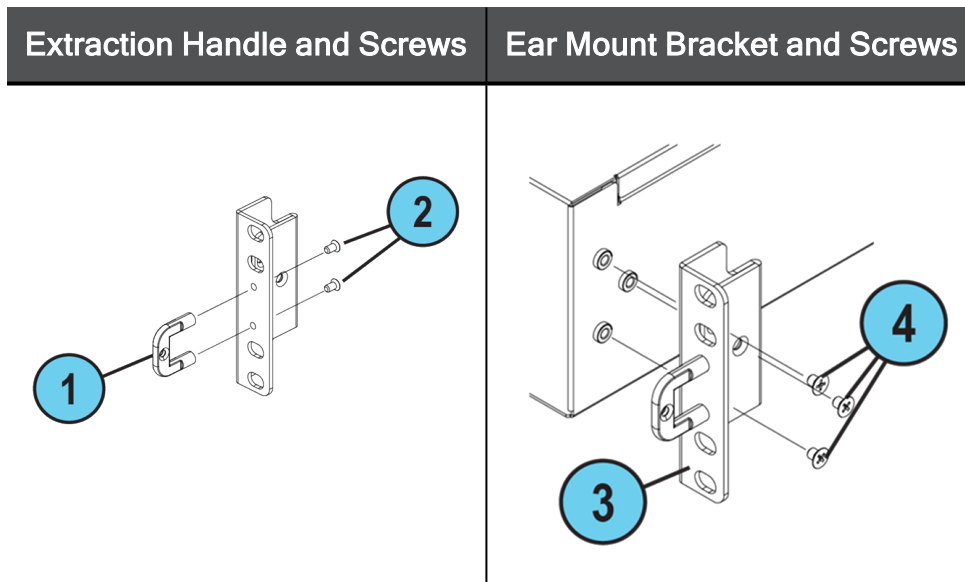
Telescopic rails installation consists of these procedures:

1. Attaching the ear mount brackets to the appliance.
2. Attaching the inner rails to the appliance.
3. Attaching the outer rack rails to the rack.
4. Installing the appliance in the rack.

Step 1 - Attaching the Ear Mount Brackets

Attach the ear mount brackets to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws



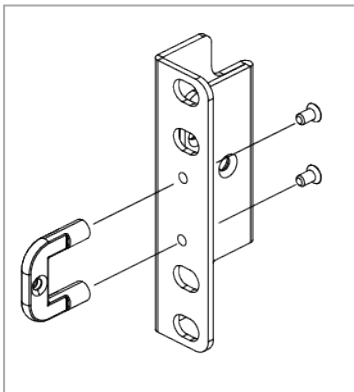
Legend

Item	Hardware Description	Quantity	Use
1	Extraction handle	2	Pulls appliance away from the rack
2	Screws for the extraction handle	4	Attaches the extraction handle to the ear mount bracket
3	Ear mount bracket	2	When fastened to the rack post, the appliance cannot be pulled out of the rack
4	Screws for ear bracket screws	6	Attaches ear mount to the appliance

Important - The main appliance accessory box contains the ear mount brackets, the extraction handles, and the screws.

To attach the extraction handle to the ear mount bracket:

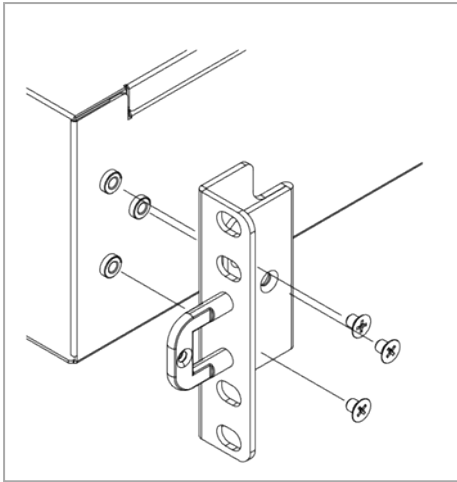
1. Prepare the ear mount bracket hardware mentioned in the table.
2. Position the extraction handle on the side of the ear mount bracket.
3. Attach the extraction handle to the ear mount bracket using two extraction handle screws as shown below.



4. Repeat steps 2 - 3 to attach the other extraction handle to the other ear mount bracket.

To attach the ear mount bracket to the appliance:

1. Place the ear mount bracket on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance with three ear mount brackets.



3. Repeat steps 1 - 2 again for the other side of the appliance.

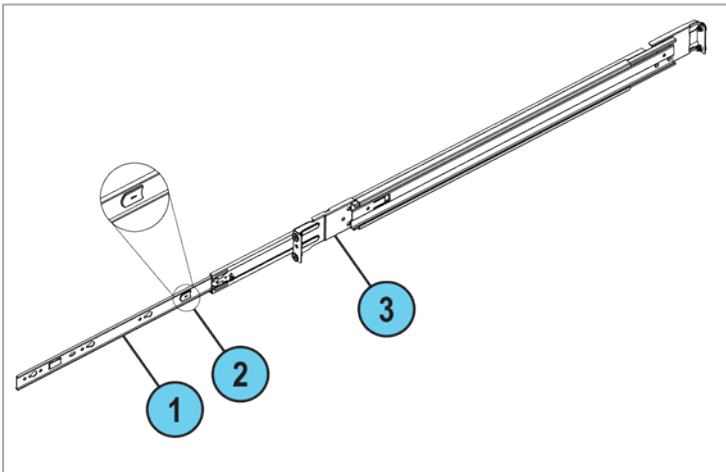
Step 2 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as a single unit in the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Repeat steps 1 - 2 for the second telescopic rack rail unit.



Legend

Item	Description
1	Inner rack rail

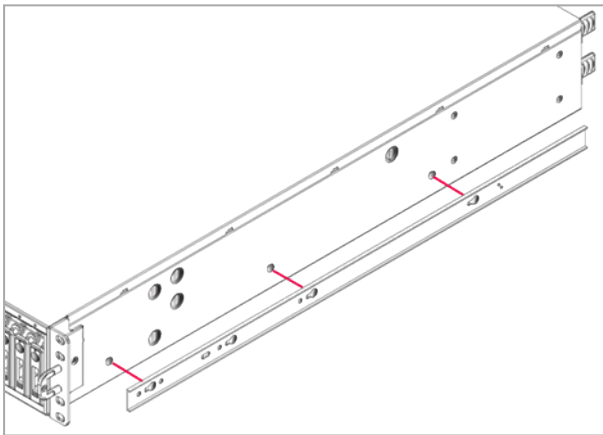
Legend (continued)

Item	Description
2	Release latch
3	Outer appliance rail

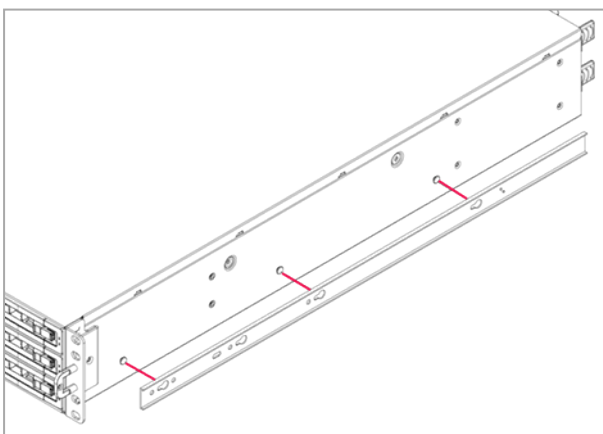
To install the inner appliance rails to the appliance:

- Place the inner appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
- Align the mounting posts on the side of the appliance with the nodules on the inner rail.

In Smart-1 7000-UL and Smart-1 7000-XL Appliances:

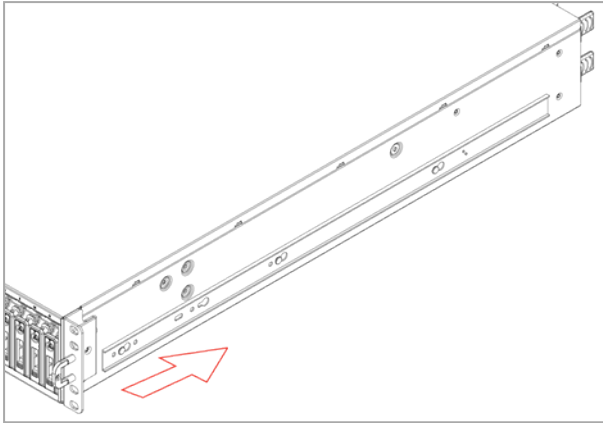


In Smart-1 7000-L Appliances:

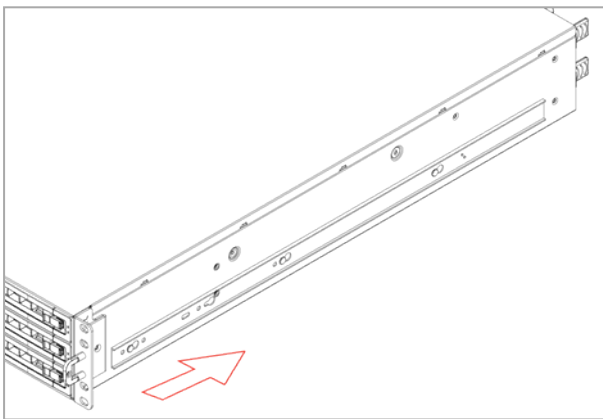


- Press firmly on the inner rail and slide it towards the rear of the appliance until the mounting posts snap into place.

In Smart-1 7000-UL and Smart-1 7000-XL Appliances:



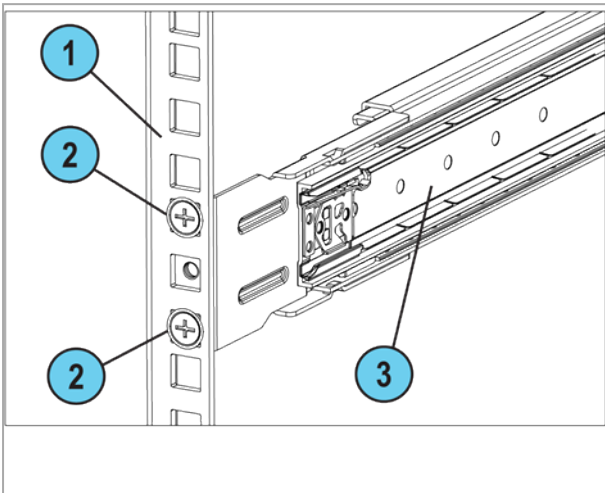
In Smart-1 7000-L Appliances:



4. Repeat steps 1 - 3 to install the second inner appliance rail on the other side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two outer rails ready. Each outer rail has a front end bracket and a rear end bracket.



Legend

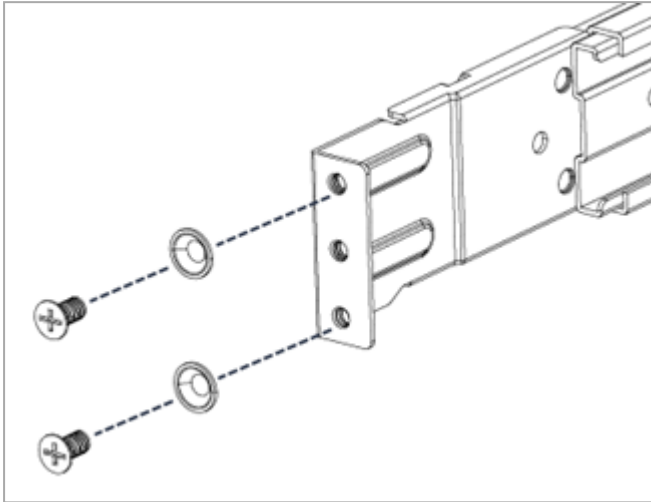
Item	Description
1	Front rack post
2	Outer rack rail washers and screws installed
3	Outer rack rail

To attach the outer rails to the rack:

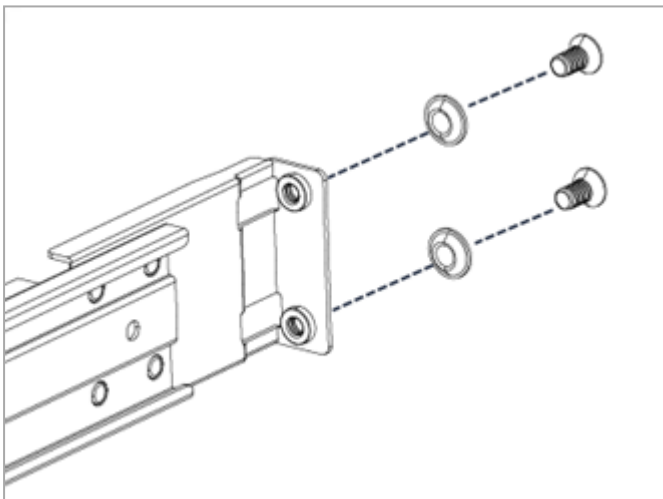
1. Identify the location in the rack posts where you will install the outer rails. You will need a total of six holes for the 2U unit. For attaching the outer rails, use the lower three holes.
2. Position the front end bracket of the outer rail (has three holes) with the front rack post.
3. Make sure that the smooth side of the outer rail marked with the engraved text "King Slide" faces the outer part of the rack enclosure.

- Secure the top and bottom holes of the front end bracket to the front rack post using rack-mounting washers and screws, as illustrated in the diagram.

Note - The empty middle hole will be used to secure the ear mount locking screw in the next procedure.



- Secure the rear end bracket, labeled "REAR", to the rear rack post using rack-mounting washers and screws, as illustrated in the diagram.



- Repeat steps 2 - 5 for the second outer rail.

Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
 - i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.
1. Insert a cage nut into the second hole on the front rack post to prepare the hole for the ear mount locking screw.

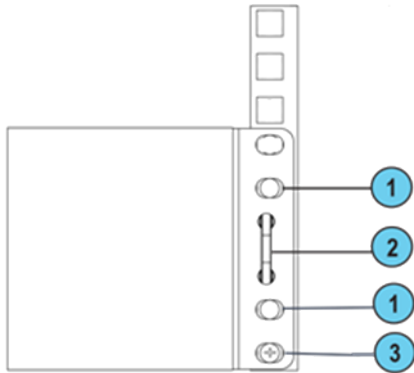


2. Pull the installed outer rails fully out until you hear a snap.
3. Align the appliance's inner rails to be level with the outer rails.
4. Slide the inner rails into the outer rails and move the appliance into the rack as far as it can go.
5. Pull on the release strips on both sides of the appliance and push the appliance in.



6. Slide the appliance in and out of the rack several times to allow the rails to position properly.
7. Tighten all rail mounting screws.
8. For each ear mount bracket, use two ear mount locking screws to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post holes labeled 1 in the below figure.



Legend

Item	Description
1	Rack post holes for ear mount locking screws
2	Extraction handle
3	Rack mounting washer and screw

Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

1. Remove the ear mount locking screws from the rack post mounting holes that attach the ear mounts to the rack.
2. Pull the appliance away from the rack as far as possible.

The release strip on the telescopic rails stops the appliance from sliding too far.

3. On the appliance rails:
 - Press and pull the release strips to unlock the telescopic rails.



- Pull out the appliance from the rack.

Appliance Air Vents

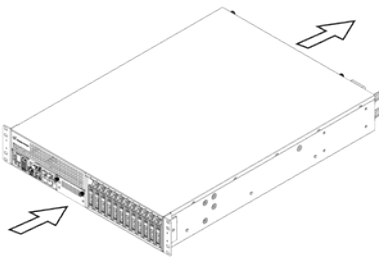
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

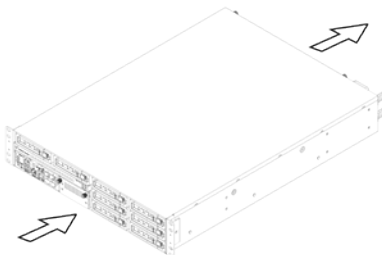
The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in Smart-1 7000-UL and Smart-1 7000-XL Appliances:



The air flow in Smart-1 7000-L Appliances:



Smart-1 700-S and Smart-1 700-M Telescopic Rails

General Requirements for Racks

Check Point Smart-1 700-M and Smart-1 700-S Appliances are mounted in racks with telescopic (sliding rails) or fixed rails depending on the appliance model:

- Smart-1 700-M Appliances come equipped with telescopic rails.
- Smart-1 700-S Appliances come equipped with fixed rails by default. You can install them with telescopic rails (as an optional accessory) instead of the fixed rails.

This chapter describes the telescopic rails installation.

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliances:

Legend

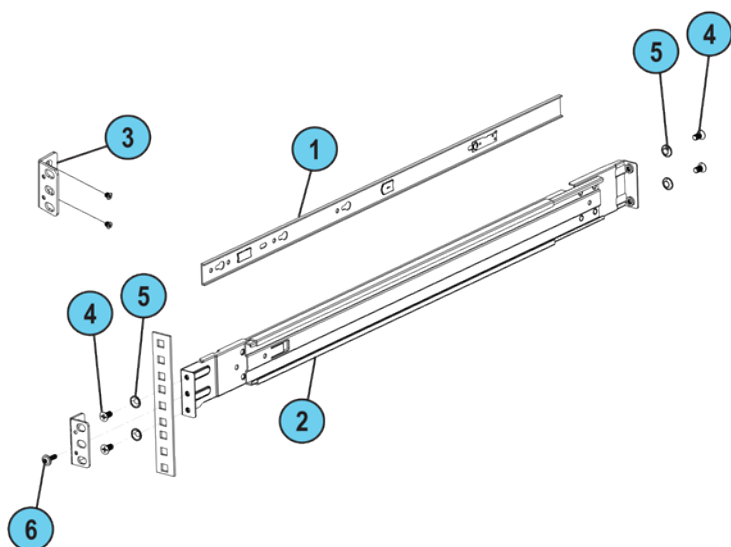
Management Appliance	Width	Depth	Height	U
Smart-1 700-M / Smart-1 700-S	438 mm	446.80 mm	44.20 mm	1U

Telescopic Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use	Bag Label
1	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance.	N / A
2	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack.	N / A

Legend (continued)

Item	Hardware Description	Qty	Use	Bag Label
3	Ear mount brackets Ear mount bracket screws	2 4	Attaches the ear mount brackets to the appliance side. Note - The bag that contains these parts is located in the appliance accessory box.	N / A
4	Rack mounting screws	8	Secures the outer rail to the front and rear of the rack post together with the rack mounting washers.	M5x10L- P0.8 F/R Bracket 8 PCS
5	Rack mounting washers	8	Secures the outer rail to the front and rear of the rack post together with the rack mounting screws.	Washer F/R Bracket 8 PCS
6	Ear mount locking screws	4	Attaches to the ear mount to lock it into place on the rack post. Smart-1 700-M Appliances use 2 screws.	M5x13L- P0.8 Shipping 4 PCS

Installation Overview

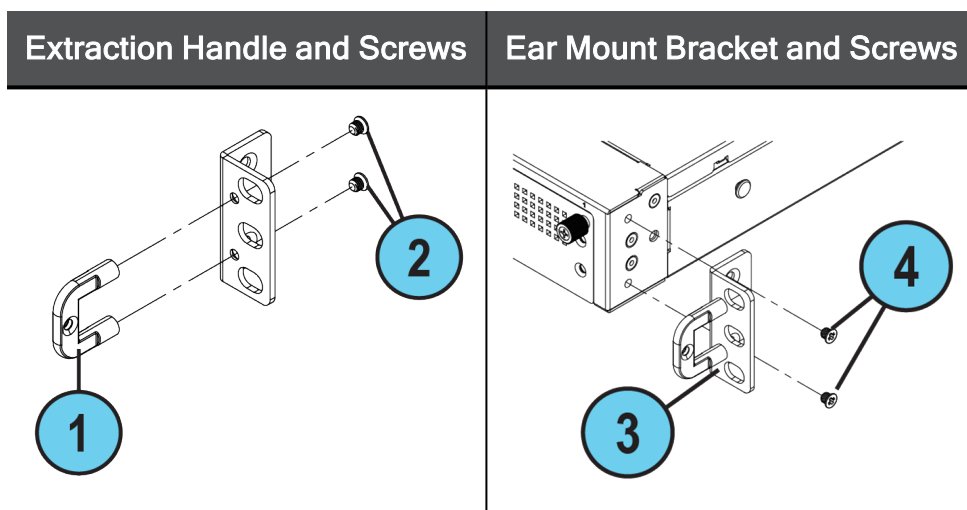
Telescopic rails installation consists of these procedures:

1. Attaching the ear mount brackets to the appliance.
2. Attaching the inner rails to the appliance.
3. Attaching the outer rack rails to the rack.
4. Installing the appliance in the rack.

Step 1 - Attaching the Ear Mount Brackets

Attach the ear mount brackets to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws



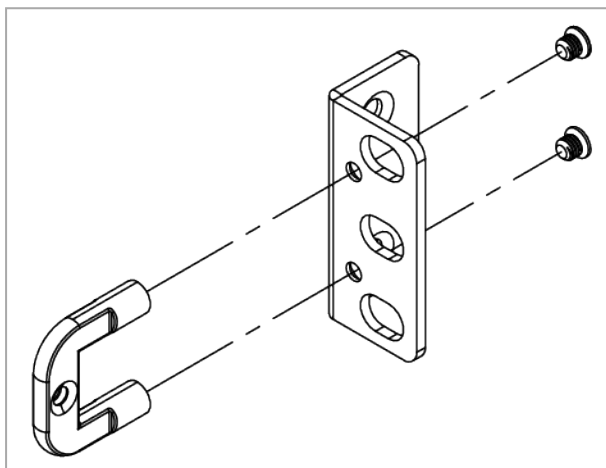
Legend

Item	Hardware Description	Quantity	Use
1	Extraction handle	2	Pulls the appliance away from the rack
2	Screws for the extraction handle	4	Attaches the extraction handle to the ear mount bracket
3	Ear mount bracket	2	When fastened to the rack post, the appliance cannot be pulled out of the rack
4	Screws for ear bracket screws	4	Attaches the ear mount bracket to the appliance

- i Important** - The main appliance accessory box contains the ear mount brackets, the extraction handles, and the screws.

To attach the extraction handle to the ear mount bracket:

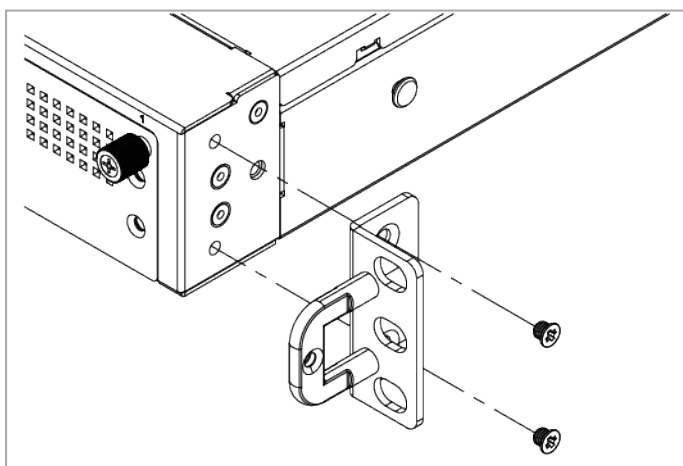
1. Prepare the ear mount bracket hardware mentioned in the table.
2. Position the extraction handle on the side of the ear mount bracket.
3. Attach the extraction handle to the ear mount bracket using two extraction handle screws as shown below.



4. Repeat steps 2 - 3 to attach the other extraction handle to the other ear mount bracket.

To attach the ear mount bracket to the appliance:

1. Place the ear mount bracket on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance with three ear mount brackets.



3. Repeat steps 1 - 2 again for the other side of the appliance.

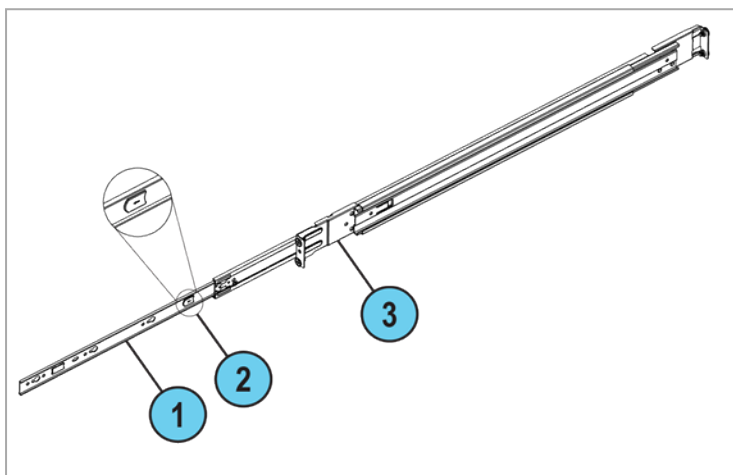
Step 2 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as a single unit in the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Repeat steps 1 - 2 for the second telescopic rack rail unit.

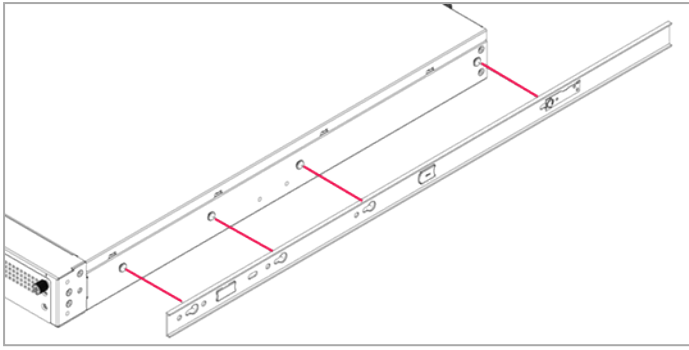


Legend

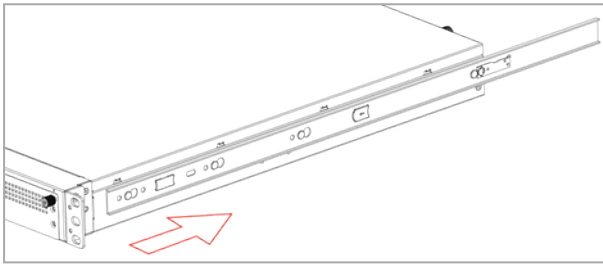
Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

1. Place the inner appliance rail on the side of the appliance and make sure:
 - The release latch faces away from the appliance
 - The arrow on the release latch points toward the front of the appliance
 - The appliance rail extends beyond the length of the appliance
2. Align the mounting posts on the side of the appliance with the nodules on the inner rail.



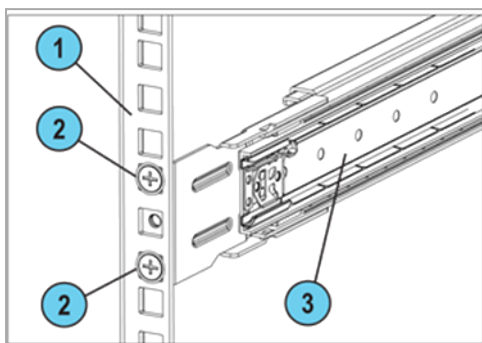
3. Press firmly on the inner rail and slide it towards the rear of the appliance until the mounting posts snap into place.



4. Repeat steps 1 - 3 to install the second inner appliance rail on the opposite side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two outer rails ready. Each outer rail has a front end bracket and a rear end bracket.



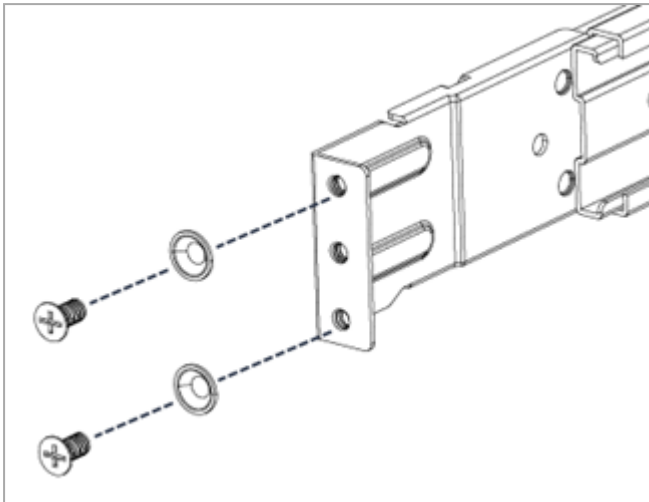
Legend

Item	Description
1	Front rack post
2	Outer rack rail washers and screws installed
3	Outer rack rail

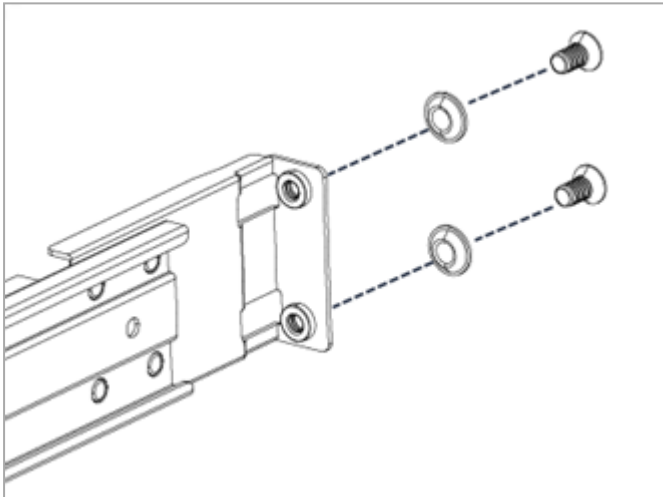
To attach the outer rails to the rack:

1. Identify the location in the rack posts where you will install the outer rails. You will need a total of three holes for the 1U unit.
2. Position the front end bracket of the outer rail (has three holes) with the front rack post.
3. Make sure that the smooth side of the outer rail marked with the engraved text "King Slide" faces the outer part of the rack enclosure.

- Secure the top and bottom holes of the front end bracket to the front rack post with the rack mounting washers and screws.



- Secure the rear end bracket (marked with the text "REAR") to the rear rack post with the rack mounting washers and screws.



- Repeat steps 2 - 5 for the second outer rail.

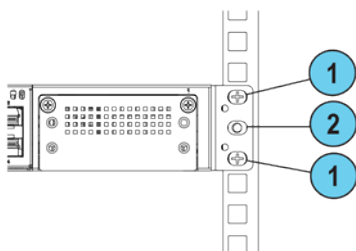
Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
 - i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.
1. Pull out the installed outer rails as far as they go; you hear a snap.
 2. Align the appliance's inner rails to be level with the outer rails.
 3. Slide the inner rails into the outer rails and move the appliance into the rack as far as it can go.
 4. Pull on the release strips on both sides of the appliance and push in the appliance.



5. Slide the appliance in and out of the rack several times to allow the rails to position properly.
6. Tighten all of the rail mounting screws.
7. For each ear mount bracket, use an ear mount locking screw to secure it to the rack post and make sure that the appliance cannot move. This disables the telescopic rails. Use the rack post mounting hole that is between the rack rail screws (see item 2 in the next figure).



Legend

Item	Description
1	Rack mounting screw
2	Rack post mounting hole for ear mount locking screw

Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

1. Remove the ear mount locking screws from the rack post mounting holes that lock the ear mounts to the rack.
2. Pull the appliance away from the rack as far as possible.

The release strip on the telescopic rails stops the appliance from sliding too far.

3. On the appliance rails:

- Press and pull the release strips to unlock the telescopic rails.



- Pull out the appliance from the rack.

Appliance Air Vents

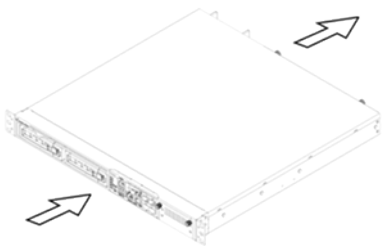
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in Smart-1 700-M and Smart-1 700-S Appliances:



Smart-1 700-S Fixed Rails

General Requirements for Racks

Check Point Smart-1 700-S Appliances come equipped with fixed rails by default. You can install them with telescopic rails (as an optional accessory) instead of the fixed rails.

This chapter describes the fixed rails installation.

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

These are the physical specifications of the appliance:

Legend

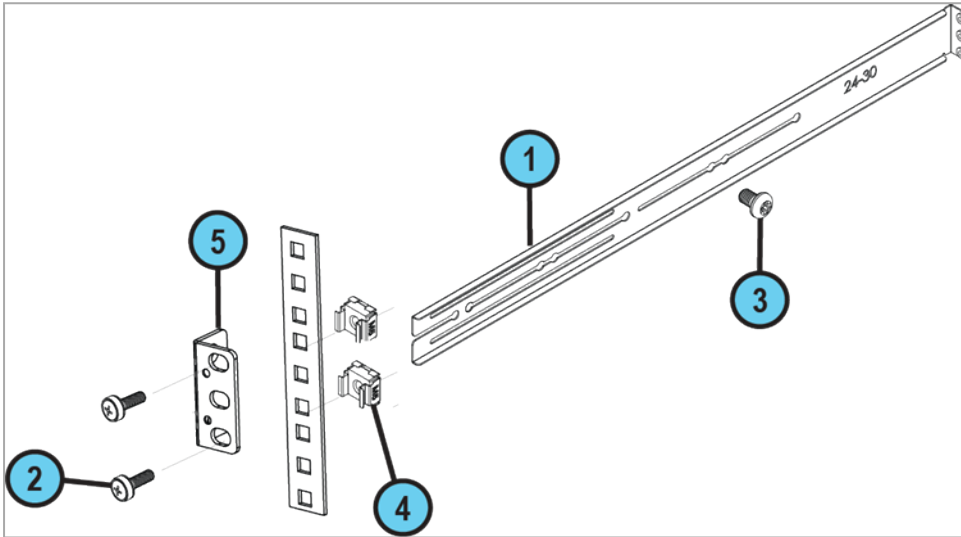
Management Appliance	Width	Depth	Height	U
Smart-1 700-S	438 mm	446.80 mm	44.20 mm	1U

Fixed Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use	Bag Label
1	Appliance rail section of the fixed rail unit	2	Attaches to the sides of the appliance.	N / A
2	Rack mounting screws	8	Attaches the fixed rail to the rear rack post (2 screws on each side). Attaches the fixed rail's ear mount bracket to the front rack post (2 screws on each side).	M5x14 8 PCS
3	Fixed rail mounting screws	2	Secures the fixed rail to the appliance.	M4x6 2 PCS
4	Cage nut	4	Attaches to the front of the rack post.	M5-NUT Shipping 4 PCS

Legend (continued)

Item	Hardware Description	Qty	Use	Bag Label
5	Ear mount bracket Ear mount bracket screws	4 4	Attaches to the appliance and to the rack post. Smart-1 700-S Appliances use 2 screws on each side.	In the main appliance box

Installation Overview

Fixed rails installation consists of these procedures:

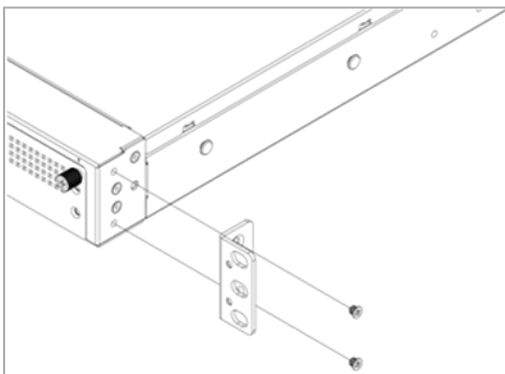
1. Attaching the ear mount brackets to the appliance
2. Attaching the fixed rails to the appliance
3. Installing the appliance in the rack

Step 1 - Attaching the Ear Mount Brackets

i Important - The main appliance accessory box contains the ear mount brackets and the screws.

To attach the ear mount brackets to the appliance:

1. Place the ear mount brackets on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance with two ear mount bracket screws.

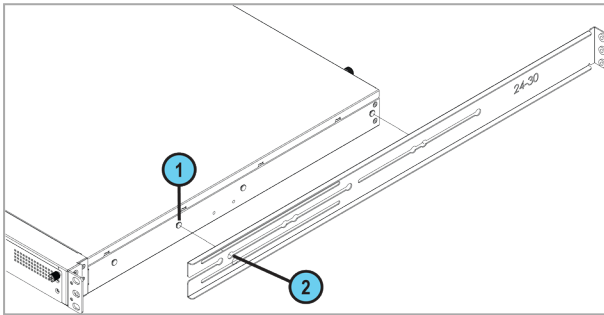


3. Repeat steps 1 - 2 for the other side of the appliance.

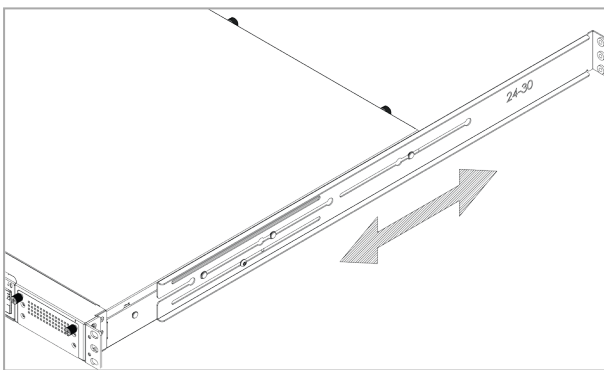
Step 2 - Attaching the Fixed Rails to the Appliance

To install the fixed appliance rails to the appliance:

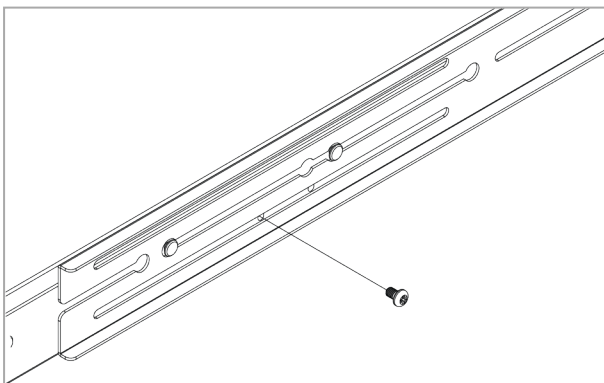
1. Place the fixed rail on the side of the appliance and make sure that protruding parts face away from the appliance.
2. Align the mounting post on the side of the appliance (1) with the nodule on the fixed rail (2).



3. Press firmly on the rail and slide it to the suitable distance for mounting on the rack.



4. Use the M4x6 screw to attach the rail to the appliance firmly.

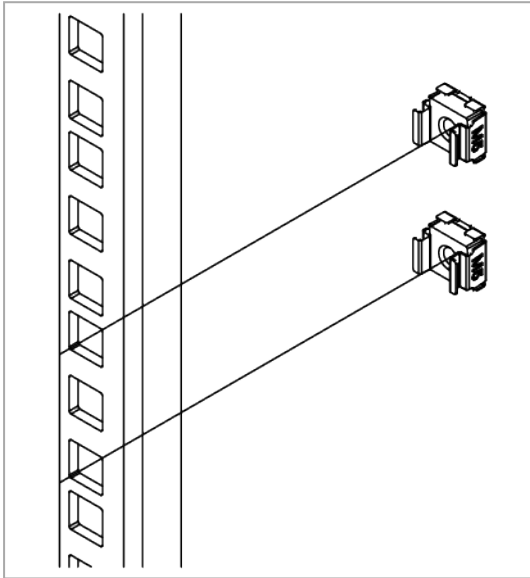


5. Repeat steps 1 - 4 to install the second appliance rail on the opposite side of the appliance.

Step 3 - Installing the Appliance in the Rack

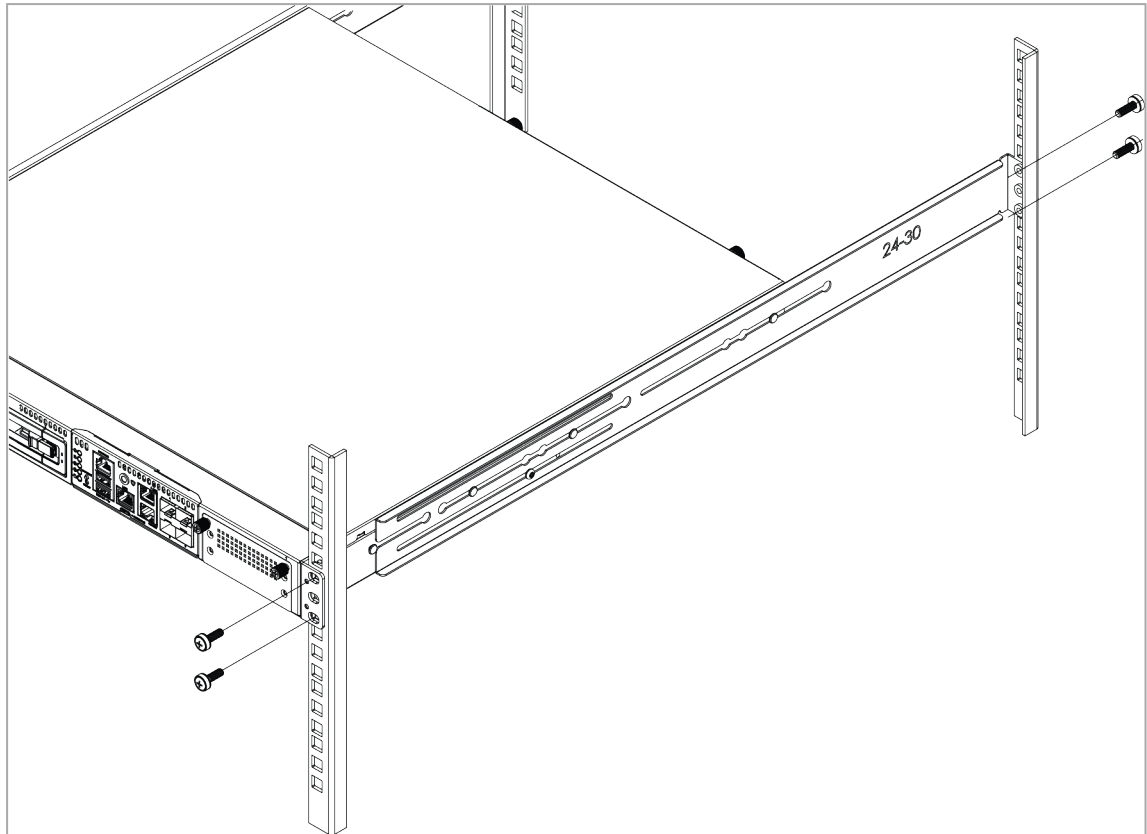
- i** **Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
- i** **Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

1. Insert 2 M5 cage nuts on the front rack post.



2. Align the fixed rail and the front ear mount bracket with the rack post holes where the cage nuts were inserted.
3. Fasten the fixed rail to the rack posts:
 - a. Fasten the front side of the fixed rail and the ear mount bracket to the front rack post with 2 M5x14 screws .

- b. Fasten the rear side of the fixed rail to the rear rack post with 2 M5x14 screws.



- c. Make sure that the appliance is secured and cannot move.

4. Repeat steps 1 - 3 for the other fixed rail on the opposite side of the appliance.

Appliance Air Vents

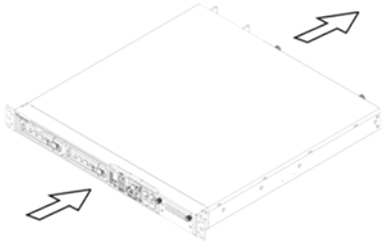
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

- i Important** - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in Smart-1 700-S Appliances:



3920 and 3950

General Requirements for Racks

You can mount Check Point 3920 and 3950 Appliances on a Rack Mount Shelf or with ear brackets (as an optional accessory instead of the supplied wall mount hardware).

These are the appliance physical specifications:

Appliance	Width	Depth	Height
3920	8.268 in (21 cm)	7.638 in (19.4 cm)	1.673 in (4.25 cm)
3950	8.268 in (21 cm)	8.264 in (20.99cm)	1.673 in (4.25 cm)

Mounting 3920 / 3950 Appliances on a Rack Mount Shelf

The Rack Mount Shelf (shelf) can hold a single appliance or two appliances in a side by side (double) installation.

The shelf dimensions are 482mm x 340mm x 44.4mm and it weighs 1.73Kg. Mount the shelf on a 19-inch (48.26 cm) rack.

For all installation setups, the ambient temperature range is -40 to 70 °C.



Note - The appliances include top/rear venting holes. Do not block them.



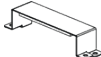



Shipping Carton Contents

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver may also be helpful.

Rack Mount Shelf carton

Hardware description	Qty
Rack mount shelf	1
Accessory carton	1

Accessory carton contents

Bag Label	Hardware description	Qty	Use	Icon
Washer x 4 and tool	Rack mount washers Spacer tool	4 1	Fasten the appliance to the shelf	
M3 black screw x 4	M3x5 black flat head machine screw	4	Fasten the appliance to the shelf	
Power adapter bracket x 2 (two bags)	Power adapter bracket	4	Secure the power adapter to the shelf	
M3 black round head screw x 8	M3x6 black round head screw with washer	8	Fasten the power adapter to the shelf	
Rack screws and nuts	M5 screws M5 cage nuts	4 4	Fasten the shelf to the rack post	
Cable tie x 4	Cable ties (black)	4	Organize the power adapter cables	

Installation Workflow

1. Attach the appliance(s) to the shelf.
2. Attach the shelf to the rack.

Appliance Orientation:

You can install the 3920 appliance on the shelf with either the front or rear panel facing the front of the rack.

The 3950 appliance must be installed on the shelf with the front panel (appliance ports) facing the front of the rack.

Installation Types:

- Single
- Side by side

Workflow:

1. Identify the correct position of the appliance on the shelf.
2. Install the appliance and power adapter.

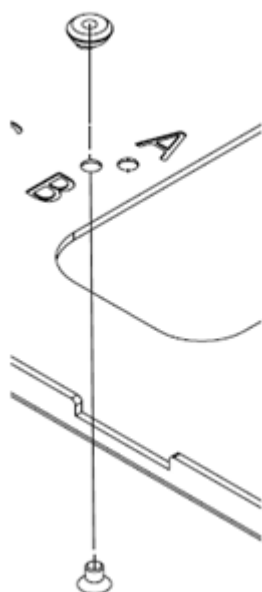
3. Attach the cables and power adapter cables to the appliance.
4. Install the shelf in the rack.

Appliance Positions on the Shelf

The screw holes on the shelf are marked with letters for proper positioning of the appliance. Make sure to use the correct screw holes for your appliance model and setup.

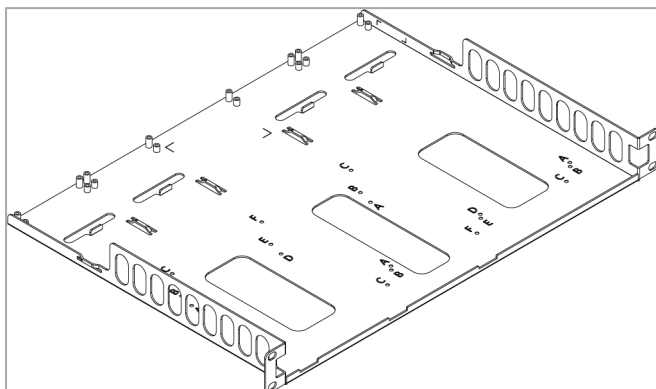
Shelf hole	Used for Appliance	Setup
A	N / A	
B	3920	Side by side
C	3950	Side by side
D	N / A	
E	3920	Single unit in the middle
F	3950	Single unit in the middle

For example, to install two 3920 appliances side by side, locate the B markings on the shelf:

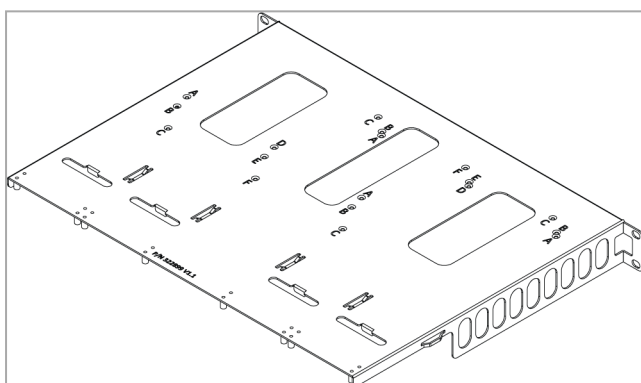


Appliance Installation

Shelf top view



Shelf bottom view

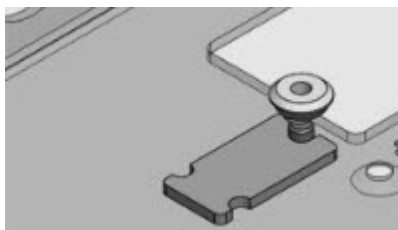


Single Appliance Installation

Note - You must install a single appliance in the middle of the shelf, not on the side.

1. Place the shelf on a flat surface.
2. Identify the location and holes to use for your appliance (see ["Appliance Positions on the Shelf" on the previous page](#)).
3. Attach the appliance to the shelf using two M3x5 screws and two rack mount washers:
 - a. Lift the shelf from the flat surface and insert the screw from underneath through the hole next to the applicable letter.
 - b. Place the washer on top of the screw, with the wider part facing up.

- c. Place the spacer tool so that its indentation is fixed against the screw on the top side of the shelf.

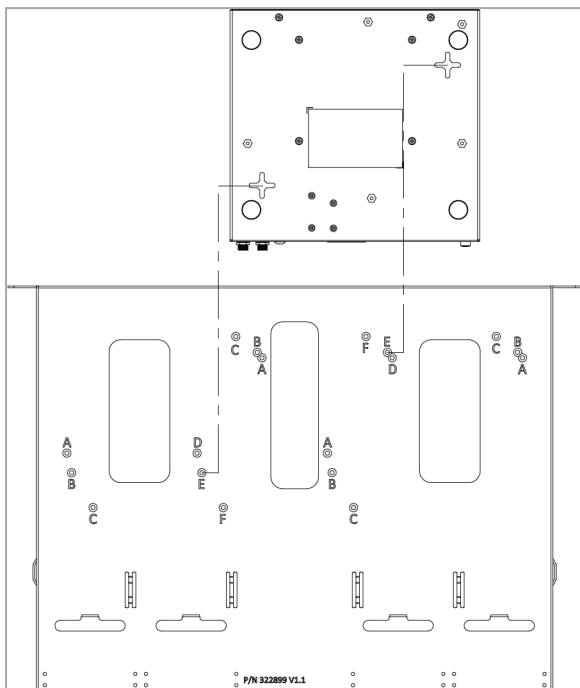


- d. Turn the washer a few times until it reaches the spacer tool and remove the tool so there is a gap. The spacer tool prevents you from twisting the washer too far.



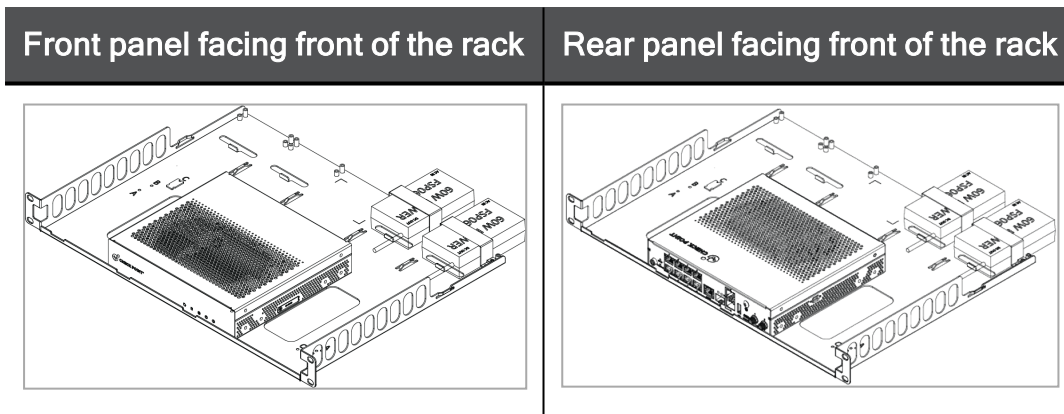
4. If there are rubber feet installed on the bottom of the appliance, remove them.
5. Align the holes on the bottom of the appliance with the screw / washer assembly.
6. Place the appliance on top of the screw / washer assembly and slide it forward until it settles into position.
7. To secure the appliance, use a screwdriver (not included in the kit) to tighten the screws on the bottom of the shelf. After you fasten the screws, the appliance is locked to the shelf.

3920 bottom view (single appliance)

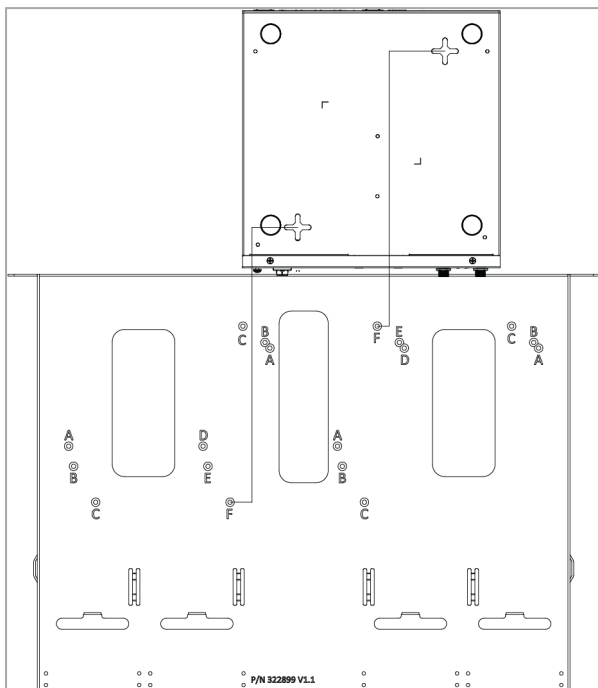


3920 top view (single appliance)

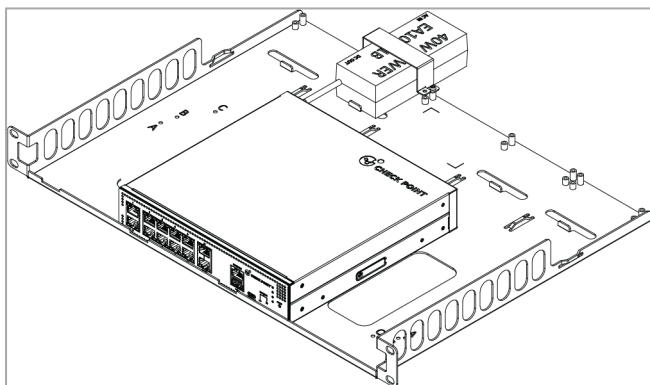
Note - You can optionally install the 3920 appliance on the shelf with its rear panel (where the appliance ports are located) facing the front of the rack.



3950 bottom view (single appliance)



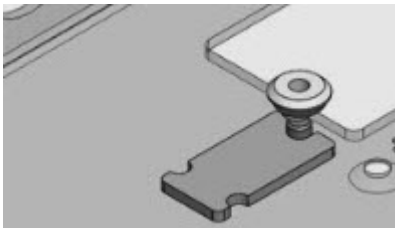
3950 top view (single appliance)



Side by Side Appliance Installation

The steps for a side-by-side installation are the same as for a single appliance. However, in a side-by-side setup, you need to place one appliance on each side of the shelf.

1. Place the shelf on a flat surface.
2. Identify the locations and holes to use for your appliances (see ["Appliance Positions on the Shelf" on page 47](#)).
3. Attach an appliance to one side the shelf using two M3x5 screws and two rack mount washers:
 - a. Lift the shelf from the flat surface and insert the screw from underneath through the hole next to the applicable letter.
 - b. Place the washer on top of the screw, with the wider part facing up.
 - c. Place the spacer tool so that its indentation is fixed against the screw on the top side of the shelf.

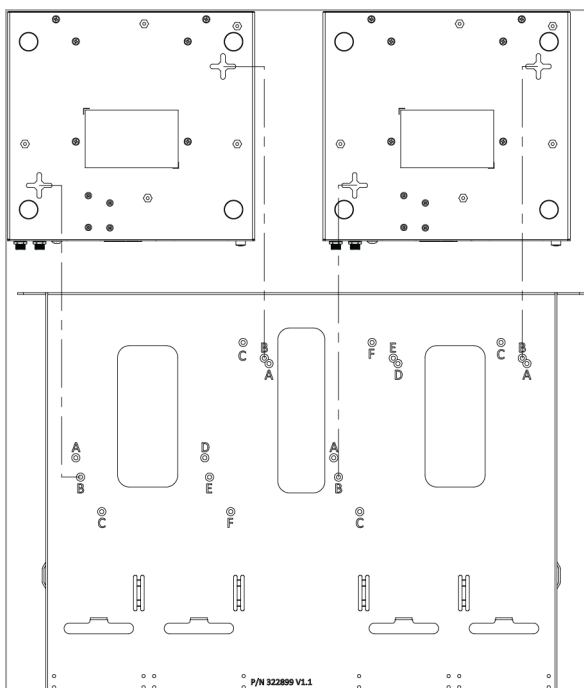


- d. Turn the washer a few times until it reaches the spacer tool and remove the tool so there is a gap. The spacer tool prevents you from twisting the washer too far.



4. If there are rubber feet installed on the bottom of the appliance, remove them.
5. Align the holes on the bottom of the appliance with the screw / washer assembly.
6. Place the appliance on top of the screw / washer and slide it forward until it settles into position. See the following diagrams.
7. Repeat steps 3 - 6 for the second appliance.
8. To secure the appliances, use a screwdriver (not included in the kit) to tighten the screws on the bottom of the shelf. After you fasten the screws, the appliances are locked to the shelf.

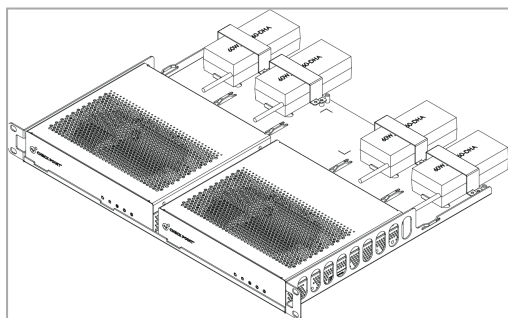
3920 bottom view (side by side appliances)



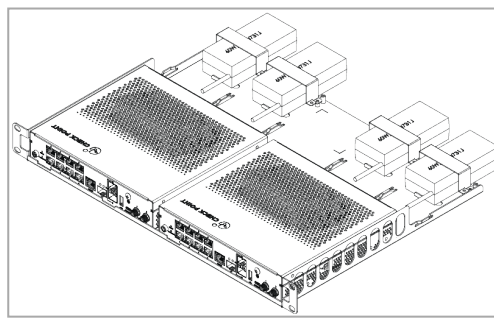
3920 top view (side by side appliances)

- Note** - You can optionally install the 3920 appliance on the shelf with its rear panel (where the appliance ports are located) facing the front of the rack.

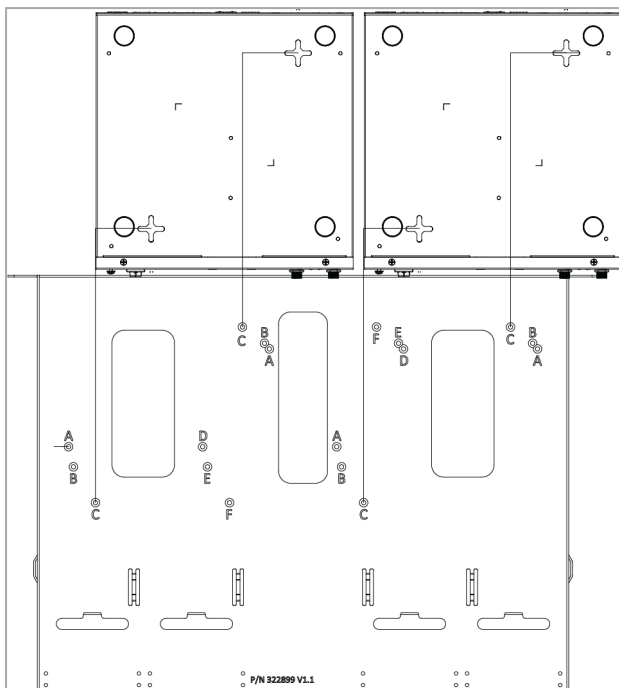
Front panel facing front of the rack



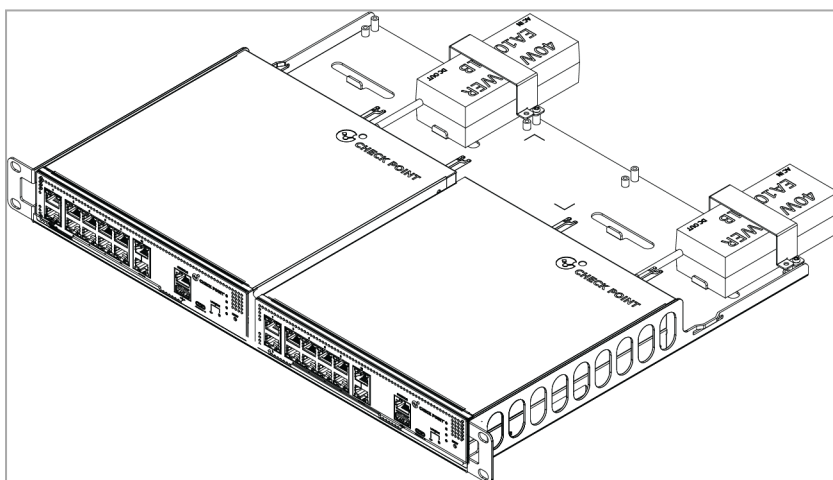
Rear panel facing front of the rack



3950 bottom view (side by side appliances)



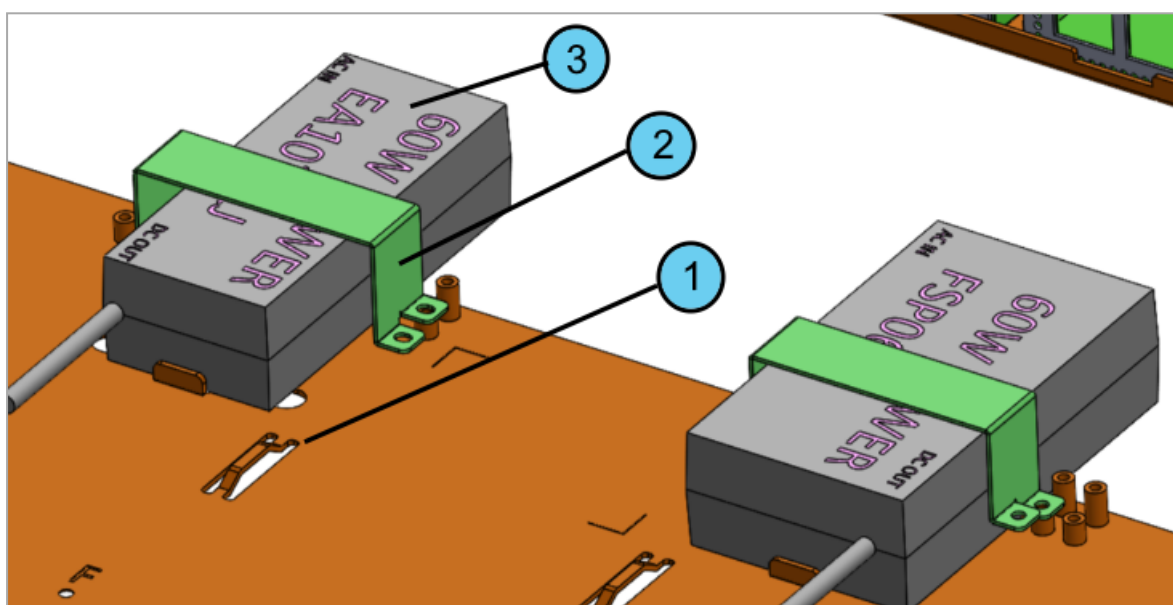
3950 top view (side by side appliances)



Installing the Power Adapter

Note - The number of AC adapters shown in the diagram is for illustration only. By default, one AC adapter is provided. The actual number depends on the purchased components in your system.

1. Attach the DC jack of the adapter and plug it into the appliance.
2. Place the adapter in the correct position on the shelf and push it until you reach the stopper. For reference, see the top view diagrams in the previous sections.
3. Place a bracket (pictured in green in the diagram) on the top of the adapter.
4. Use the provided M3x6 screws to fasten each side of the bracket to the shelf.
5. As needed, attach cable ties to hold the cables together.



Legend

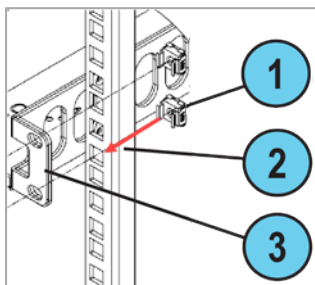
Item	description
1	Cable tie slot
2	Power adapter bracket
3	Power adapter

6. Repeat steps 1 - 5 for each installed power adapter.

Installing the Shelf in the Rack

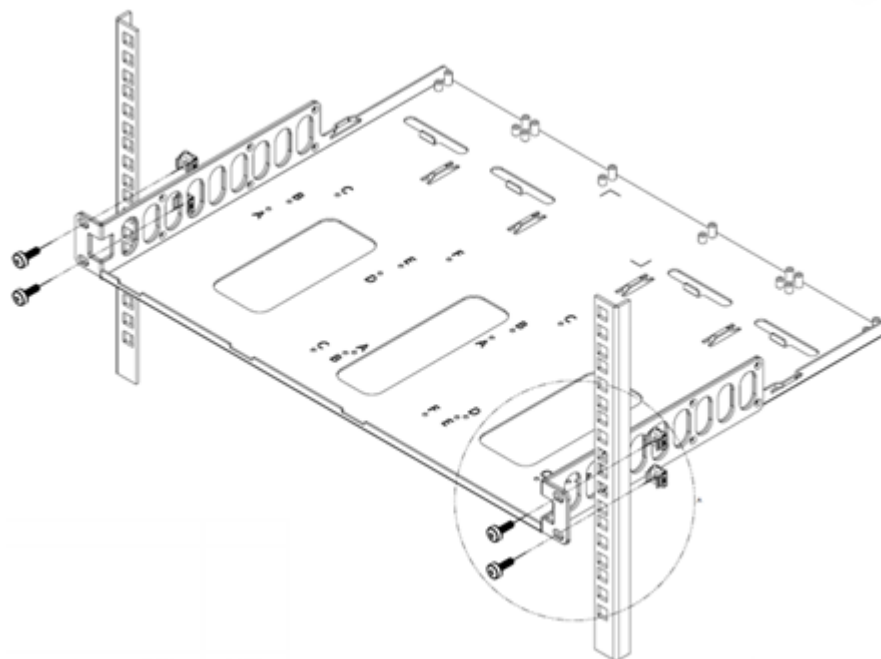
i Important - To prevent injury or damage, at least two people are required to install the shelf in a rack.

1. Insert two M5 cage nuts on the back side of the front rack post.



Item	description
1	M5 cage nut
2	Front rack post
3	Shelf ear bracket

2. Align the shelf and the shelf ear bracket with the rack post holes where the cage nuts were inserted.
3. Fasten the shelf to the rack post with two M5 screws.



4. Repeat steps 1 - 3 for the other side of the shelf.

Uninstalling the appliance

 **Note** - This applies to both single and side-by-side installations.

1. Unplug the cables from the power adapters and the appliance.
2. Loosen the screws from the adapter brackets and remove the brackets.
3. Remove the adapters.
4. Remove the appliance.
5. Repeat steps 1 - 4 for the second appliance (if applicable).

Mounting 3920 / 3950 Appliances with Ear Brackets

Shipping Carton Contents

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver may also be helpful.

Hardware description	Qty	Use
Ear brackets	2	Attach the appliance to the rack
Screws	6	Attach the ear brackets to the appliance

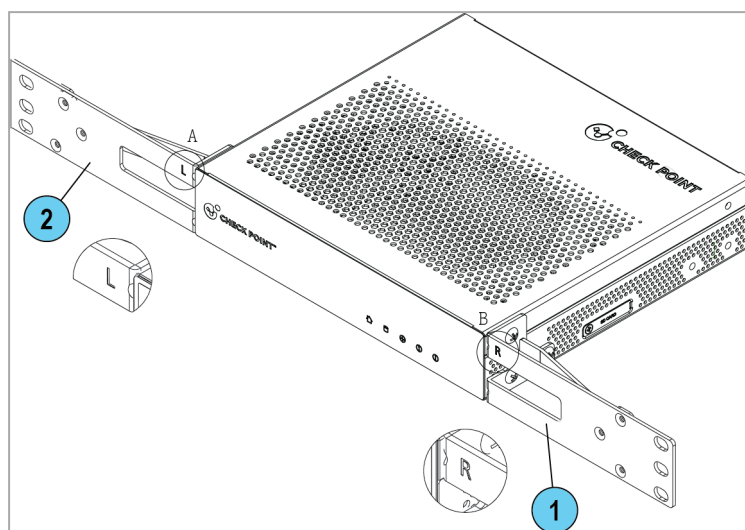
Installation Workflow

To mount the appliance with ear brackets to the 19" rack:

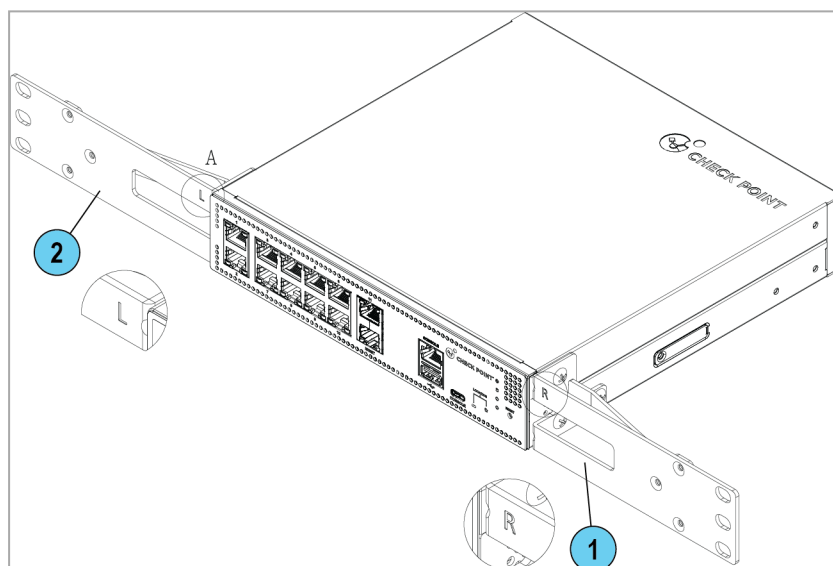
1. Attach the left ear bracket to the left-side appliance panel with three M3 screws.
2. Attach the right ear bracket to the right-side appliance panel with three M3 screws.

■ Front view:

3920:

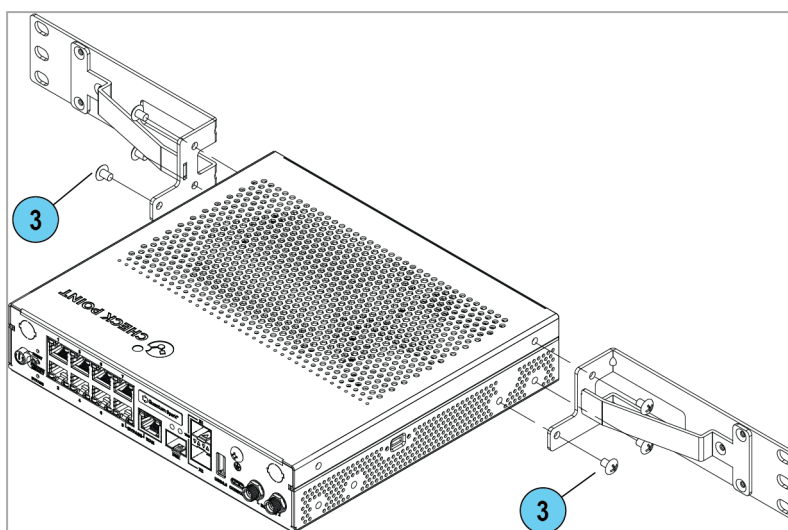


3950

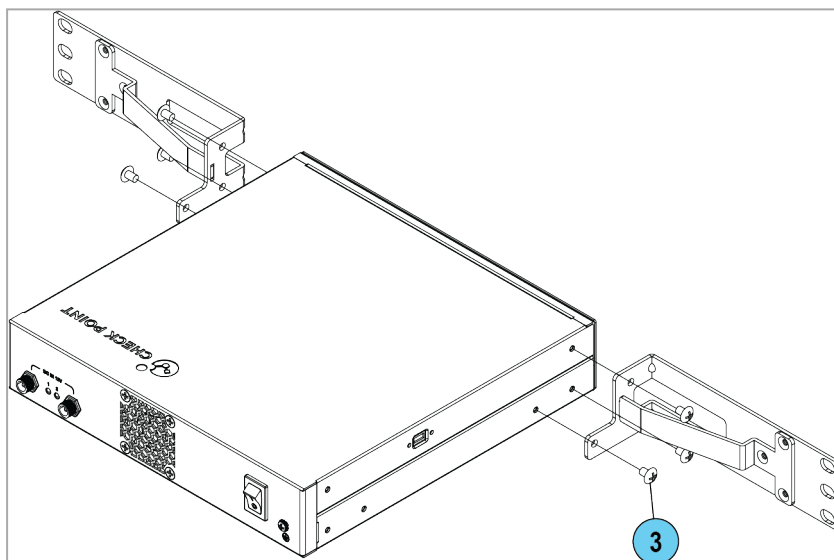


■ Back view:

3920:



3950



Legend

Item	Hardware description
1	Right ear mount bracket
2	Left ear mount bracket
3	Ear mount bracket screws

3. Align the front end of the ear mount brackets with the rack post holes.
4. Attach each ear mount bracket to the 19-inch rack with three screws.

 **Important:**

- You must have free access to the front panel.
- A minimum 0.5 inch (1.5 cm) air gap above and below the appliance is required for sufficient cooling.

2530 / 2550, 2560 / 2570, and 2580

General Requirements for Racks

You can mount Quantum Spark 2530 / 2550, 2560 / 2570, and 2580 Appliances on a Rack Mount Shelf as an optional accessory instead of the supplied wall mount hardware.

These are the appliance physical specifications:

Appliance	Width	Depth	Height
2530 / 2550	210 mm 8.3 in.	170 mm 6.7 in.	42 mm 1.7 in.
2560 / 2570	210 mm 8.3 in.	170 mm 6.7 in.	42 mm 1.7 in.
2580	210 mm 8.3 in.	209 mm 8.3 in.	42 mm 1.7 in.

Mounting 2530 / 2550, 2560 / 2570, and 2580 Appliances on a Rack Mount Shelf

The Rack Mount Shelf (shelf) can hold a single appliance or two appliances in a side by side (double) installation.

The shelf dimensions are 482 mm x 340 mm x 44.4 mm and it weighs 1.73Kg. Mount the shelf on a 19-inch (48.26 cm) rack.

For all installation setups, the ambient temperature range is -40 to 70 °C.



Note - Do not block the appliance top / rear venting holes.







Shipping Carton Contents

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver may also be helpful.

Rack Mount Shelf carton

Hardware description	Qty
Rack mount shelf	1
Accessory carton	1

Accessory carton contents

Bag Label	Hardware description	Qty	Use	Icon
Washer x 4 and tool	Rack mount washers Spacer tool	4 1	Fasten the appliance to the shelf	
M3 black screw x 4	M3x5 black flat head machine screw	4	Fasten the appliance to the shelf	
Power adapter bracket x 2 (two bags)	Power adapter bracket	4	Secure the power adapter to the shelf	
M3 black round head screw x 8	M3x6 black round head screw with washer	8	Fasten the power adapter to the shelf	
Rack screws and nuts	M5 screws M5 cage nuts	4 4	Fasten the shelf to the rack post	
Cable tie x 4	Cable ties (black)	4	Organize the power adapter cables	

Installation Workflow

1. Attach the appliance(s) to the shelf.
2. Attach the shelf to the rack.

Appliance Orientation

You must install the 2530 / 2550 and 2560 / 2570 appliances on the shelf with the front panel facing outward.

The 2580 model can be installed with either the front or rear panel facing the front of the rack.

Installation Types for all models:

- Single - 2530 / 2550, 2560 / 2570, and 2580 single unit in the middle.
- Side by side - 2530 / 2550, 2560 / 2570, 2580

Workflow:

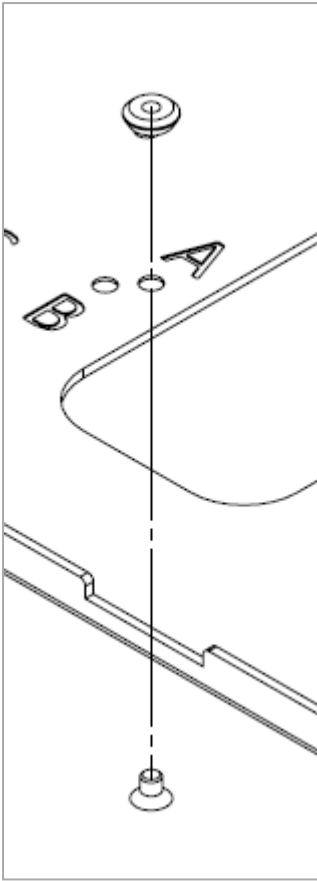
1. Identify the correct position of the appliance on the shelf.
2. Install the appliance and power adapter.
3. Attach the cables and power adapter cables to the appliance.
4. Install the shelf in the rack.

Appliance Positions on the Shelf

The screw holes on the shelf are marked with letters for proper positioning of the appliance. Make sure to use the correct screw holes for your appliance model and setup.

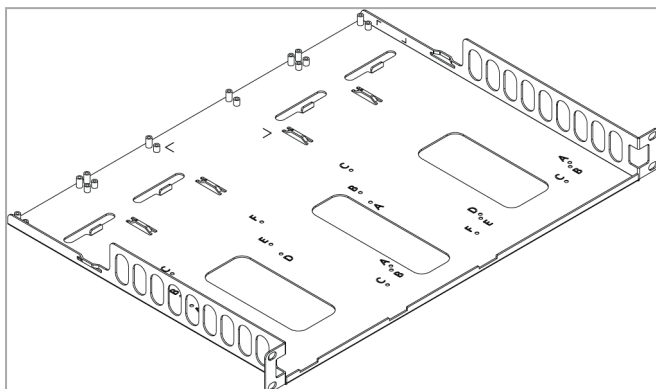
Shelf hole	Used for Appliance	Setup
A	2530 / 2550	Side by Side (SBS)
B	2560 / 2570	Side by Side (SBS)
C	2580	Side by Side (SBS)
D	2530 / 2550	Single unit in the middle
E	2560 / 2570	Single unit in the middle
F	2580	Single unit in the middle

For example, to install two 2530 / 2550 appliances side by side, locate the A markings on the shelf:

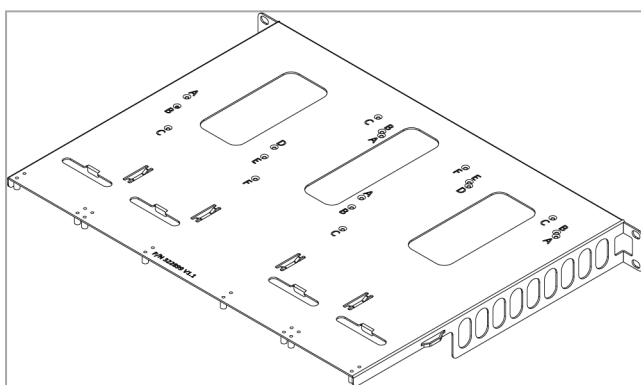


Appliance Installation

Shelf top view



Shelf bottom view

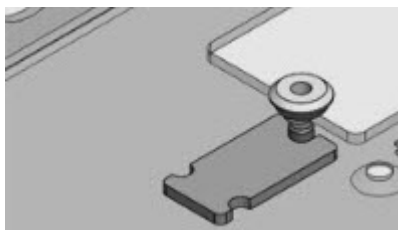


Single Appliance Installation

Note - You must install a single appliance in the middle of the shelf, not on the side.

1. Place the shelf on a flat surface.
2. Identify the location and holes to use for your appliance (see ["Appliance Positions on the Shelf" on page 64](#)).
3. Attach the appliance to the shelf using two M3x5 screws and two rack mount washers:
 - a. Lift the shelf from the flat surface and insert the screw from underneath through the hole next to the applicable letter.
 - b. Place the washer on top of the screw, with the wider part facing up.

- c. Place the spacer tool so that its indentation is fixed against the screw on the top side of the shelf.



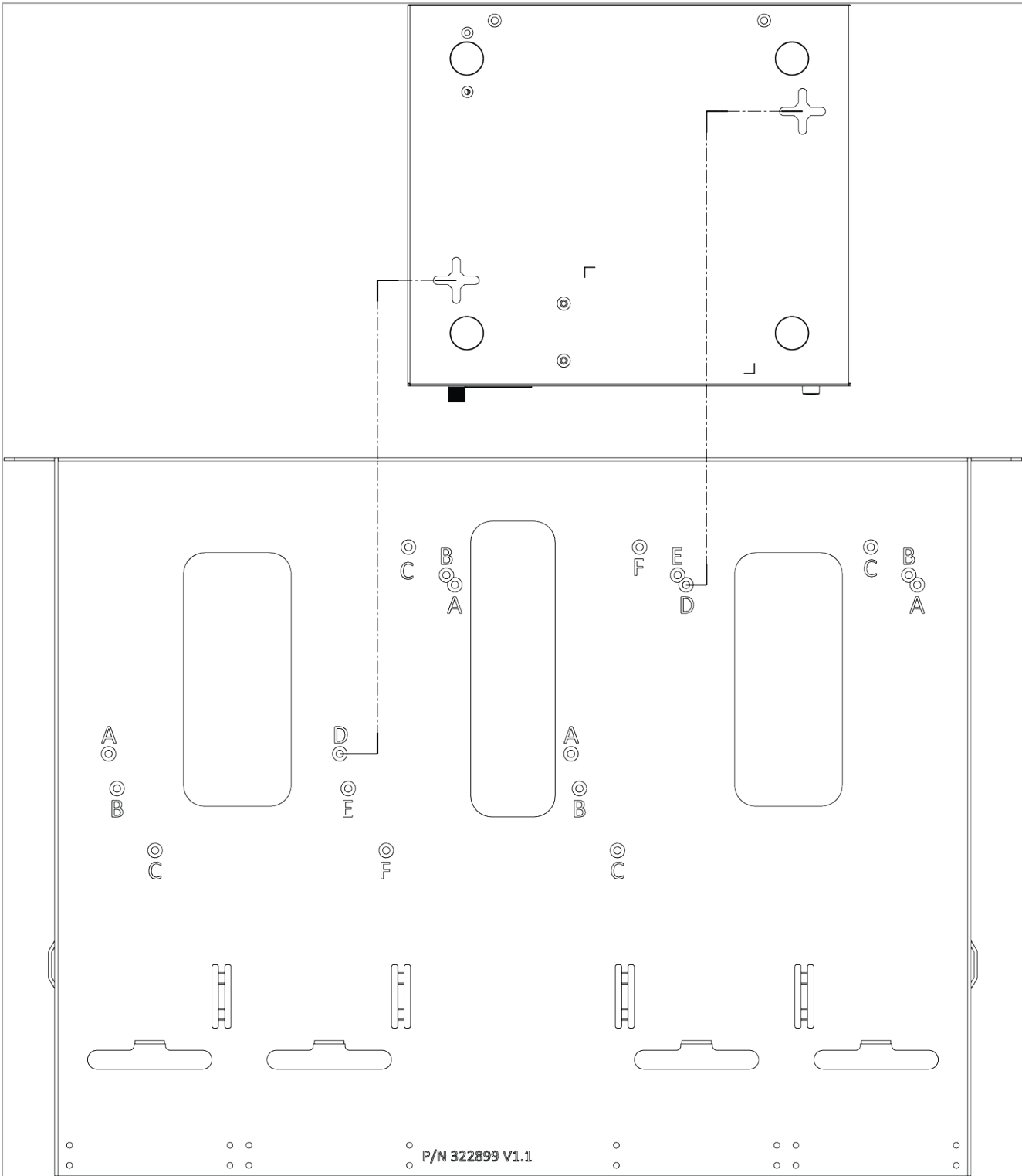
- d. Turn the washer a few times until it reaches the spacer tool and remove the tool so there is a gap. The spacer tool prevents you from twisting the washer too far.



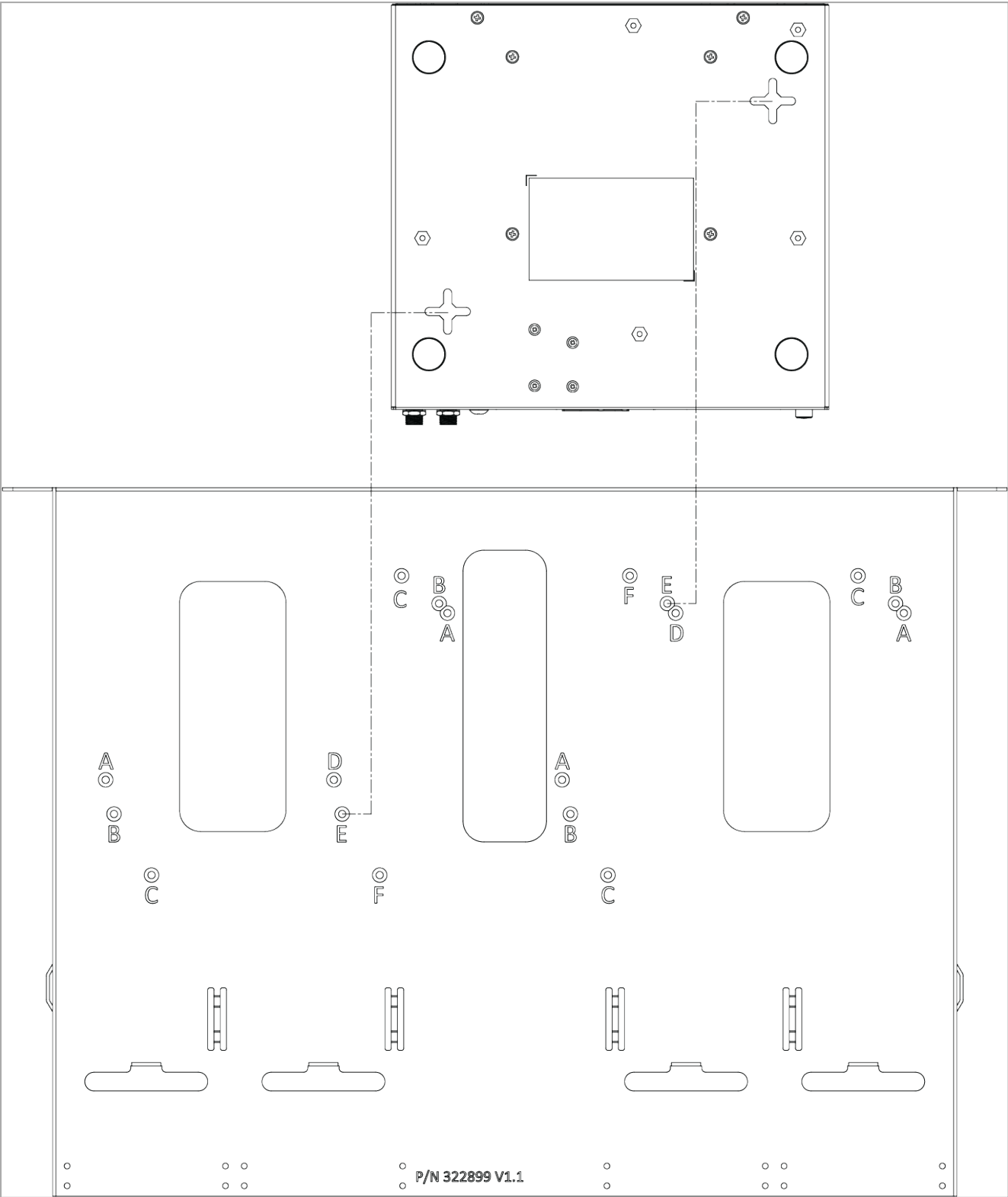
4. If there are rubber feet installed on the bottom of the appliance, remove them.
5. Align the holes on the bottom of the appliance with the screw / washer assembly.
6. Place the appliance on top of the screw / washer assembly and slide it forward until it settles into position.
7. To secure the appliance, use a screwdriver (not included in the kit) to tighten the screws on the bottom of the shelf. After you fasten the screws, the appliance is locked to the shelf.

Single Appliance - Bottom View

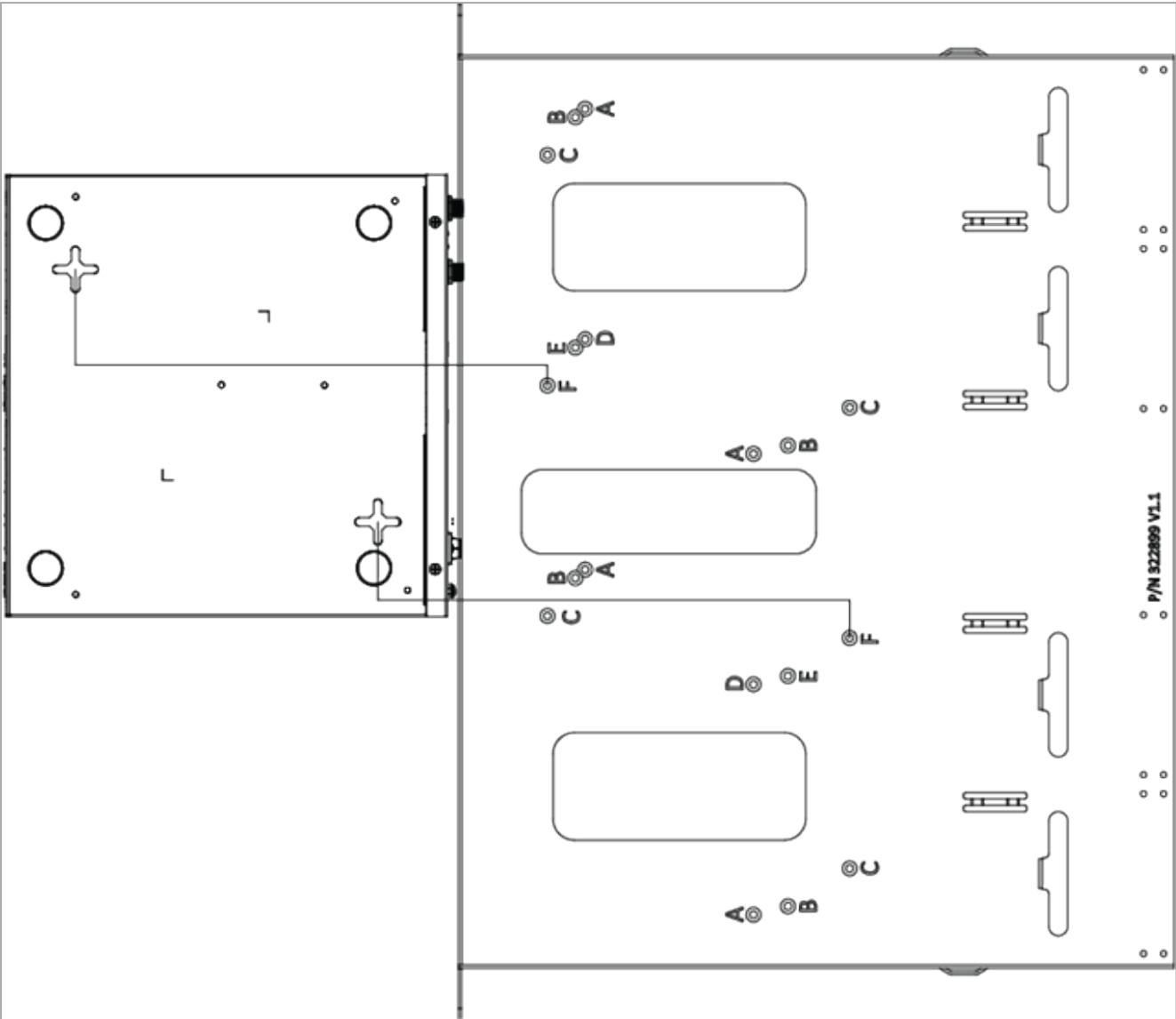
2530 / 2550



2560 / 2570

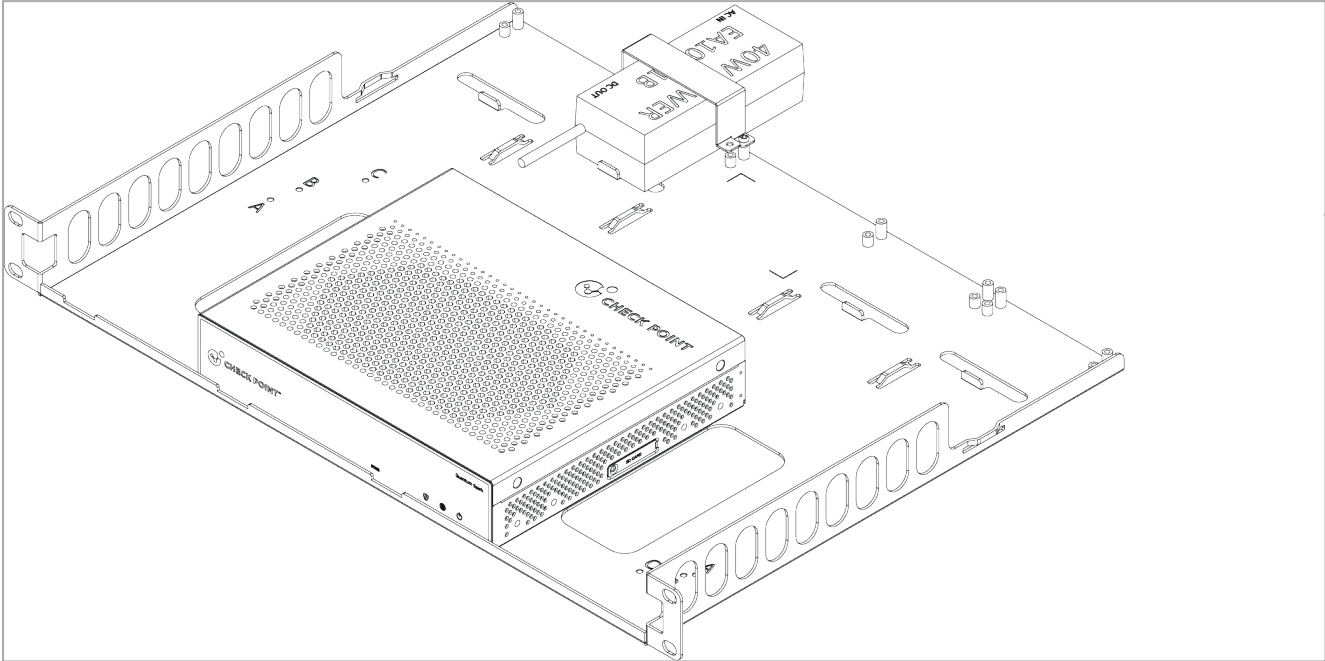


2580

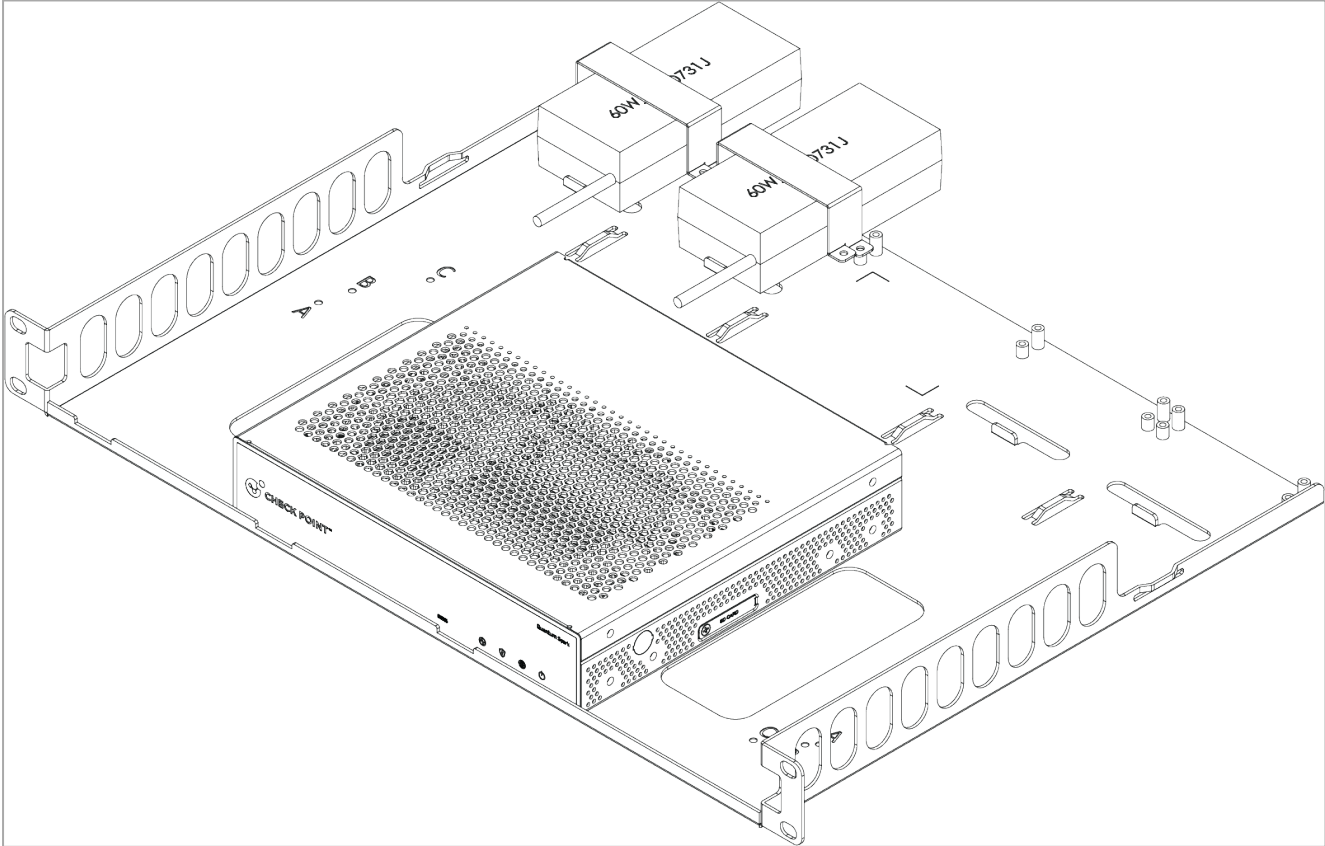


Single Appliance - Top View

2530 / 2550

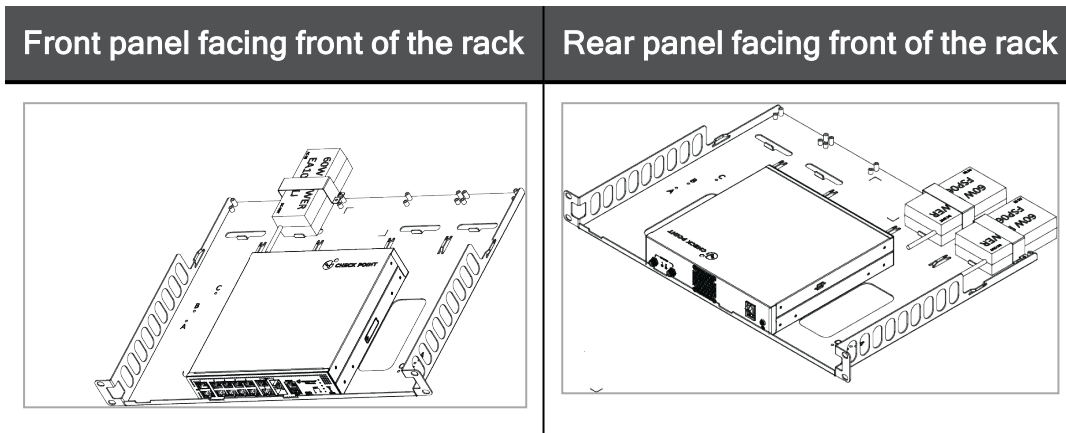


2560 / 2570



2580

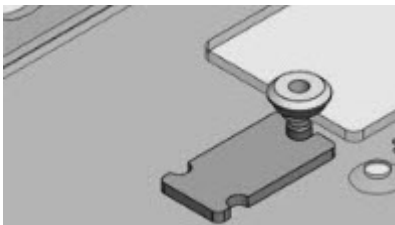
Note - You can optionally install the 2580 appliance on the shelf with its rear panel (where the appliance ports are located) facing the front of the rack.



Side by Side Appliance Installation

The steps for a side-by-side installation are the same as for a single appliance. However, in a side-by-side setup, you need to place one appliance on each side of the shelf.

1. Place the shelf on a flat surface.
2. Identify the locations and holes to use for your appliances (see ["Appliance Positions on the Shelf" on page 64](#)).
3. Attach an appliance to one side of the shelf using two M3x5 screws and two rack mount washers:
 - a. Lift the shelf from the flat surface and insert the screw from underneath through the hole next to the applicable letter.
 - b. Place the washer on top of the screw, with the wider part facing up.
 - c. Place the spacer tool so that its indentation is fixed against the screw on the top side of the shelf.



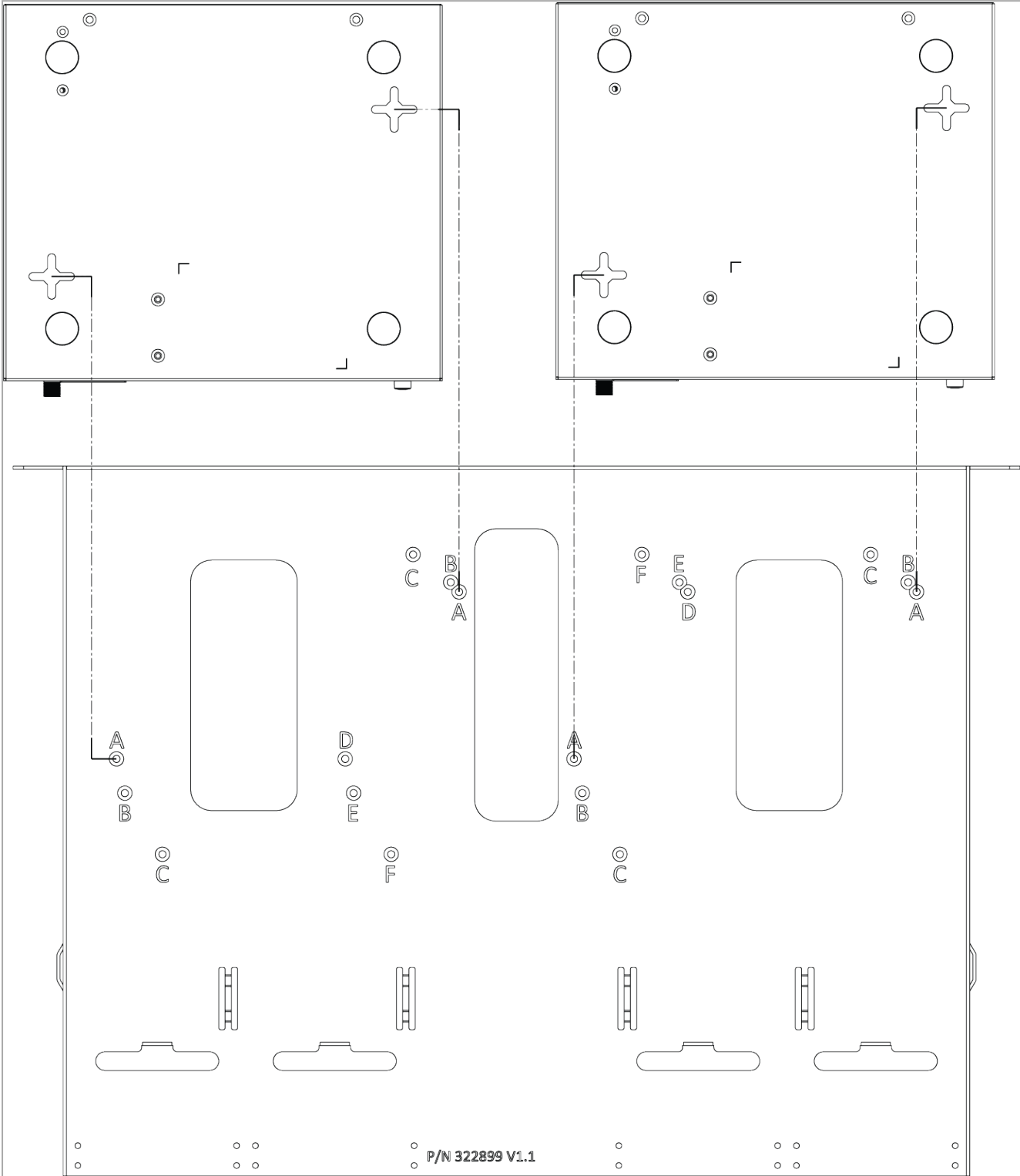
- d. Turn the washer a few times until it reaches the spacer tool and remove the tool so there is a gap. The spacer tool prevents you from twisting the washer too far.



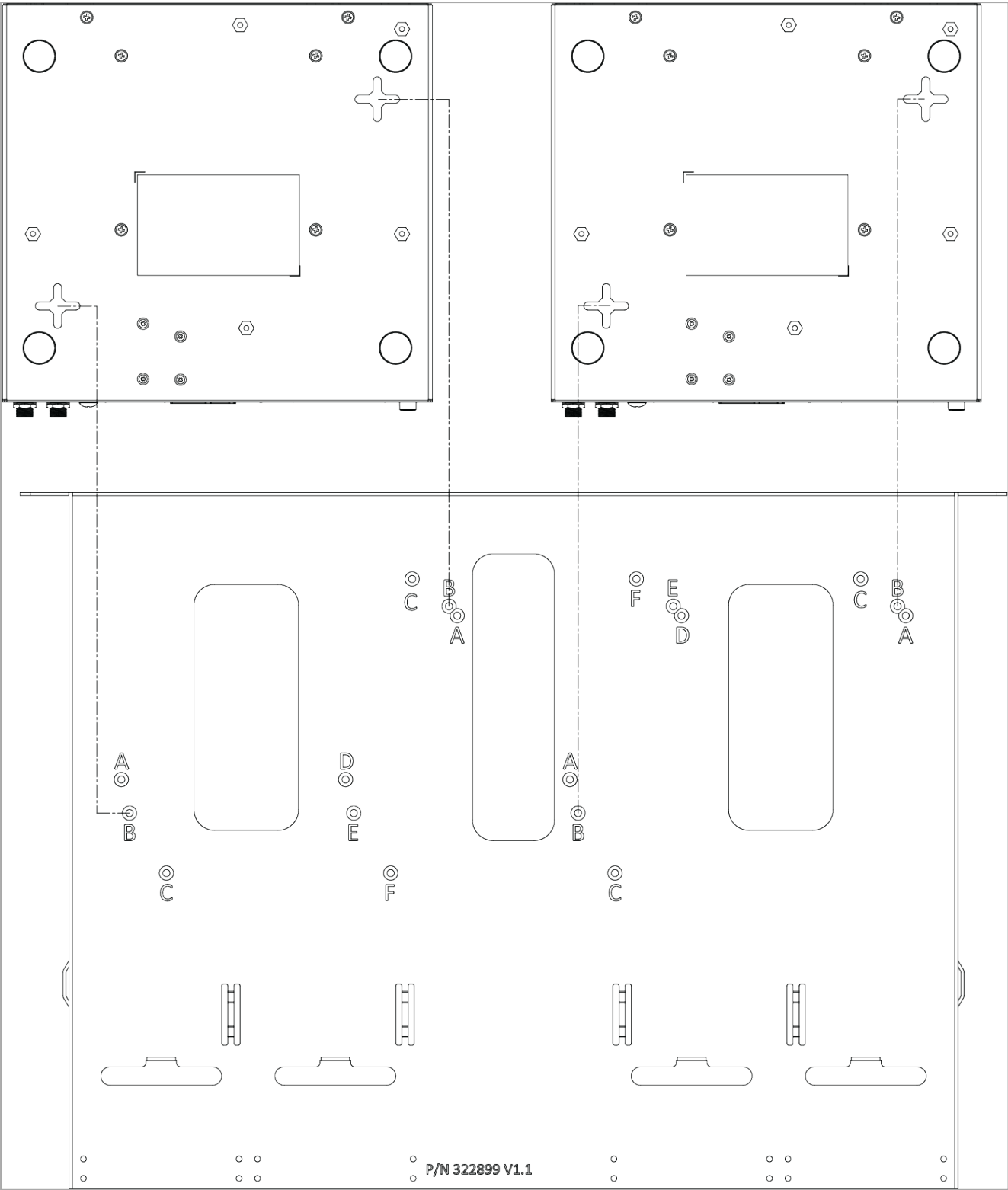
4. If there are rubber feet installed on the bottom of the appliance, remove them.
5. Align the holes on the bottom of the appliance with the screw / washer assembly.
6. Place the appliance on top of the screw / washer and slide it forward until it settles into position. See the following diagrams.
7. Repeat steps 3 - 6 for the second appliance.
8. To secure the appliances, use a screwdriver (not included in the kit) to tighten the screws on the bottom of the shelf. After you fasten the screws, the appliances are locked to the shelf.

Side By Side - Bottom View

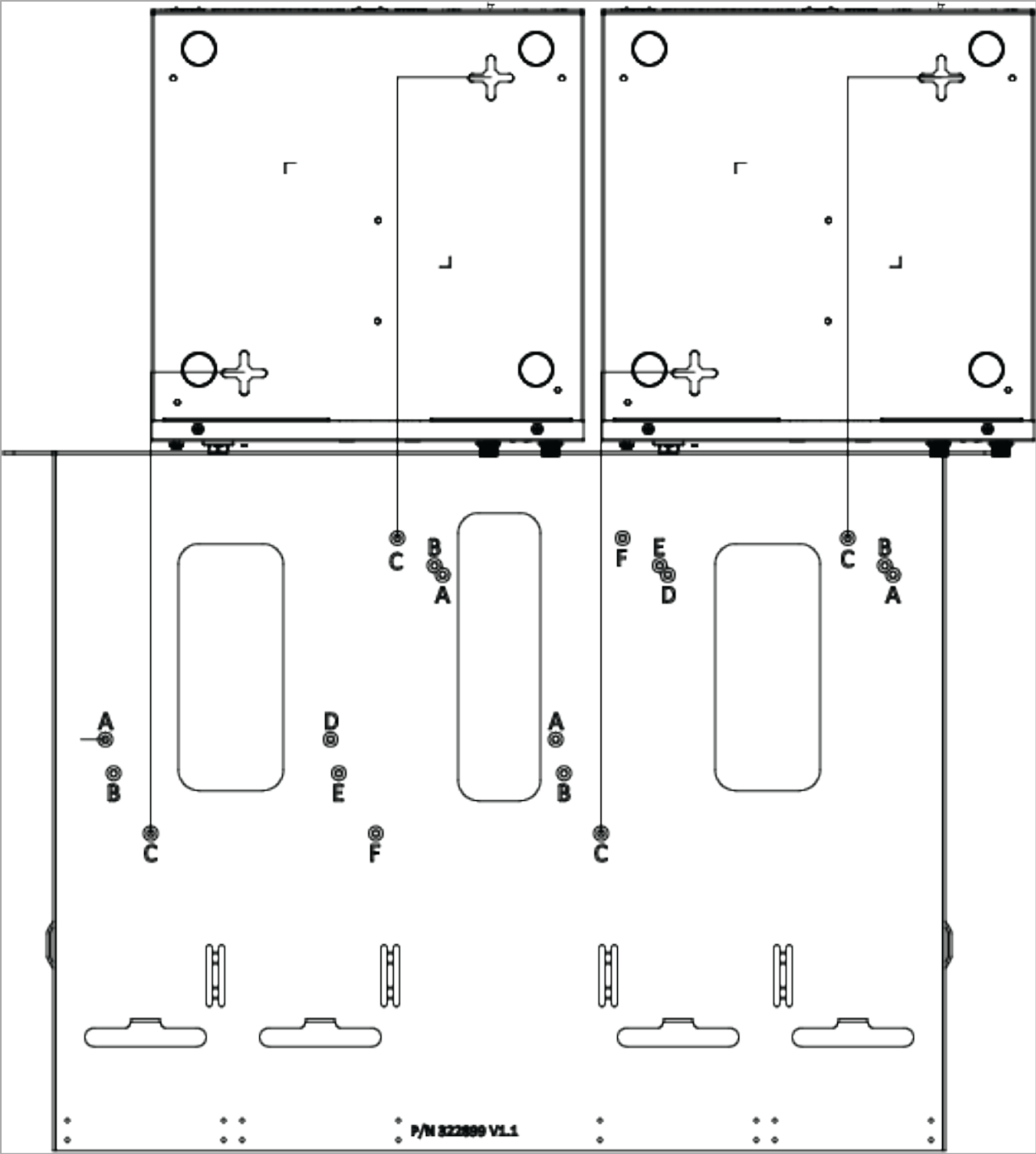
2530 / 2550



2560 / 2570

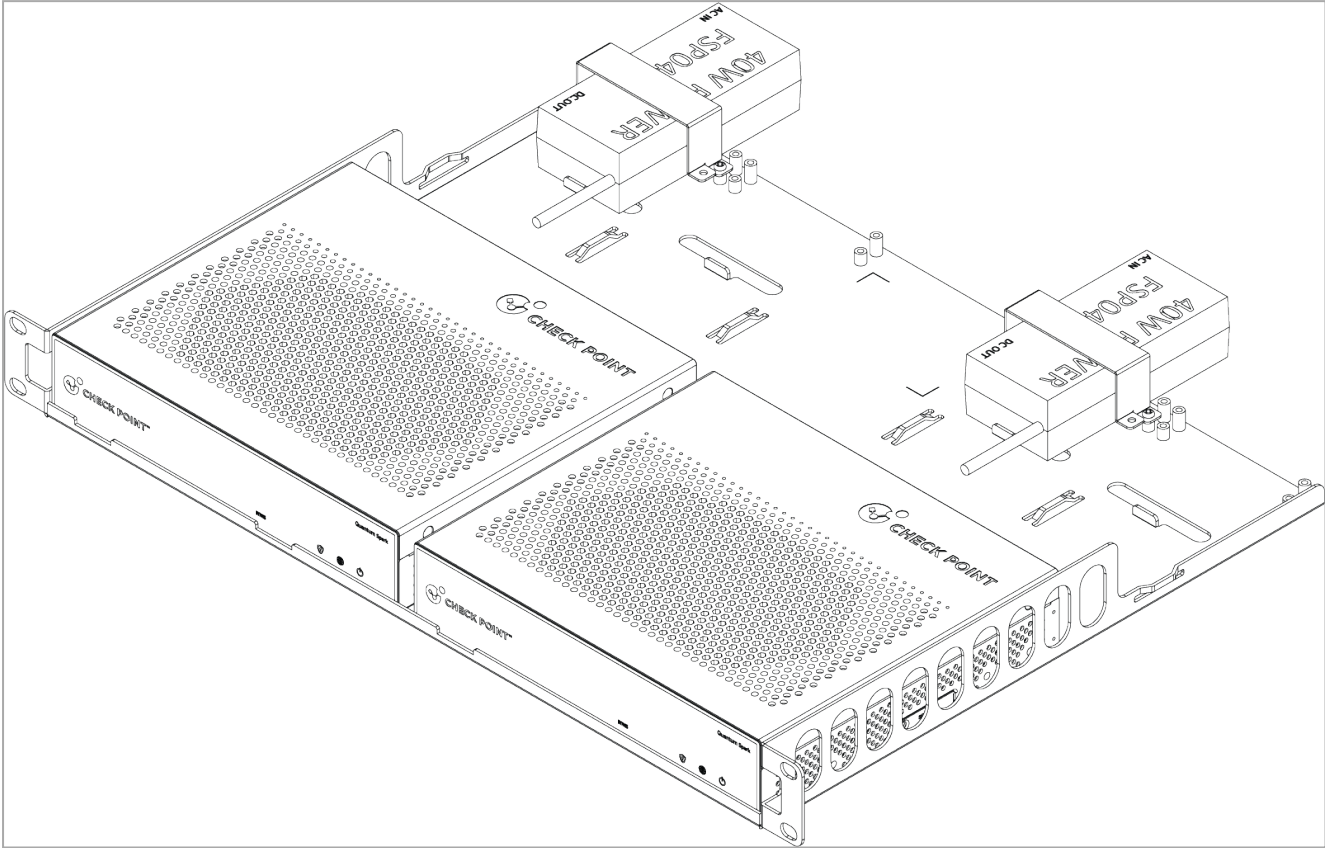


2580

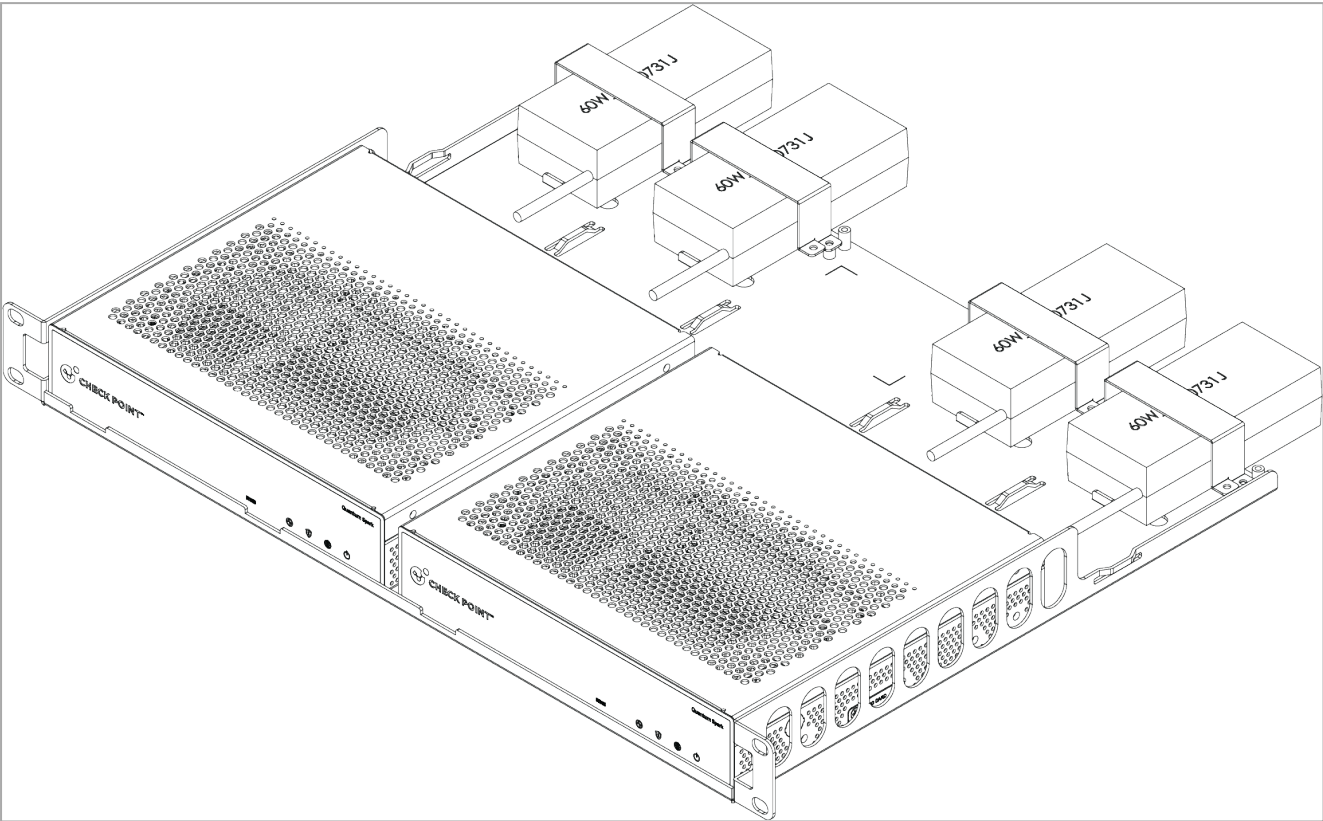


Side by Side - Top View

2530 / 2550

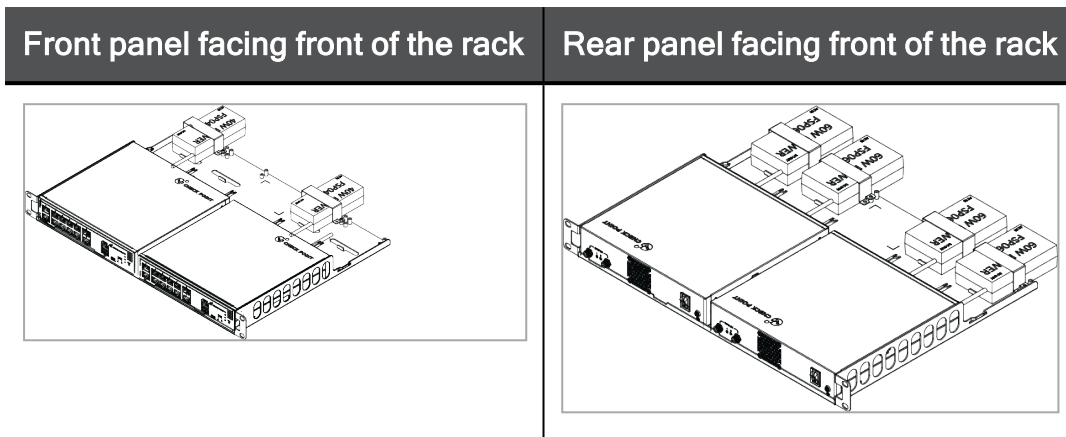


2560 / 2570



2580

- Note** - You can optionally install the 2580 appliance on the shelf with its rear panel (where the appliance ports are located) facing the front of the rack.



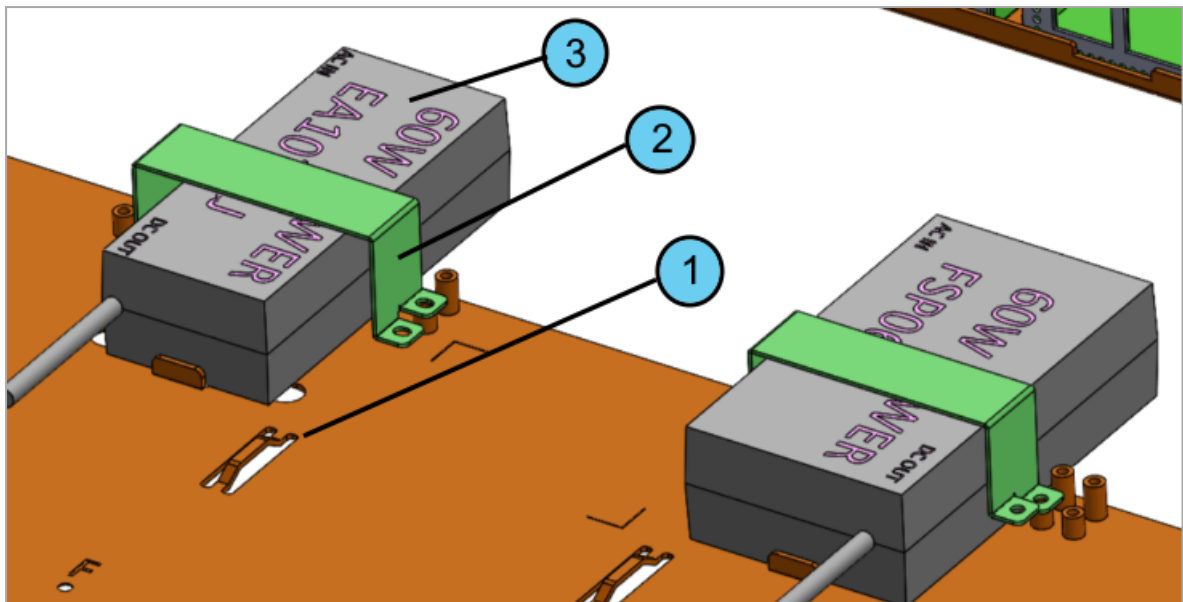
Installing the Power Adapter

- Note** - The number of AC adapters shown in the diagram is for illustration only. By default, one AC adapter is provided. The actual number depends on the purchased components in your system.

1. Attach the DC jack of the adapter and plug it into the appliance.
2. Place the adapter in the correct position on the shelf and push it until you reach the stopper. For reference, see the top view diagrams in the previous sections.

- Note** - For 2560 / 2570 appliances, the power adapters can go on either the right or left sides of the shelf.

3. Place a bracket (pictured in green in the diagram) on the top of the adapter.
4. Use the provided M3x6 screws to fasten each side of the bracket to the shelf.
5. As needed, attach cable ties to hold the cables together.



Legend

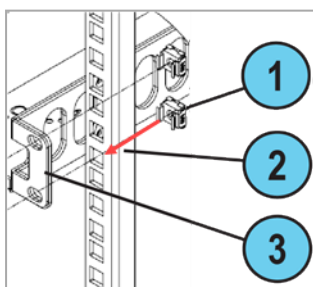
Item	description
1	Cable tie slot
2	Power adapter bracket
3	Power adapter

- Repeat steps 1 - 5 for each installed power adapter.

Installing the Shelf in the Rack

Important - To prevent injury or damage, at least two people are required to install the shelf in a rack.

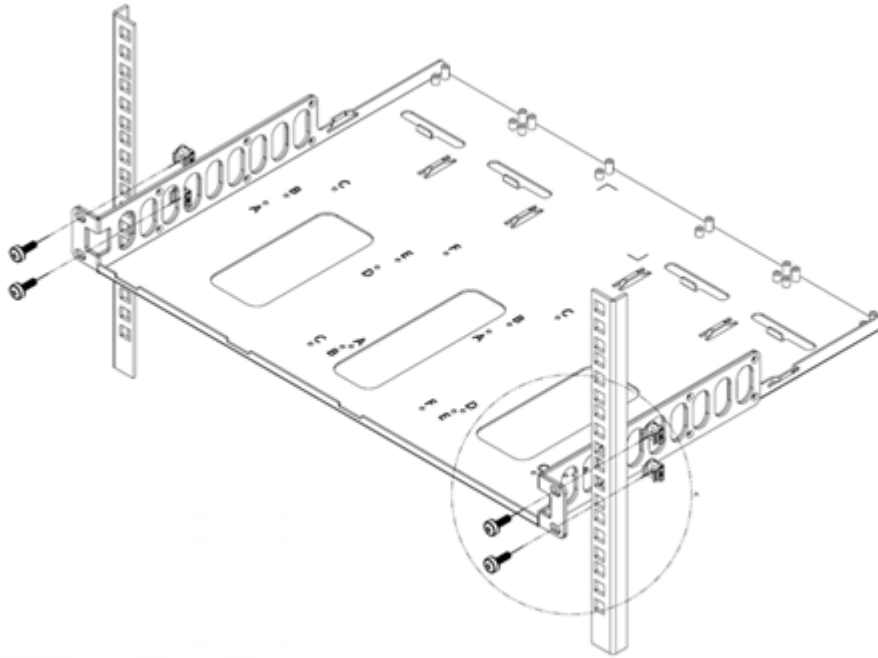
- Insert two M5 cage nuts on the back side of the front rack post.



Item	description
1	M5 cage nut

Item	description
2	Front rack post
3	Shelf ear bracket

- Align the shelf and the shelf ear bracket with the rack post holes where the cage nuts were inserted.
- Fasten the shelf to the rack post with two M5 screws.



- Repeat steps 1 - 3 for the other side of the shelf.

Uninstalling the appliance

Note - This applies to both single and side-by-side installations.

- Unplug the cables from the power adapters and the appliance.
- Loosen the screws from the adapter brackets and remove the brackets.
- Remove the adapters.
- Remove the appliance.
- Repeat steps 1 - 4 for the second appliance (if applicable).

19100, 19200, 29100, and 29200

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliances:

Legend

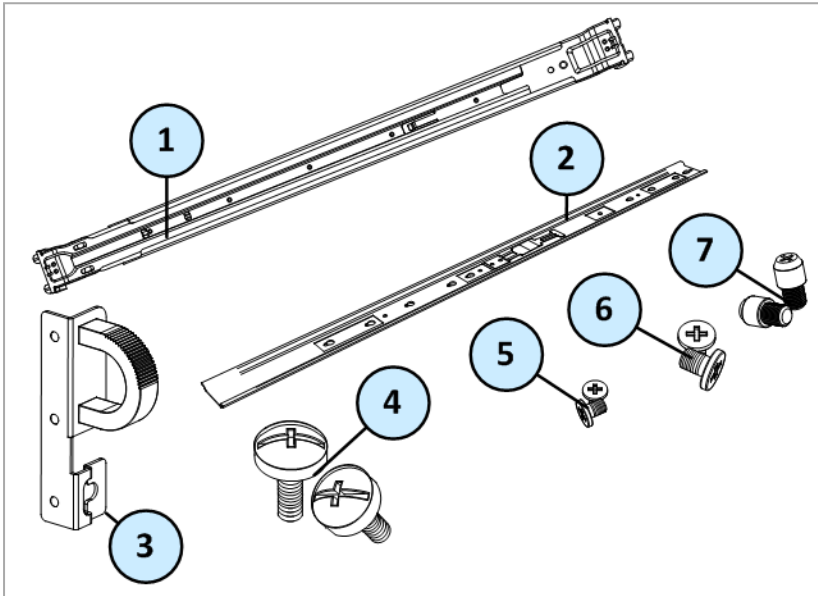
Security Appliance	Width	Depth	Height	U
19100 19200 29100 29200	442 mm 17.4 in	610 mm 24 in	88 mm 3.5 in	2U

Telescopic Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack
2	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance
3	Ear mount bracket	2	Attaches the appliance to the rack
4	Rack mounting screws	4	Attaches the ear mounts to the rack, which prevents movement of the appliance
5	Appliance rail screws	12	Attaches the appliance rails to the appliance
6	Ear mount bracket screws	6	Attaches the ear mounts to the appliance

Legend (continued)

Item	Hardware Description	Qty	Use
7	Round hole pins	8	Attaches to the outer rack rails Note - Needed for round hole racks only

Installation Overview

Telescopic rails installation consists of these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching the outer rack rails to the rack
4. Installing the appliance in the rack

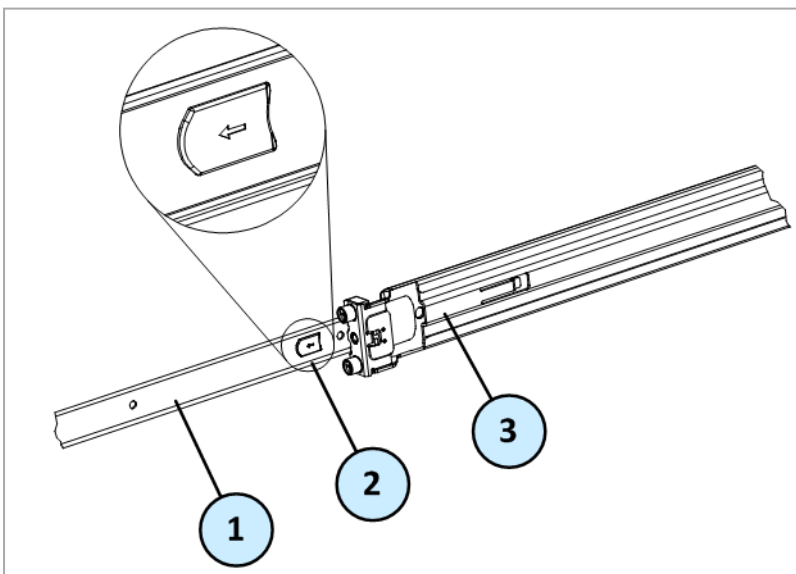
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Do steps 1 and 2 again for the other telescopic rack rail unit.



Legend

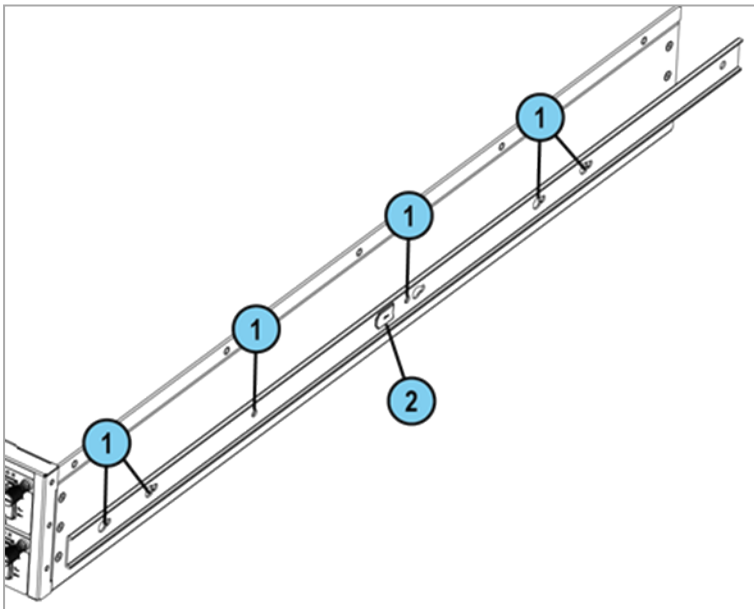
Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

1. Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail is longer than the appliance
2. Install the appliance rails to the side of the appliance with the six provided screws. Refer to the below appliance rail image.

Note - Do not over-tighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

3. Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.



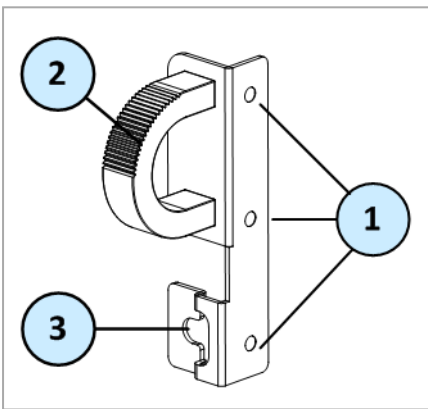
Legend

Item	Description
1	Appliance rail screws
2	Release latch (press this latch to remove the appliance from the rack)

Step 2 - Attaching the Ear Mounts

Attach the ear mounts to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws



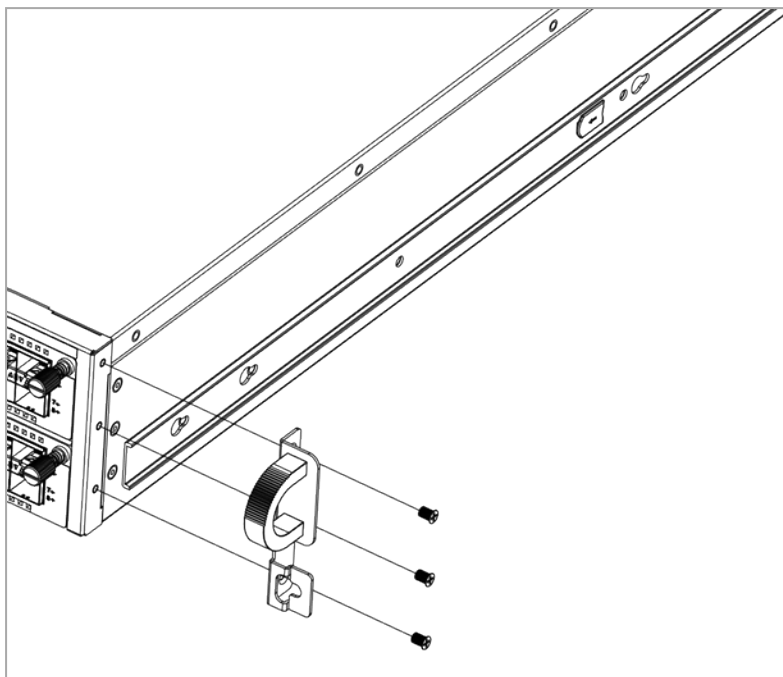
Legend

Item	Hardware Description	Use
1	Holes for ear bracket screws	Attaches ear mount to the appliance
2	Extraction handle	Pulls appliance away from the rack
3	Rack post mounting hole for the rack mounting screw	When the screw is fastened, the appliance cannot be pulled out of the rack

To attach the ear mounts to the appliance:

1. Place the ear mount on the side of the appliance near the front panel.
2. Attach the ear mount to the appliance with three ear bracket screws.

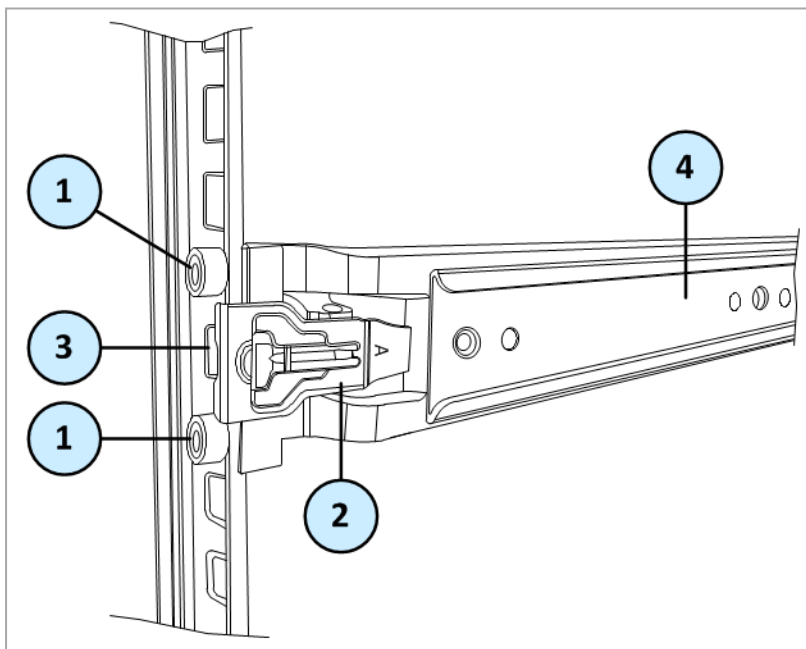
The 29200 Appliance is shown, but the ear mount attachment is the same for 19100/19200/29100.



3. Do steps 1 - 2 again for the other side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)

Legend (continued)

Item	Description
2	Securing clip
3	Screw hole for ear mount screw
4	Rack rail



To attach the outer rails to the rack:

1. If your rack has round holes, remove the screws from the end of the rack rail and replace them with the round hole pins.
2. Align the front end of the outer rail with the hole number.
 - The front securing clip is marked with the letter "A".
 - Make sure that the securing clip faces the inner part of the rack.
3. Press the securing clip and connect the outer rail to the rack.
 - For square-hole racks: Insert the screws into the rack holes.
 - For round-hole racks: Reattach the screws that you removed to the rack. Tighten the screws.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clip is marked with the letter "B".
5. Use an ear mount screw (with washer) to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

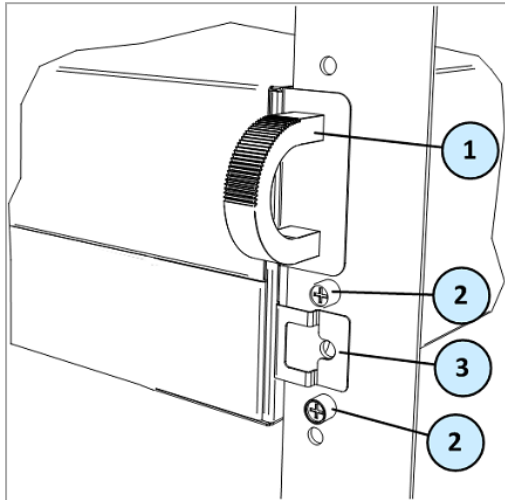
-  **Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
-  **Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

1. Align the appliance rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. Slide the appliance in and out of the rack several times to allow the rails to position properly.

Tighten all of the rail mounting screws.

- For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 3 in the next figure).



Legend

Item	Description
1	Extraction handle
2	Rack rail screws
3	Rack post mounting hole for rack mount screw

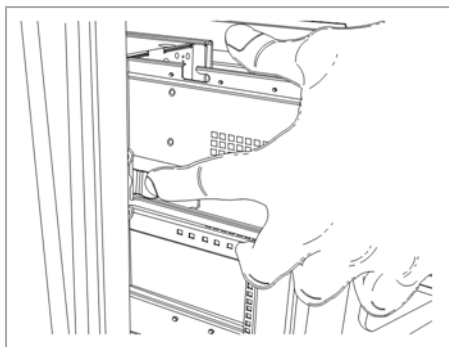
Removing the Appliance

- Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

- Remove the rack mounting screws from the rack post mounting holes that attach the ear mounts to the rack.
- Pull the appliance away from the rack as far as possible.
The release strip on the telescopic rails stops the appliance from sliding too far.
- On the appliance rails:

- Press and hold the release strips to unlock the telescopic rails.
- Pull out the appliance from the rack.



Appliance Air Vents

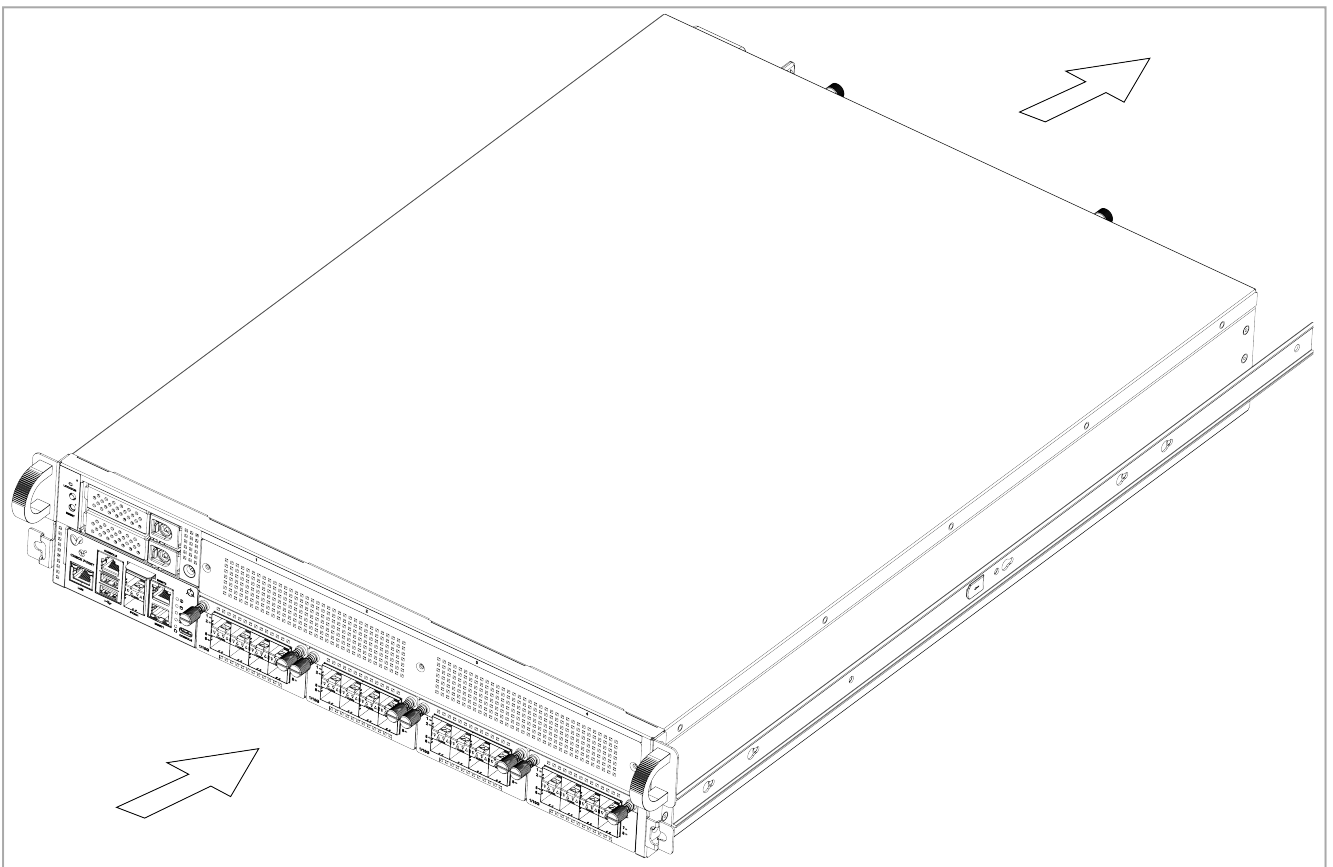
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in 19100, 19200, 29100, and 29200 appliances (image shows the 19200 model):



9100, 9200, 9300, 9400, 9700, and 9800


Check Point appliances are mounted in racks with telescopic (sliding) rails or fixed rails depending on the appliance model.

These Check Point appliances are designed to be used with telescopic rails:

- 9300
- 9400
- 9700
- 9800

These Check Point appliances come equipped by default with fixed rails:

- 9100
- 9200

 **Note** - 9100 / 9200 appliances can be installed with telescopic rails (as an optional accessory).

General Requirements for Racks

Check Point 1U appliances are designed for a standard 19-inch (48.26 cm) rack (see specification EIA-310-D). The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails can be used with racks that have round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door

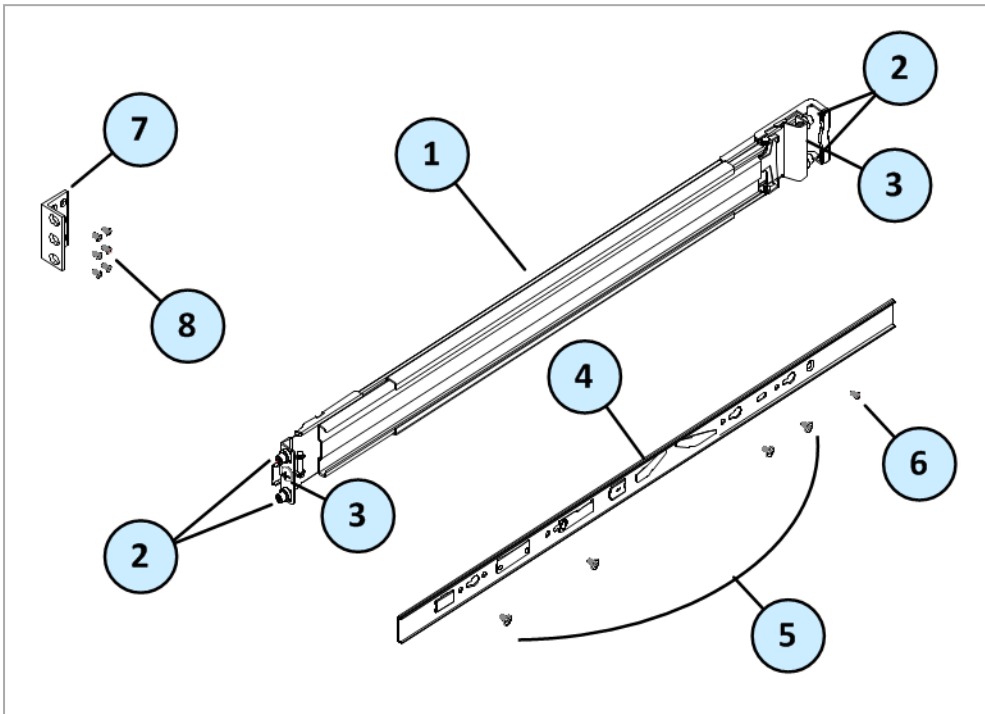
These are the physical specifications of the appliances:

Legend

Appliance	Width	Depth	Height	Rack Unit
9800	17.20 in (43.8 cm)	20 in (50.8 cm)	1.73 in (4.4 cm)	1U
9700				
9400				
9300				
9200				
9100				

Telescopic Rails

Telescopic Rails Hardware



Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws.

Item	Hardware Description	Qty.	Use	Label
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack	No label
2	Square-hole rack screws	8	Come attached to the outer rack rails to be used with square holed racks	No label
2	Round-hole rack screws	8	For use with round-hole racks only. Replace the original square-hole rack screws with the round-hole rack screws.	Round-hole rack screws P/N for Round Hole 7.1 x8pcs

Item	Hardware Description	Qty.	Use	Label
3	Rack mounting screws	4	At front of appliance - Attaches the ear mounts to the rack, which prevents movement of the appliance. At back of appliance - Attaches the outer rack rail to the rack.	Rack mounting screws M5x20L x4PCS
4	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance	No label
5	Appliance rail screws	8	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x8pcs
6	Appliance rail screws	2	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x2pcs
7	Ear mount bracket **	2	Attaches the appliance to the rack	Rack Ear
8	Ear mount bracket screws**	12 / 6	Attaches the ear mounts to the appliance. The number of screws depends on appliance model.	Rack Ear screw

** The ear mount bracket and screws are delivered as accessories together with the appliance.

Installation Overview

Telescopic rails installation includes these procedures:

- Attaching the inner rails to the appliance
- Attaching the ear mounts to the appliance
- Attaching round-hole rack screws (if you are using round-hole racks)
- Attaching the outer rack rails to the rack
- Installing the appliance in the rack

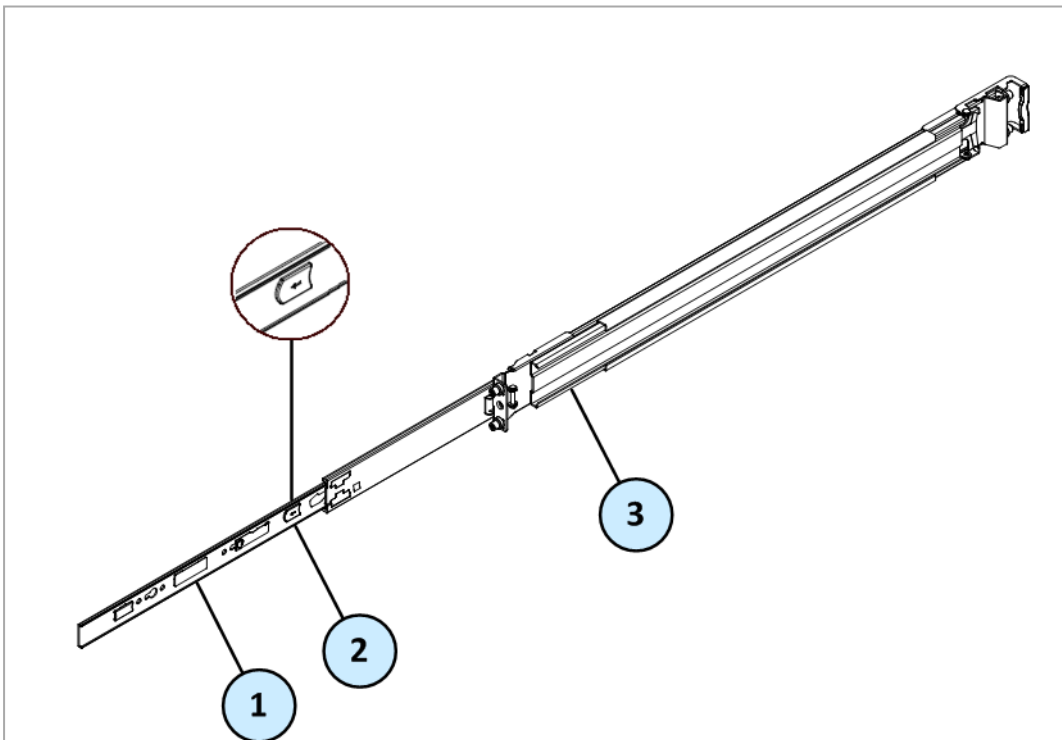
Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Repeat steps 1 and 2 for the other telescopic rack rail unit.



Legend

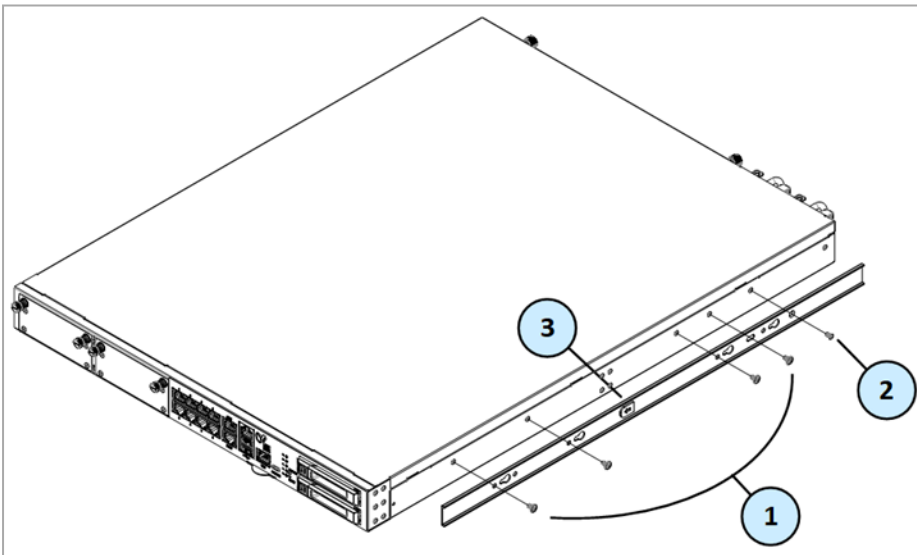
Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

- Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail extends past the back panel of the appliance
- Install the appliance rails to the side of the appliance with the provided screws. Refer to the below appliance rail image.

Note - Do not overtighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

- Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.



Legend

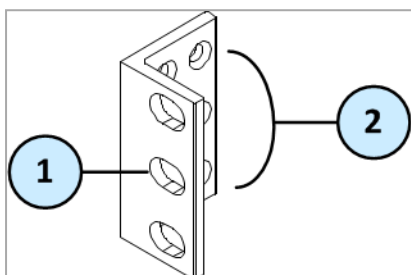
Item	Description
1	Appliance rail screws - Four for each inner rail
2	Appliance rail screws - One for each inner rail

Legend (continued)

Item	Description
3	Release latch

Attaching the Ear Mount Brackets

Attach the ear mounts to the left and right side of the front of the appliance to lock the appliance into the rack.

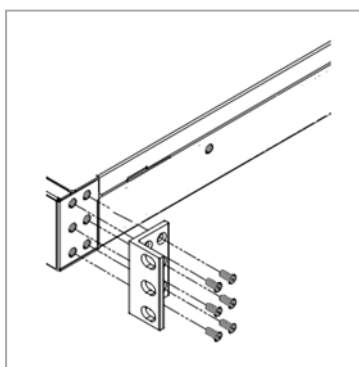


Legend

Item	Hardware Description	Use
1	Rack post mounting hole for the rack mounting screws	When the screw is fastened, the appliance cannot be pulled out of the rack
2	Holes for ear mount bracket screws	Attaches the ear mount to the appliance

To attach the ear mount brackets to the appliance:

1. Place the ear mount bracket on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance using the six ear mount bracket screws.



3. Do steps 1 - 2 again for the other side of the appliance.

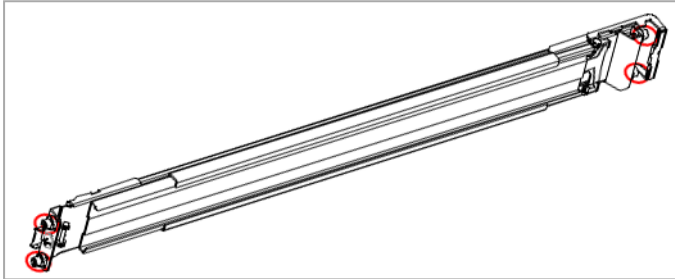
Preparing Round-Hole Rack Rails

If you use round-hole racks, you must replace the eight square-hole rack screws that come attached to the outer rack rails with the eight supplied round-hole rack screws.

Do this procedure before you attach the outer rack rails to the rack.

To attach the round-hole rack screws:

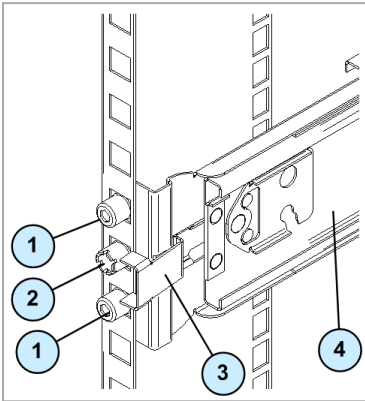
1. Use a screwdriver to remove the square-hole rack screws from the front and back of the outer rack rail.



2. Replace with four of the supplied round-hole rack screws.
3. Do steps 1 - 2 again for the other outer rack rail.

Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



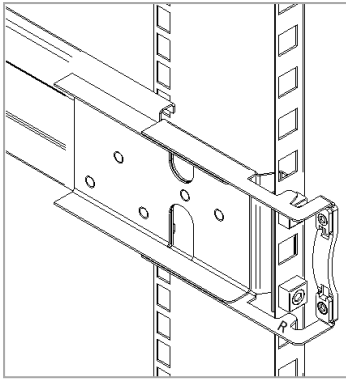
Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Screw hole with rack mounting screw
3	Securing clip
4	Rack rail

To attach the outer rails to the rack:

1. If your rack has round holes, make sure to complete ["Preparing Round-Hole Rack Rails" on the previous page](#).
2. Align the front end of the outer rail with the hole number.
 - Make sure that the securing clip faces the inner part of the rack.
3. Gently pull forward and connect the outer rail to the rack by inserting the rack rail screws into the rack holes.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clips are marked with the letters R (for the right rack rail) and L (for the left rack rail).



5. Use a rack mounting screw to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

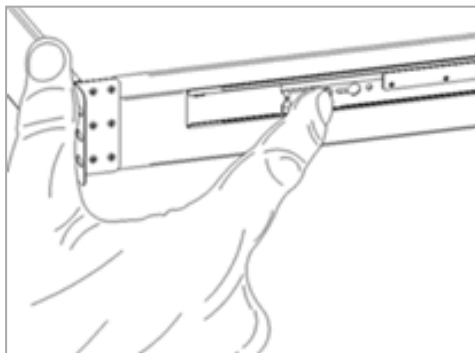
Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To install the appliance in the rack:

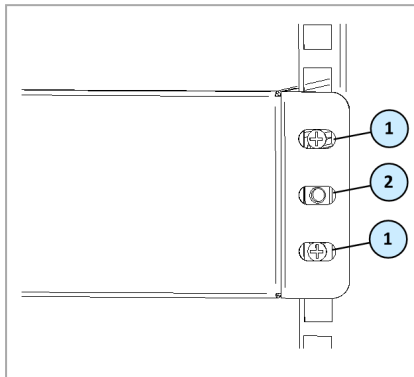
1. Align the inner rack rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. On the appliance rails:
 - Press and pull gently on the blue release strips on both sides of the appliance.
 - While continuously holding the blue release strips, push the appliance into the rack.



4. Tighten all of the rail mounting screws.

- For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 2 in the figure).



Legend

Item	Description
1	Rack rail screws attached to the outer rack rail
2	Rack post mounting hole for rack mount screw

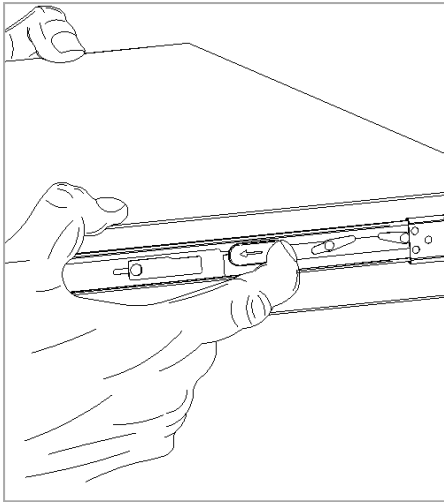
Removing the Appliance

Unlock the telescopic rails to remove the appliance from the rack.

- Important** - To prevent injury or damage, at least two people are required to remove the appliance from the rack.

To remove the appliance from the rack:

- Remove the rack mounting screws in the ear mounts to enable the telescopic rails.
- Move the appliance away from the rack as far as possible.
- On the inner rack rail, press and pull on the white release levers on both sides of the appliance.



4. While holding the appliance, move the appliance away from the rack rail.

Fixed Rails

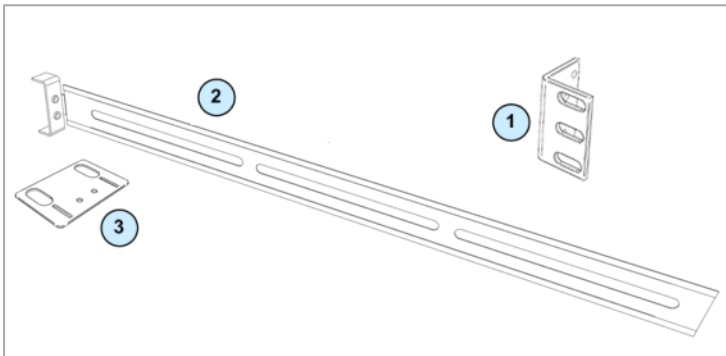
This section describes how to mount the appliance in a rack with fixed rails.

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Hardware and Tools

The 9100 and 9200 Check Point appliances come equipped by default with fixed rails.

You must install rack mounting hardware on the appliance before you mount it in a rack. These rack mounting components are included in the kit.



Legend

Item	Hardware Description	Qty.	Use	Label
1	Ear mount bracket	2	Attaches to the appliance front panel. Both ear mount brackets are identical.	Rack Ear
	Ear mount screws	12	Secures the ear mount brackets to the appliance front panel. These screw heads are smaller (5 mm).	Rack Ear Screw: 12pcs
2	Mounting bracket	2	Attaches to the appliance. Both mounting brackets are identical.	No label
3	Adapter	2	Attaches to the mounting brackets. Both adapters are identical.	Rack Bracket
	Mounting bracket screws	12	Secures the adapters to the mounting brackets and the mounting brackets to the appliance. These screw heads are larger (8 mm).	Rack Bracket Screw: 12pcs

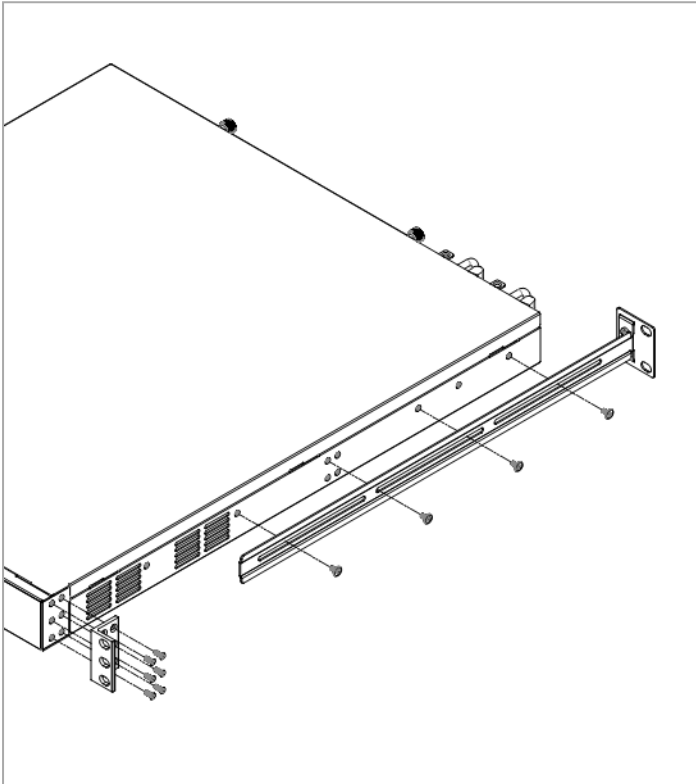
Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.

Note - Screws to attach the ear mount brackets and rail plates to the rack are not included.

Attaching the Ear Mount Brackets to the Appliance

Attach the two ear mount brackets to the front of the appliance. .



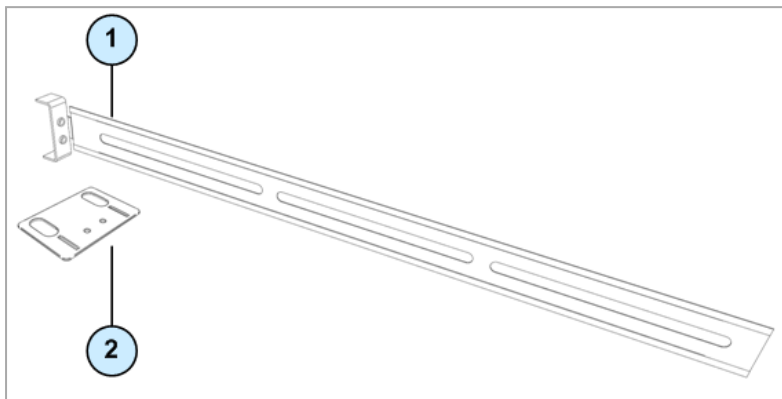
Note - The ear mount screws have 5 mm heads.

To attach the ear mount brackets to the appliance:

1. Attach the appliance ear bracket to one side of the appliance using three or six ear mount screws (depending on the appliance model).
2. Do step 1 again for the other side of the appliance.

Attaching the Rail Plates

Attach the adapters to the mounting brackets to connect the appliance to the rear vertical rails of the rack.



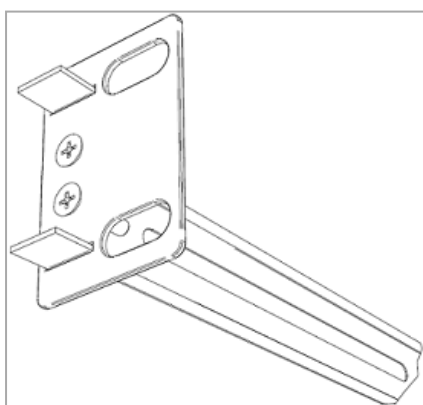
Legend

Item	Description
1	Mounting bracket
2	Adapter

i **Note** - The mounting bracket screws have 8 mm heads.

To attach the adapters:

1. Attach an adapter to a mounting bracket using two mounting bracket screws.
2. Do step 1 again for the other adapter and mounting bracket.

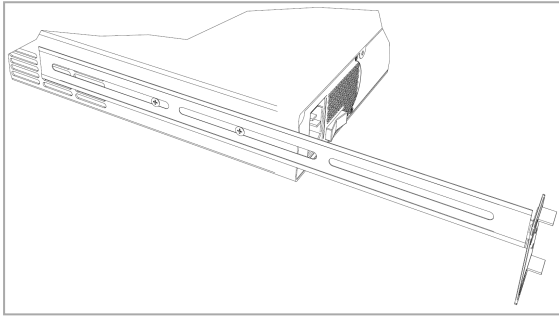


Attaching the Mounting Brackets to the Appliance

Attach the mounting brackets to the sides of the appliance. Align the adapters to connect the mounting brackets to the rear of the rack. Note that the mounting bracket screws have 8 mm heads.

To attach the mounting brackets:

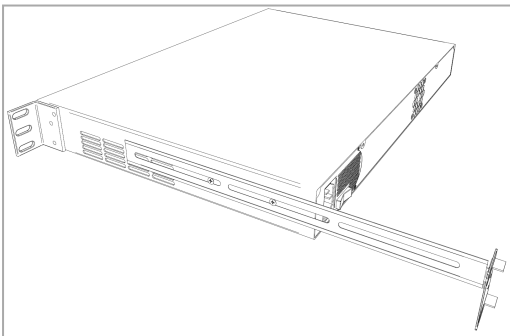
1. Place the mounting bracket on the side of the appliance with the protruding side of the bracket facing away from the appliance.



2. Attach the mounting bracket to the appliance using three mounting bracket screws.
3. Do steps 1 and 2 again for the other side of the appliance.

Installing the Appliance in the Rack

Install the appliance in the rack. It may be necessary to adjust the mounting brackets to secure the appliance to the rack.



i Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

To install the appliance in the rack:

1. Attach the ear mount brackets to the front of the rack.
2. Attach the adapters to the rear of the rack.
3. Confirm that the appliance is stable and secure in the rack.

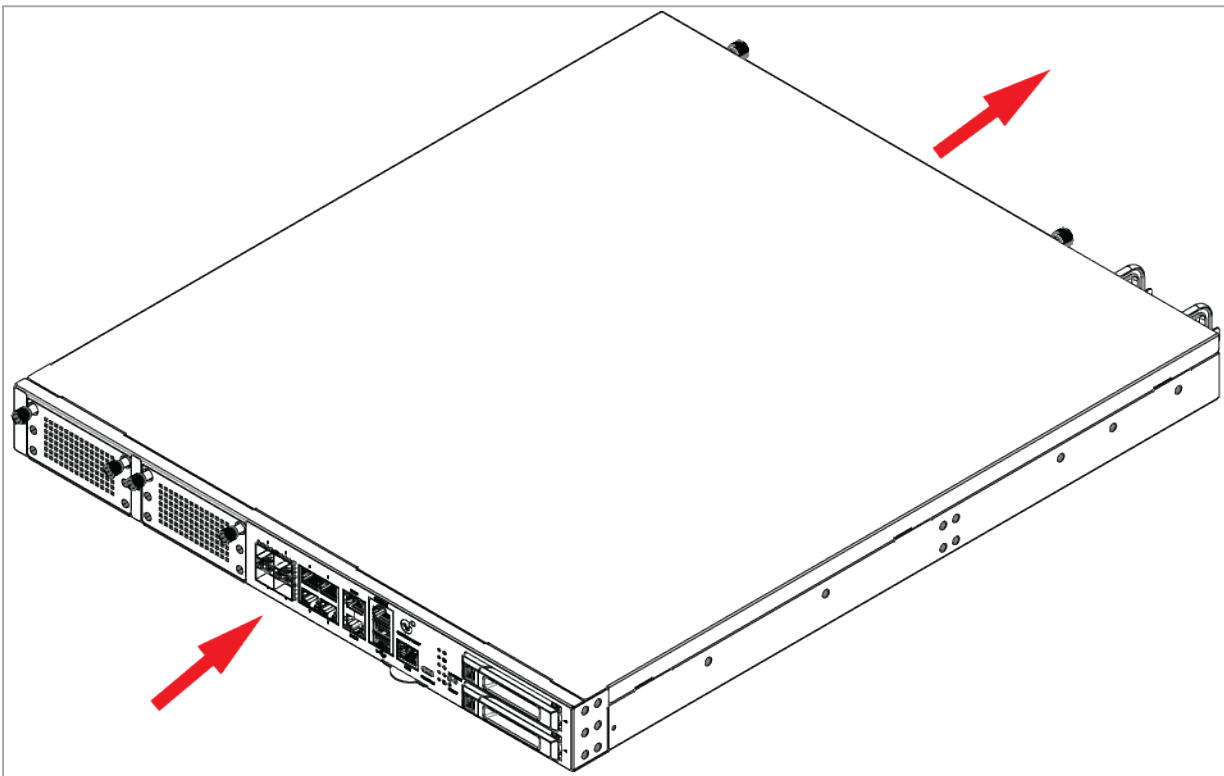
Appliance Air Vents

Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance. These appliances are specifically designed to install with these rails.

The appliance shown is 9800, but the air flow is the same for all appliances.



MLS200

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

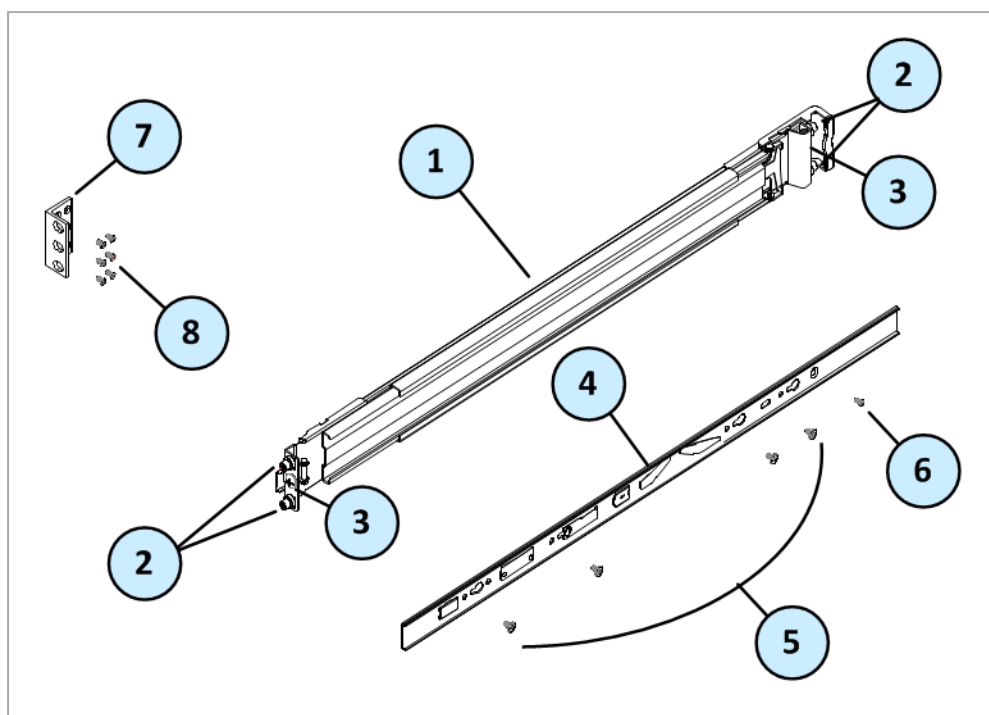
Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliance:

Legend

Appliance	Width	Depth	Height	U
MLS200	438 mm 17.24 in	580 mm 22.83 in	44 mm 1.73 in	1U

Telescopic Rails Hardware



Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.

Legend

Item	Hardware Description	Qty	Use	Label
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack	No label
2	Square-hole rack screws	8	Come attached to the outer rack rails to be used with square holed racks	No label
2	Round-hole rack screws	8	For use with round-hole racks only. Replace the original square-hole rack screws with the round-hole rack screws.	Round-hole rack screws P/N for Round Hole 7.1 x 8pcs

Legend (continued)

Item	Hardware Description	Qty	Use	Label
3	Rack mounting screws	4	At front of appliance - Attaches the ear mounts to the rack, which prevents movement of the appliance. At back of appliance - Attaches the outer rack rail to the rack.	Rack mounting screws M5x20L x 4pcs
4	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance	No label
5	Appliance rail screws	8	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x 8pcs
6	Appliance rail screws	2	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x 2pcs
7	Ear mount bracket **	2	Attaches the appliance to the rack	Assembly kit
8	Ear mount bracket screws **	12	Attaches the ear mounts to the appliance.	Rack Ear screw

** The ear mount bracket and screws are delivered as accessories together with the appliance.

Installation Overview

Telescopic rails installation includes these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching round-hole rack screws (if you are using round-hole racks)
4. Attaching the outer rack rails to the rack
5. Installing the appliance in the rack

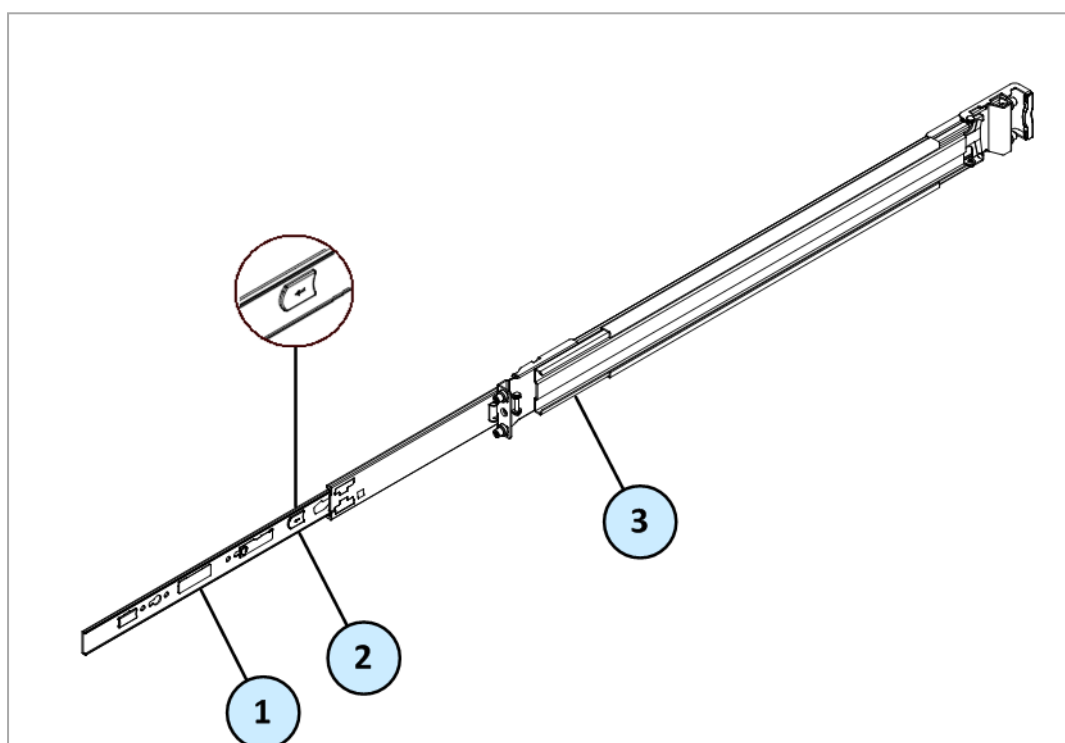
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Do steps 1 and 2 again for the other telescopic rack rail unit.



Legend

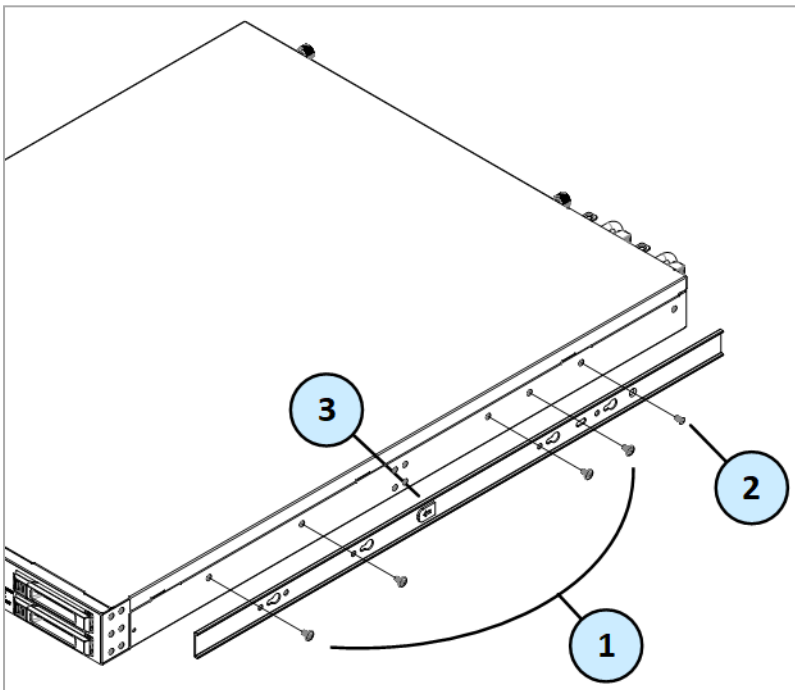
Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

1. Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail extends past the back panel of the appliance
2. Install the appliance rails to the side of the appliance with the provided screws.

Note - Do not overtighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

3. Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.

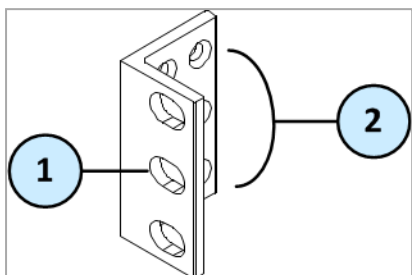


Legend

Item	Description
1	Appliance rail screws - Four for each inner rail
2	Appliance rail screws - One for each inner rail
3	Release latch

Step 2 - Attaching the Ear Mount Brackets

Attach the ear mounts to the left and right side of the front of the appliance to lock the appliance into the rack.

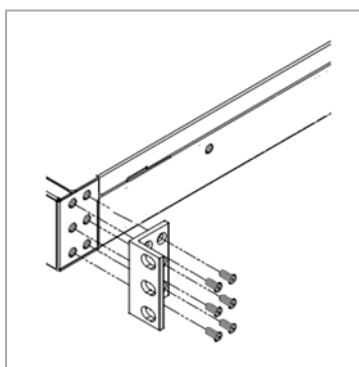


Legend

Item	Hardware Description	Use
1	Rack post mounting hole for the rack mounting screws	When the screw is fastened, the appliance cannot be pulled out of the rack
2	Holes for ear mount bracket screws	Attaches the ear mount to the appliance

To attach the ear mount brackets to the appliance:

1. Place the ear mount bracket on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance using the six ear mount bracket screws.



3. Do steps 1 - 2 again for the other side of the appliance.

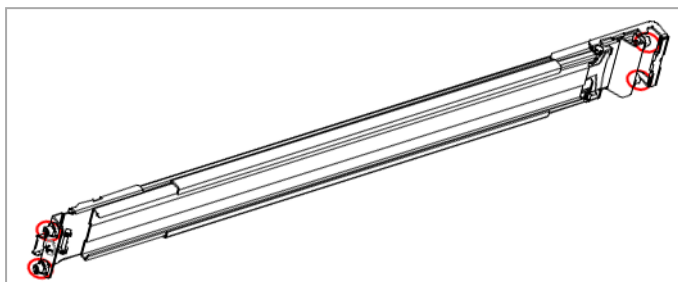
Step 3 - Preparing Round-Hole Rack Rails

If you use round-hole racks, you must replace the eight square-hole rack screws that come attached to the outer rack rails with the eight supplied round-hole rack screws.

Do this procedure before you attach the outer rack rails to the rack.

To attach the round-hole rack screws:

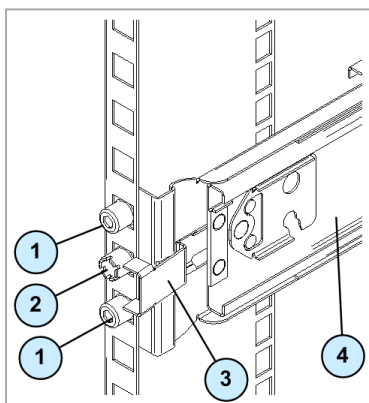
1. Use a screwdriver to remove the square-hole rack screws from the front and back of the outer rack rail.



2. Replace with four of the supplied round-hole rack screws.
3. Do steps 1 - 2 again for the other outer rack rail.

Step 4 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



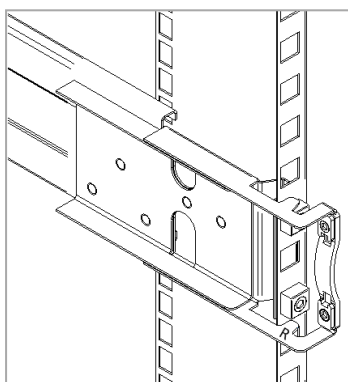
Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Screw hole with rack mounting screw
3	Securing clip
4	Rack rail

To attach the outer rails to the rack:

1. If your rack has round holes, make sure to complete ["Step 3 - Preparing Round-Hole Rack Rails" on page 114](#).
2. Align the front end of the outer rail with the hole number.
Make sure that the securing clip faces the inner part of the rack.
3. Gently pull forward and connect the outer rail to the rack by inserting the rack rail screws into the rack holes.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clips are marked with the letters **R** (for the right rack rail) and **L** (for the left rack rail).



5. Use a rack mounting screw to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

Step 5 - Installing the Appliance in the Rack

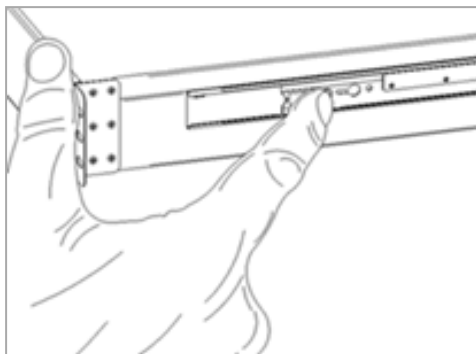
Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To install the appliance in the rack:

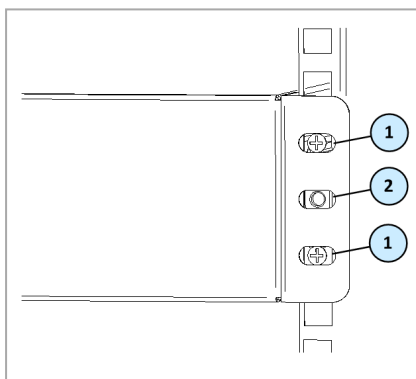
1. Align the inner rack rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. On the appliance rails:

- a. Press and pull gently on the blue release strips on both sides of the appliance.
- b. While continuously holding the blue release strips, push the appliance into the rack.



4. Tighten all of the rail mounting screws.
5. For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 2 in the figure).



Legend

Item	Description
1	Rack rail screws attached to the outer rack rail
2	Rack post mounting hole for rack mount screw

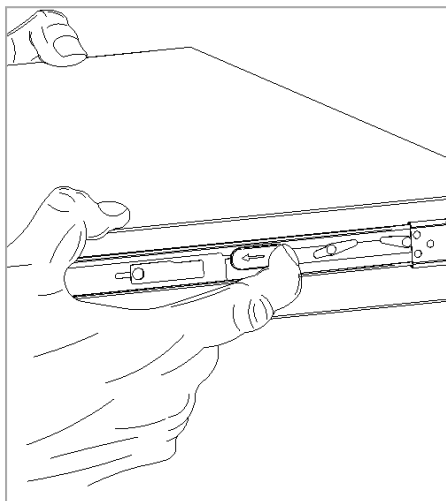
Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

Unlock the telescopic rails to remove the appliance from the rack.

To remove the appliance from the rack:

1. Remove the rack mounting screws in the ear mounts to enable the telescopic rails.
2. Move the appliance away from the rack as far as possible.
3. On the inner rack rail, press and pull on the white release levers on both sides of the appliance.



4. While holding the appliance, move the appliance away from the rack rail.

Appliance Air Vents

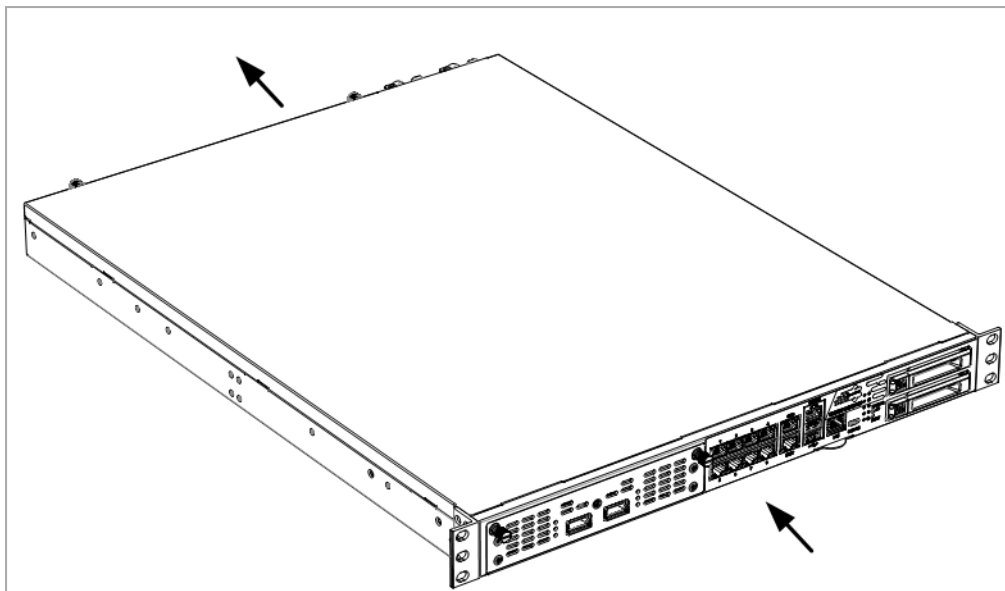
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in MLS200 appliances:



MLS400

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

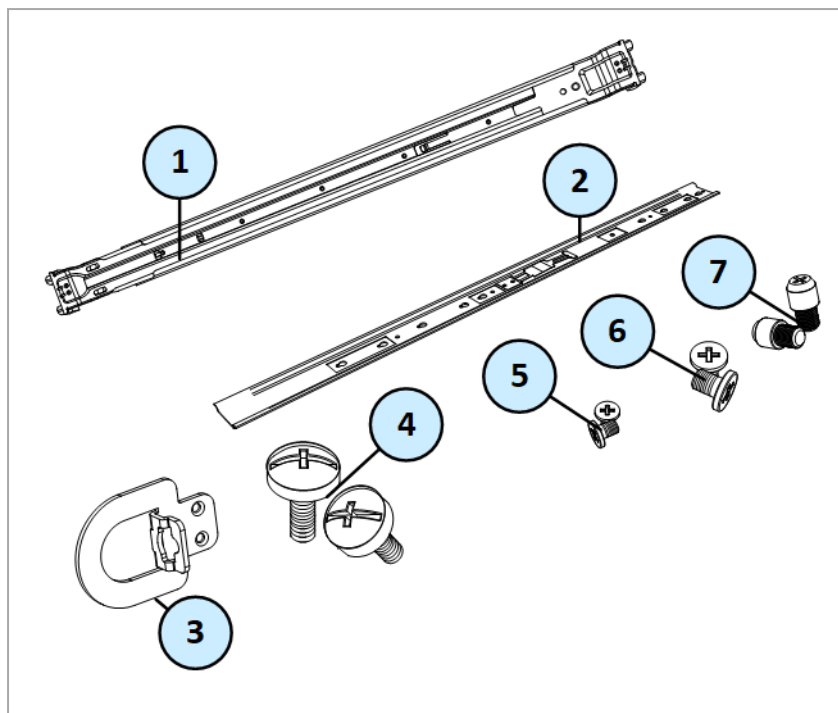
These are the physical specifications of the appliance:

Legend

Security Appliance	Width	Depth	Height	U
MLS400	442 mm 17.4 in	610 mm 24 in	44 mm 1.73 in	1U

Telescopic Rails Hardware

i Important - We recommend that at least two people work together to install the appliance in a rack to prevent injury, or damage to the appliance.



Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.

Legend

Item	Hardware Description	Qty	Use
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack
2	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance
3	Ear mount bracket	2	Attaches the appliance to the rack
4	Rack mounting screws	4	Attaches the ear mounts to the rack, which prevents movement of the appliance
5	Appliance rail screws	12	Attaches the appliance rails to the appliance
6	Ear mount bracket screws	4	Attaches the ear mounts to the appliance
7	Round hole pins	8	Attaches to the outer rack rails Note - Needed for round hole racks only

Installation Overview

Telescopic rails installation consists of these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching the outer rack rails to the rack
4. Installing the appliance in the rack

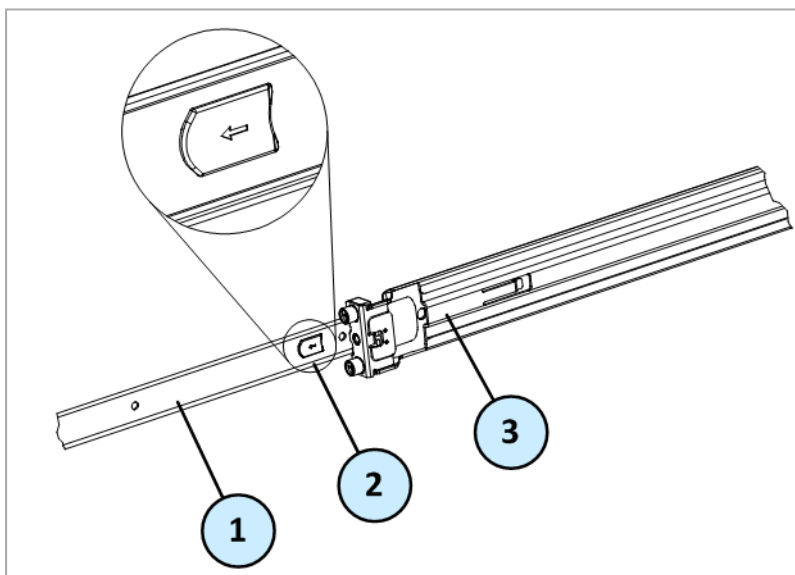
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.



Legend

Item	Description
1	Inner rack rail

Legend (continued)

Item	Description
2	Release latch
3	Outer appliance rail

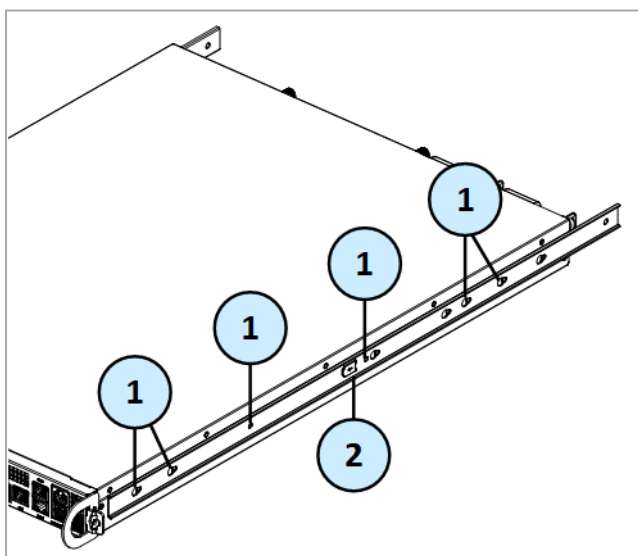
- Repeat steps 1 and 2 for the other telescopic rack rail unit.

To install the inner appliance rails to the appliance:

- Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail is longer than the appliance
- Install the appliance rails to the side of the appliance with the six provided screws. Refer to the below appliance rail image.

Note - Do not over-tighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

- Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.



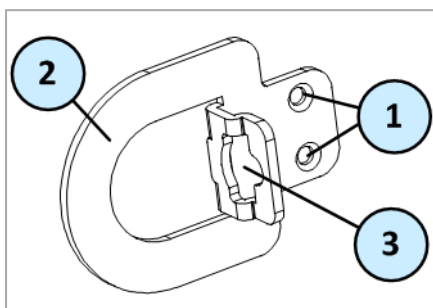
Legend

Item	Description
1	Appliance rail screws
2	Release latch (press this latch to remove the appliance from the rack)

Step 2 - Attaching the Ear Mounts

Attach the ear mounts to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws

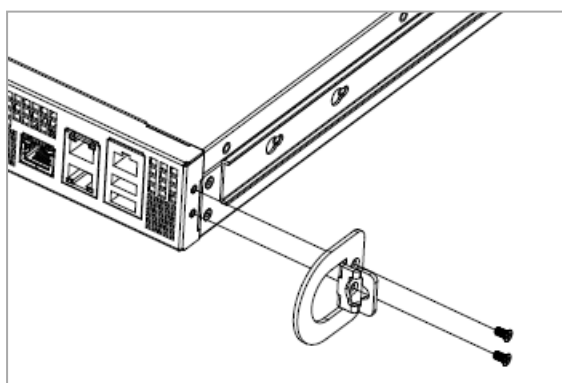


Legend

Item	Hardware Description	Use
1	Holes for ear bracket screws	Attaches ear mount to the appliance
2	Extraction handle	Pulls appliance away from the rack
3	Rack post mounting hole for the rack mounting screw	When the screw is fastened, the appliance cannot be pulled out of the rack

To attach the ear mounts to the appliance:

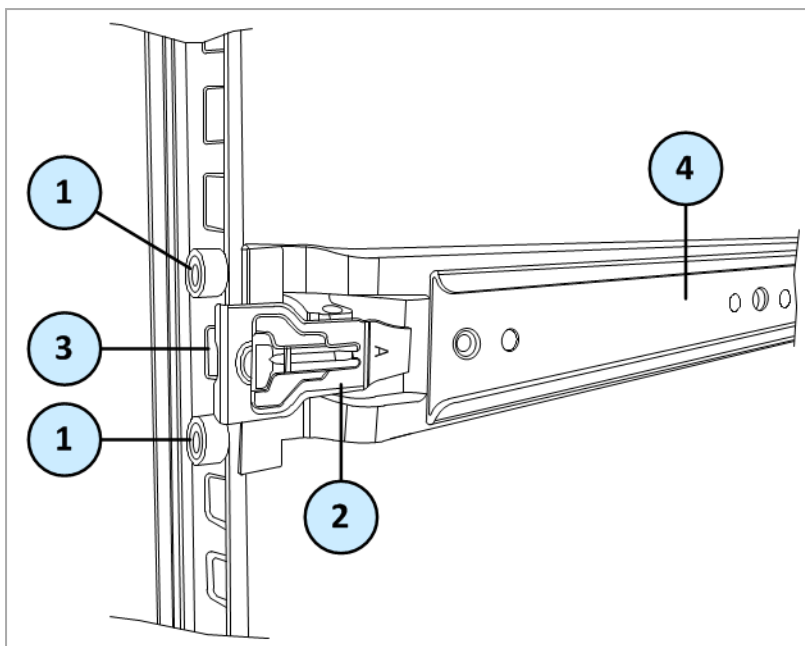
1. Place the ear mount on the side of the appliance near the front panel.
2. Attach the ear mount to the appliance using two bracket screws.



3. Do steps 1 - 2 again for the other side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Securing clip
3	Screw hole for ear mount screw
4	Rack rail

To attach the outer rails to the rack:

1. If your rack has round holes, remove the screws from the end of the rack rail and replace them with the round hole pins.
2. Align the front end of the outer rail with the hole number.
 - The front securing clip is marked with the letter A.
 - Make sure that the securing clip faces the inner part of the rack.
3. Press the securing clip and connect the outer rail to the rack.
 - For square-hole racks: Insert the screws into the rack holes.
 - For round-hole racks: Reattach the screws that you removed to the rack. Tighten the screws.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clip is marked with the letter B.

5. Use an ear mount screw (with washer) to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

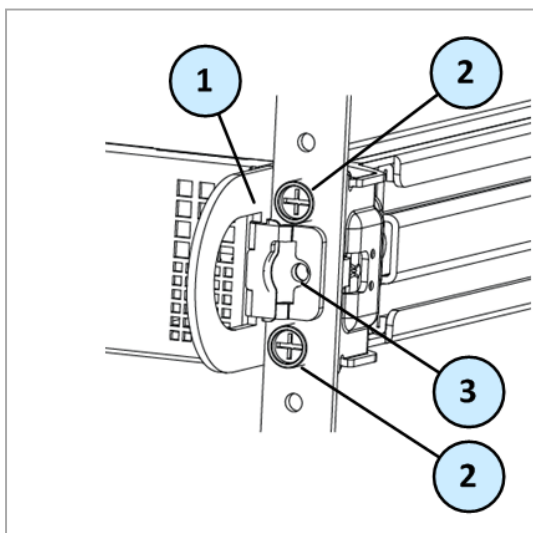
To install the appliance in the rack:

1. Align the appliance rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. Slide the appliance in and out of the rack several times to allow the rails to position properly.

Tighten all of the rail mounting screws.

4. For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 3 in the next figure).



Legend

Item	Description
1	Extraction handle

Legend (continued)

Item	Description
2	Rack rail screws
3	Rack post mounting hole for rack mount screw

Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

1. Remove the rack mounting screws from the rack post mounting holes that attach the ear mounts to the rack.
2. Pull the appliance away from the rack as far as possible.

The release strip on the telescopic rails stops the appliance from sliding too far.

3. On the appliance rails:
 - Press and hold the release strips to unlock the telescopic rails.
 - Pull out the appliance from the rack.



Appliance Air Vents

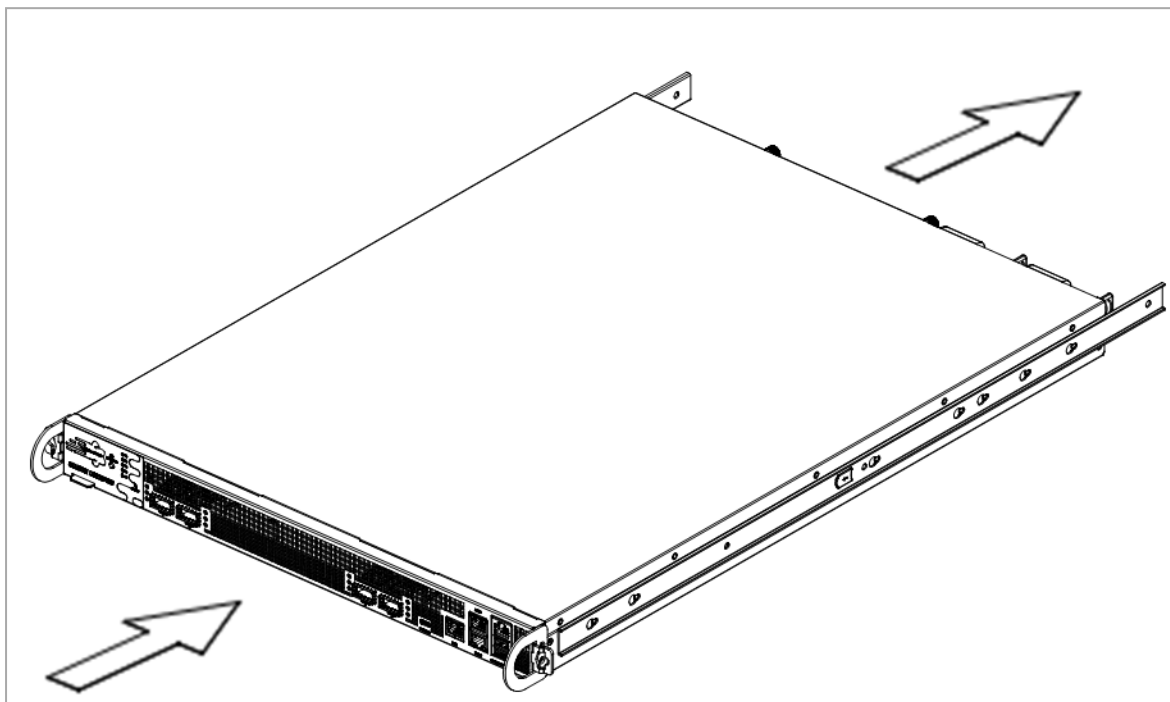
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

- i Important** - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in MLS400 appliances:



QLS250, QLS450, QLS650, and QLS800

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliances:

Legend

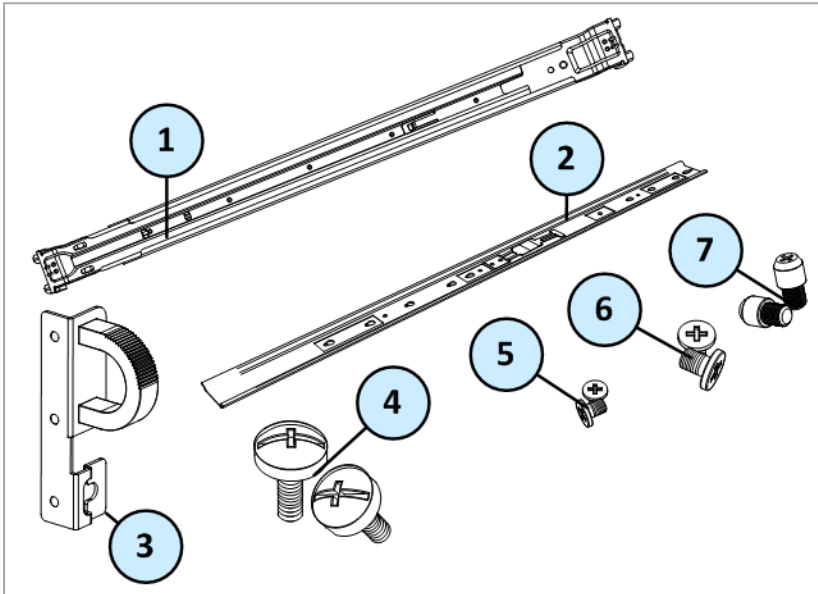
Security Appliance	Width	Depth	Height	U
QLS250	442 mm 17.4 in	610 mm 24 in	88 mm 3.5 in	2U
QLS450, QLS650, QLS800	442 mm 17.4 in	610 mm 24 in	132 mm 5.2 in	3U

Telescopic Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack
2	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance
3	Ear mount bracket	2	Attaches the appliance to the rack
4	Rack mounting screws	4	Attaches the ear mounts to the rack, which prevents movement of the appliance
5	Appliance rail screws	12	Attaches the appliance rails to the appliance
6	Ear mount bracket screws	6	Attaches the ear mounts to the appliance

Legend (continued)

Item	Hardware Description	Qty	Use
7	Round hole pins	8	Attaches to the outer rack rails Note - Needed for round hole racks only

Installation Overview

Telescopic rails installation consists of these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching the outer rack rails to the rack
4. Installing the appliance in the rack

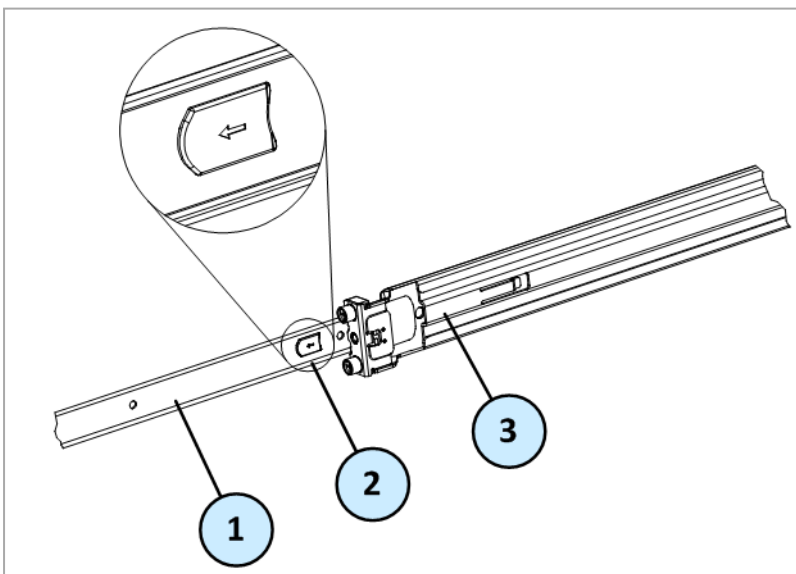
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Do steps 1 and 2 again for the other telescopic rack rail unit.



Legend

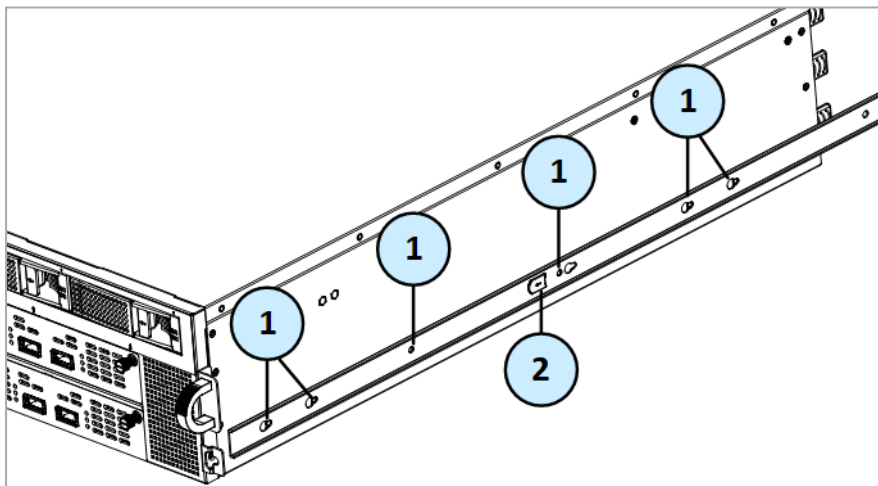
Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

- Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail is longer than the appliance
- Install the appliance rails to the side of the appliance with the six provided screws. Refer to the below appliance rail image.

Note - Do not over-tighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

- Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.



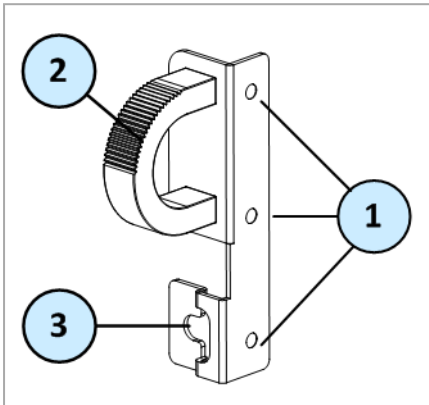
Legend

Item	Description
1	Appliance rail screws
2	Release latch (press this latch to remove the appliance from the rack)

Step 2 - Attaching the Ear Mounts

Attach the ear mounts to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws



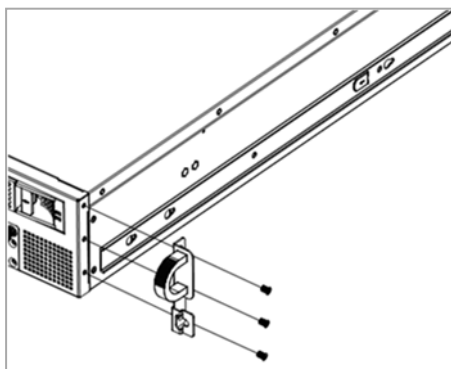
Legend

Item	Hardware Description	Use
1	Holes for ear bracket screws	Attaches ear mount to the appliance
2	Extraction handle	Pulls appliance away from the rack
3	Rack post mounting hole for the rack mounting screw	When the screw is fastened, the appliance cannot be pulled out of the rack

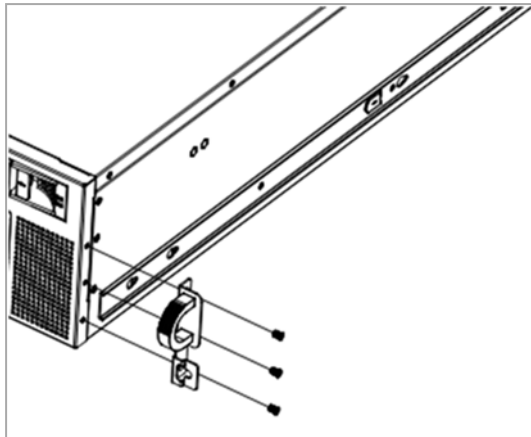
To attach the ear mounts to the appliance:

1. Place the ear mount on the side of the appliance near the front panel.
2. Attach the ear mount to the appliance with three ear bracket screws.

- QLS250:



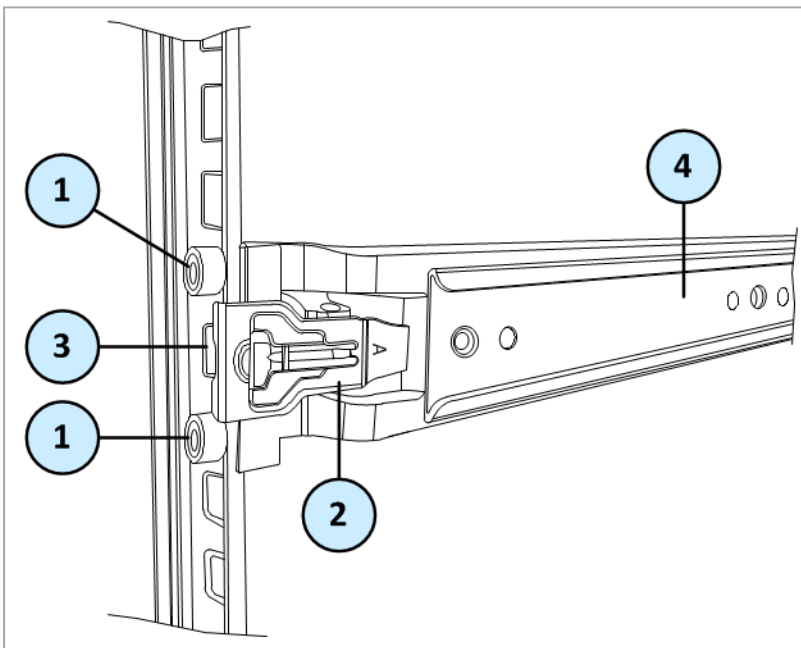
- QLS450, QLS650, and QLS800:



3. Do steps 1 - 2 again for the other side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Securing clip
3	Screw hole for ear mount screw
4	Rack rail



To attach the outer rails to the rack:

1. If your rack has round holes, remove the screws from the end of the rack rail and replace them with the round hole pins.
2. Align the front end of the outer rail with the hole number.
 - The front securing clip is marked with the letter "A".
 - Make sure that the securing clip faces the inner part of the rack.
3. Press the securing clip and connect the outer rail to the rack.
 - For square-hole racks: Insert the screws into the rack holes.
 - For round-hole racks: Reattach the screws that you removed to the rack. Tighten the screws.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clip is marked with the letter "B".
5. Use an ear mount screw (with washer) to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

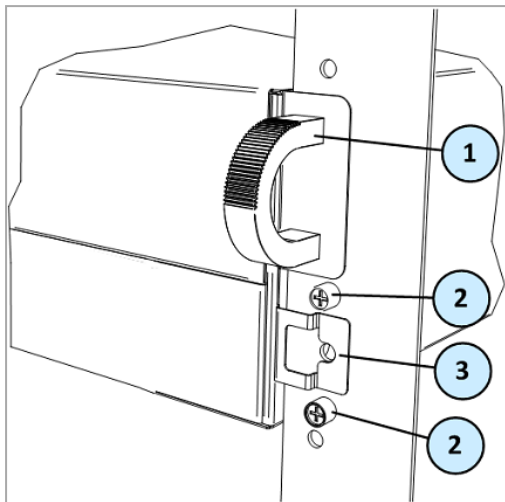
-  **Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
-  **Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

1. Align the appliance rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. Slide the appliance in and out of the rack several times to allow the rails to position properly.

Tighten all of the rail mounting screws.

4. For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 3 in the next figure).



Legend

Item	Description
1	Extraction handle
2	Rack rail screws
3	Rack post mounting hole for rack mount screw

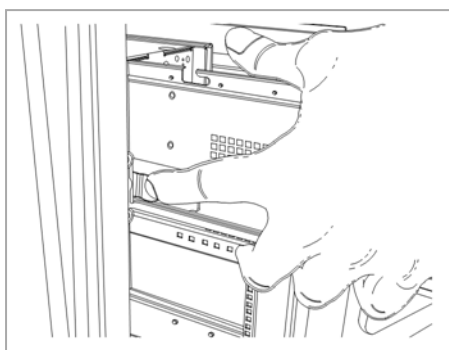
Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

1. Remove the rack mounting screws from the rack post mounting holes that attach the ear mounts to the rack.
2. Pull the appliance away from the rack as far as possible.
The release strip on the telescopic rails stops the appliance from sliding too far.
3. On the appliance rails:

- Press and hold the release strips to unlock the telescopic rails.
- Pull out the appliance from the rack.



Appliance Air Vents

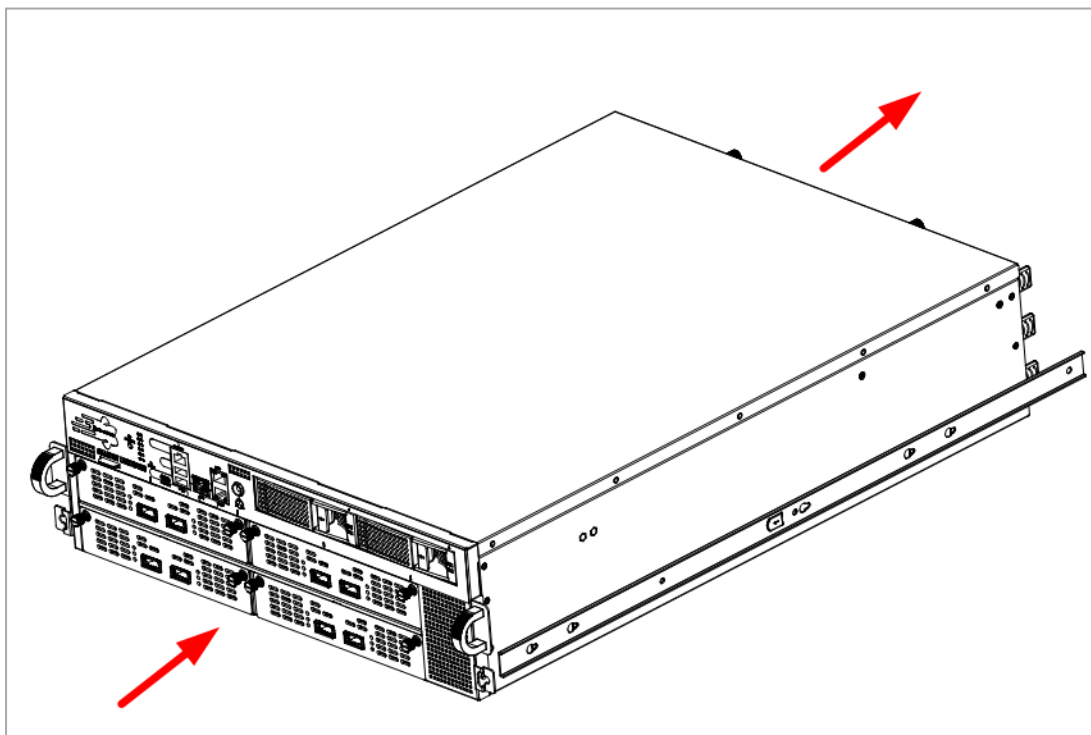
Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in QLS250, QLS450, QLS650, QLS800 appliances (image shows the QLS800 model):



TE2000XN

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliance:

Legend

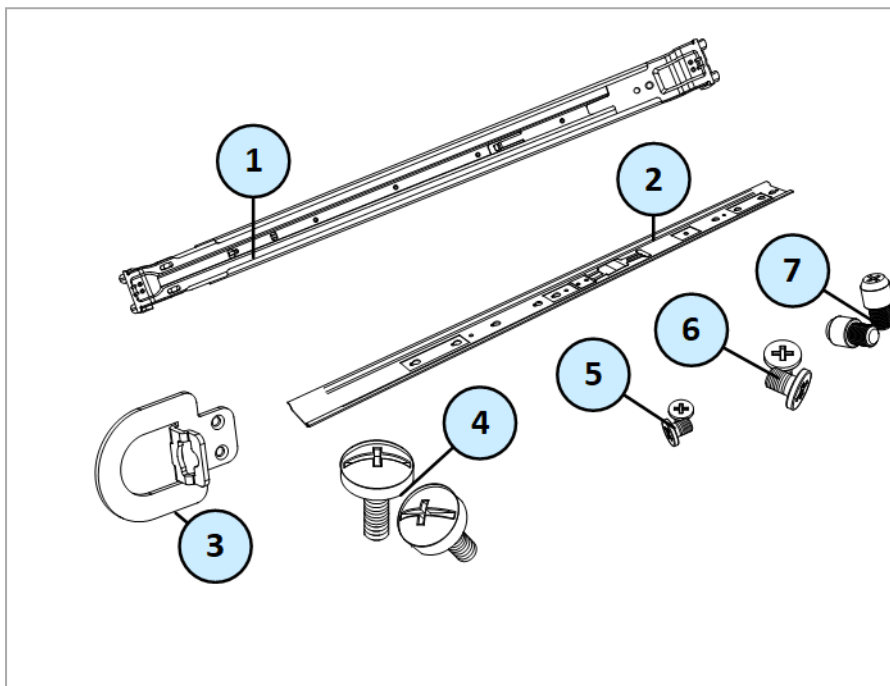
Appliance	Width	Depth	Height	U
TE2000XN	442 mm 17.4 in	610 mm 24 in	44 mm 1.73 in	1U

Telescopic Rails Hardware

Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack
2	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance
3	Ear mount bracket	2	Attaches the appliance to the rack
4	Rack mounting screws	4	Attaches the ear mounts to the rack, which prevents movement of the appliance
5	Appliance rail screws	12	Attaches the appliance rails to the appliance

Legend (continued)

Item	Hardware Description	Qty	Use
6	Ear mount bracket screws	4	Attaches the ear mounts to the appliance
7	Round hole pins	8	Attaches to the outer rack rails Note - Needed for round hole racks only

Installation Overview

Telescopic rails installation consists of these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching the outer rack rails to the rack
4. Installing the appliance in the rack

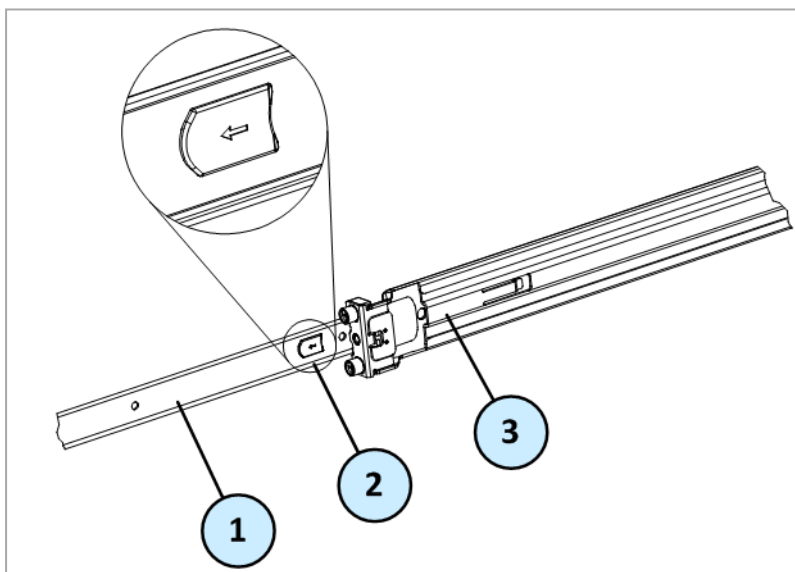
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.



Legend

Item	Description
1	Inner rack rail

Legend (continued)

Item	Description
2	Release latch
3	Outer appliance rail

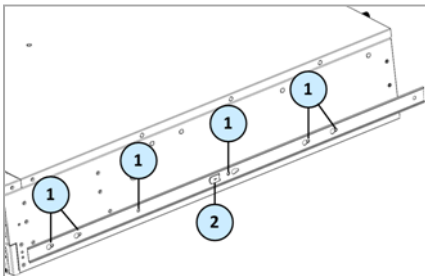
- Repeat steps 1 and 2 for the other telescopic rack rail unit.

To install the inner appliance rails to the appliance:

- Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail is longer than the appliance
- Install the appliance rails to the side of the appliance with the six provided screws. Refer to the below appliance rail image.

Note - Do not over-tighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.

- Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.



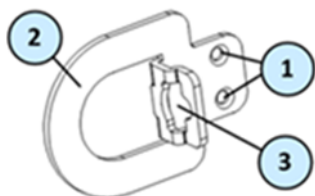
Legend

Item	Description
1	Appliance rail screws
2	Release latch (press this latch to remove the appliance from the rack)

Step 2 - Attaching the Ear Mounts

Attach the ear mounts to the left and right side of the front of the appliance to allow:

- Easy pulling in and pulling out of the appliance while it is in the rack using the extraction handles
- Locking the appliance into the rack using the rack mounting screws

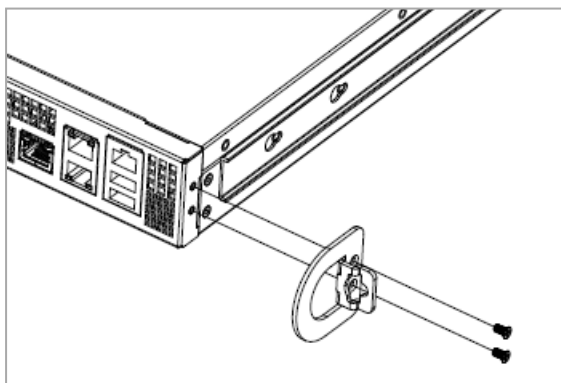


Legend

Item	Hardware Description	Use
1	Holes for ear bracket screws	Attaches ear mount to the appliance
2	Extraction handle	Pulls appliance away from the rack
3	Rack post mounting hole for the rack mounting screw	When the screw is fastened, the appliance cannot be pulled out of the rack

To attach the ear mounts to the appliance:

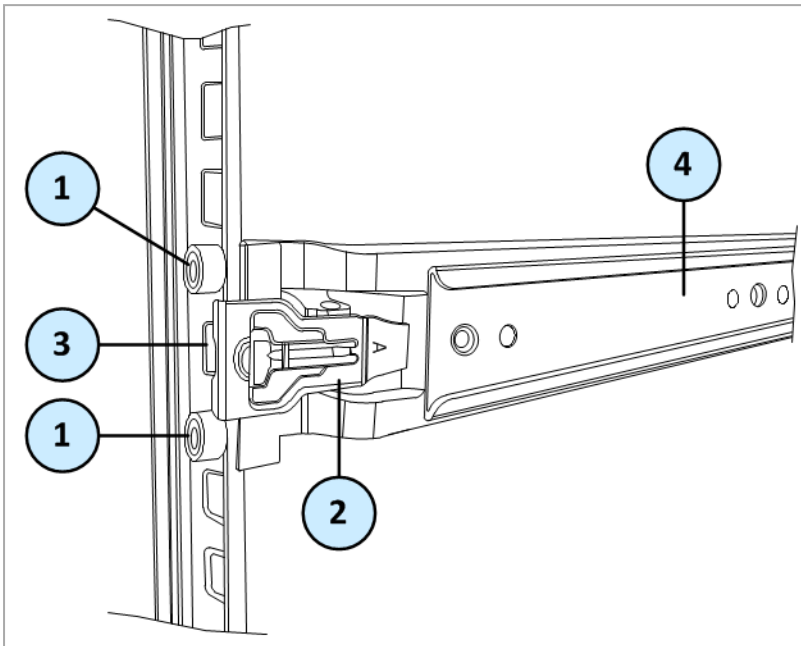
1. Place the ear mount on the side of the appliance near the front panel.
2. Attach the ear mount to the appliance using two ear bracket screws.



3. Do steps 1 - 2 again for the other side of the appliance.

Step 3 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Securing clip
3	Screw hole for ear mount screw
4	Rack rail



To attach the outer rails to the rack:

1. If your rack has round holes, remove the screws from the end of the rack rail and replace them with the round hole pins.
2. Align the front end of the outer rail with the hole number.
 - The front securing clip is marked with the letter A.
 - Make sure that the securing clip faces the inner part of the rack.
3. Press the securing clip and connect the outer rail to the rack.

- For square-hole racks: Insert the screws into the rack holes.
 - For round-hole racks: Reattach the screws that you removed to the rack. Tighten the screws.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.
The rear securing clip is marked with the letter B.
 5. Use an ear mount screw (with washer) to secure the rear end of the outer rail to the rack.
 6. Do steps 1 - 5 again for the other outer rail.

Step 4 - Installing the Appliance in the Rack

Install the appliance in the telescopic rails in the rack.

-  **Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
-  **Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

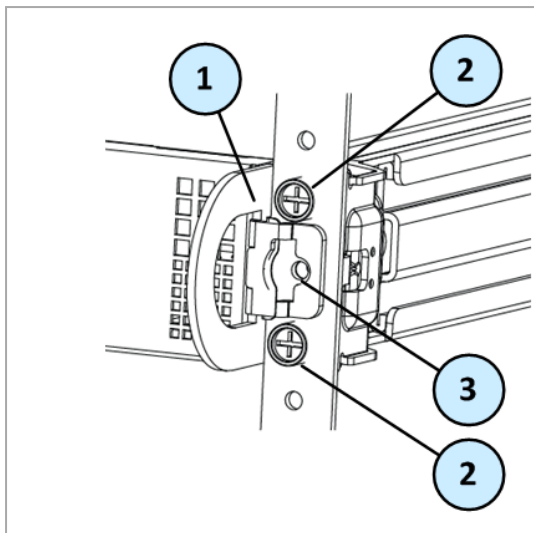
To install the appliance in the rack:

1. Align the appliance rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. Slide the appliance in and out of the rack several times to allow the rails to position properly.

Tighten all of the rail mounting screws.

4. For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 3 in the next figure).



Legend

Item	Description
1	Extraction handle
2	Rack rail screws
3	Rack post mounting hole for rack mount screw

Removing the Appliance

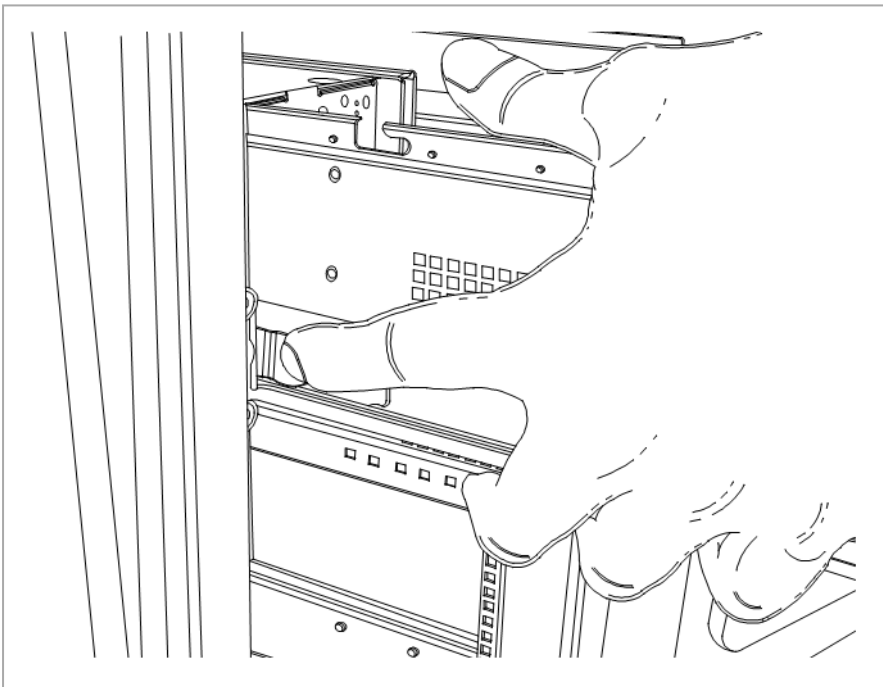
- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To remove the appliance from the rack:

1. Remove the rack mounting screws from the rack post mounting holes that attach the ear mounts to the rack.
2. Pull the appliance away from the rack as far as possible.

The release strip on the telescopic rails stops the appliance from sliding too far.

3. On the appliance rails:
 - Press and hold the release strips to unlock the telescopic rails.
 - Pull out the appliance from the rack.



Appliance Air Vents

Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in TE2000XN appliances:



TE250XN

General Requirements for Racks

Check Point appliances are designed for a standard 19-inch (48.26 cm) rack. For more information, see the specification EIA-310-D. The telescopic rails are designed for racks with these specifications:

Legend

Minimum Depth	Maximum Depth
22 inches (55.9 cm)	32 inches (81.3 cm)
24 inches (61 cm)	36 inches (91.4 cm)

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescopic rails.

The telescopic rails support racks with either round holes or square holes.

Legend

Rack Side	Clearance Requirement
Front	36 in (91.4 cm) plus additional clearance, if necessary, for the mechanical lift used to move the appliance and rails equipment.
Rear	16 in (40.6 cm) from the rear of the rack or appliance without the rear cabinet door. 22 in (55.9 cm) from the rear of the rack or appliance with the rear cabinet door.

These are the physical specifications of the appliance:

Legend

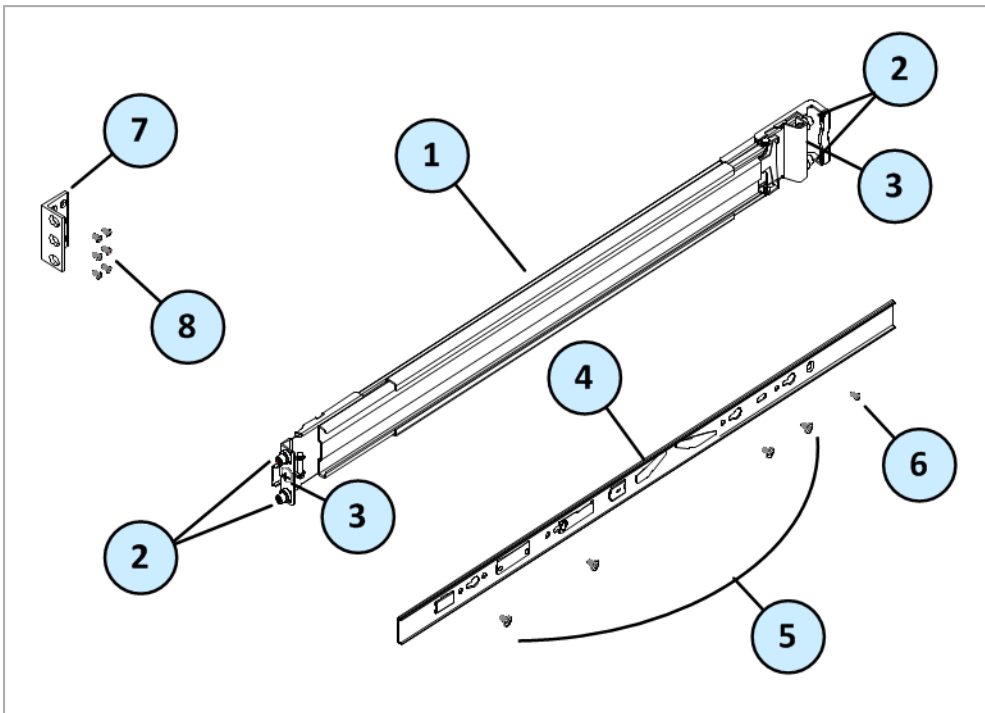
Appliance	Width	Depth	Height	U
TE250XN	438 mm 17.24 in	580 mm 22.83 in	44 mm 1.73 in	1U

Telescopic Rails Hardware

i Important - To prevent injury or damage, at least two people are required to install the appliance in a rack.

Rack Mounting Tools

We recommend that you use a Phillips PH2 screwdriver with a magnetic head to hold and retrieve screws. A powered screwdriver is also useful.



Legend

Item	Hardware Description	Qty	Use	Label
1	Outer rack rail section of the telescopic rail unit	2	Moves the appliance into position in the rack	No label
2	Square-hole rack screws	8	Come attached to the outer rack rails to be used with square holed racks	No label
2	Round-hole rack screws	8	For use with round-hole racks only. Replace the original square-hole rack screws with the round-hole rack screws.	Round-hole rack screws P/N for Round Hole 7.1 x 8pcs

Legend (continued)

Item	Hardware Description	Qty	Use	Label
3	Rack mounting screws	4	At front of appliance - Attaches the ear mounts to the rack, which prevents movement of the appliance. At back of appliance - Attaches the outer rack rail to the rack.	Rack mounting screws M5x20L x 4pcs
4	Inner appliance rail section of the telescopic rail unit	2	Attaches to the sides of the appliance	No label
5	Appliance rail screws	8	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x 8pcs
6	Appliance rail screws	2	Attaches the appliance rails to the appliance	Appliance rail screws #6-32 x 2pcs
7	Ear mount bracket **	2	Attaches the appliance to the rack	Assembly kit
8	Ear mount bracket screws**	12	Attaches the ear mounts to the appliance.	Rack Ear screw

** The ear mount bracket and screws are delivered as accessories together with the appliance.

Installation Overview

Telescopic rails installation includes these procedures:

1. Attaching the inner rails to the appliance
2. Attaching the ear mounts to the appliance
3. Attaching round-hole rack screws (if you are using round-hole racks)
4. Attaching the outer rack rails to the rack
5. Installing the appliance in the rack

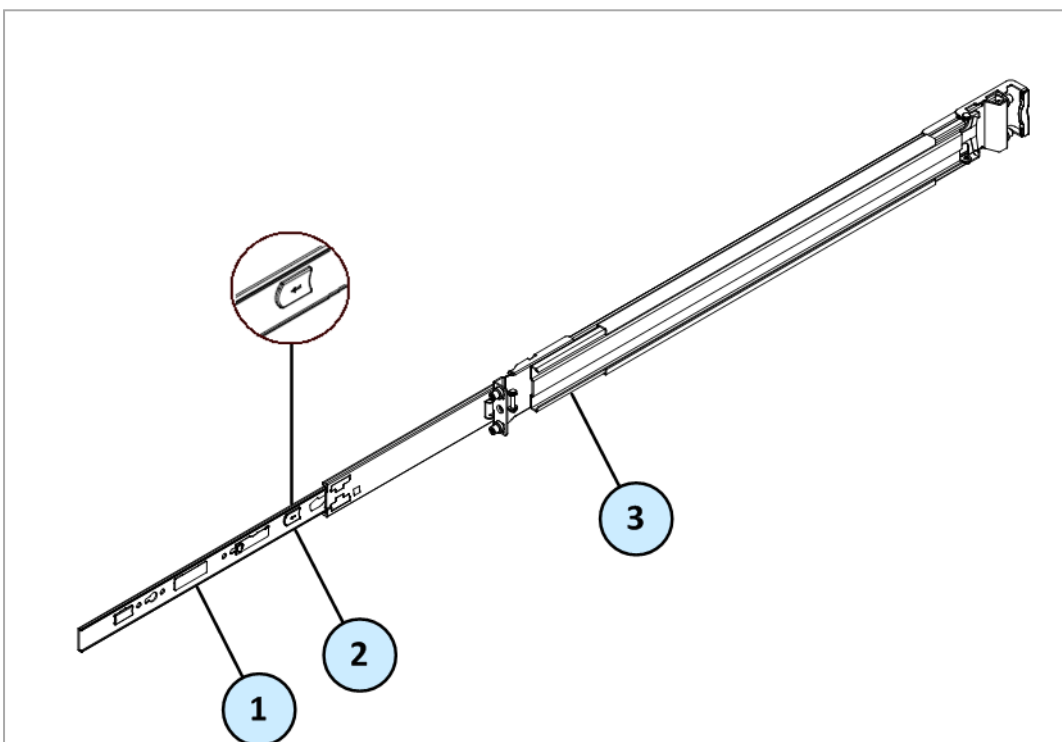
Step 1 - Attaching the Inner Appliance Rails

The outer rack rail section and the inner appliance rail section come as one unit when you open the box.

Before you can attach each appliance rail to the side of the appliance, you must remove the inner appliance rails from the outer rack rails.

To remove the inner appliance rail from the telescopic rail unit:

1. Extend the inner appliance rail from the outer rail until the rails locks in place.
2. Press the inner rail release latch, as shown, and pull the inner appliance rail straight out.
3. Repeat steps 1 and 2 for the other telescopic rack rail unit.



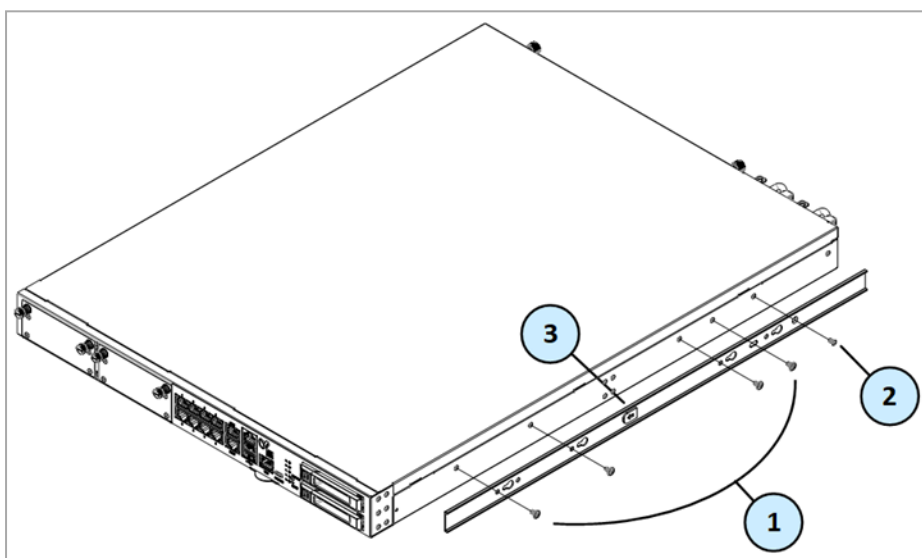
Legend

Item	Description
1	Inner rack rail
2	Release latch
3	Outer appliance rail

To install the inner appliance rails to the appliance:

1. Place the appliance rail on the side of the appliance and make sure:
 - The release latch is facing away from the appliance
 - The arrow on the release latch points to the front of the appliance
 - The appliance rail extends past the back panel of the appliance
2. Install the appliance rails to the side of the appliance with the provided screws.

i Note - Do not overtighten the screws. Check Point recommends that you leave the rail mounting screws loose until the server is completely installed. This eases installation by preventing binding of the server in the rack.
3. Do steps 1 and 2 again to install the appliance rail on the other side of the appliance.

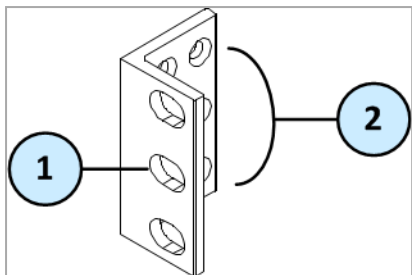


Legend

Item	Description
1	Appliance rail screws - Four for each inner rail
2	Appliance rail screws - One for each inner rail
3	Release latch

Step 2 - Attaching the Ear Mount Brackets

Attach the ear mounts to the left and right side of the front of the appliance to lock the appliance into the rack.

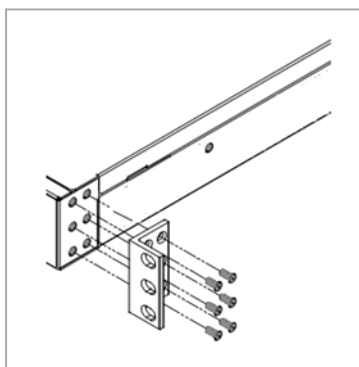


Legend

Item	Hardware Description	Use
1	Rack post mounting hole for the rack mounting screws	When the screw is fastened, the appliance cannot be pulled out of the rack
2	Holes for ear mount bracket screws	Attaches the ear mount to the appliance

To attach the ear mount brackets to the appliance:

1. Place the ear mount bracket on the side of the appliance near the front panel.
2. Attach the ear mount bracket to the appliance using the six ear mount bracket screws.



3. Do steps 1 - 2 again for the other side of the appliance.

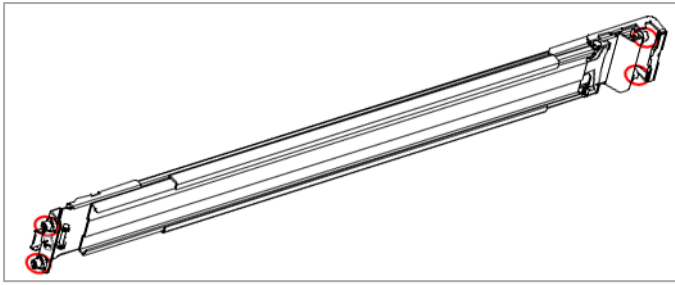
Step 3 - Preparing Round-Hole Rack Rails

If you use round-hole racks, you must replace the eight square-hole rack screws that come attached to the outer rack rails with the eight supplied round-hole rack screws.

Do this procedure before you attach the outer rack rails to the rack.

To attach the round-hole rack screws:

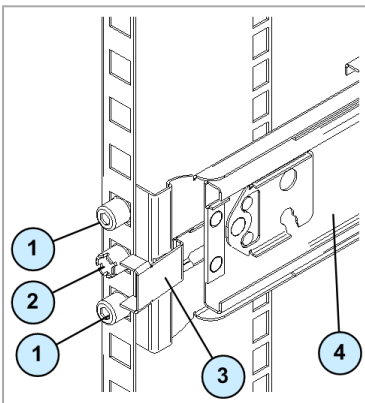
1. Use a screwdriver to remove the square-hole rack screws from the front and back of the outer rack rail.



2. Replace with four of the supplied round-hole rack screws.
3. Do steps 1 - 2 again for the other outer rack rail.

Step 4 - Attaching the Outer Rack Rails

Attach the outer rack rails to the rack. Make sure that you have the two rack rails ready.



Legend

Item	Description
1	Rack rail screws (attached to the end of the rack rail)
2	Screw hole with rack mounting screw
3	Securing clip
4	Rack rail

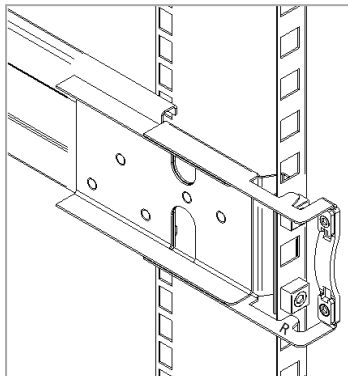
To attach the outer rails to the rack:

1. If your rack has round holes, make sure to complete *Preparing Round-Hole Rack Rails*.
2. Align the front end of the outer rail with the hole number.

Make sure that the securing clip faces the inner part of the rack.

3. Gently pull forward and connect the outer rail to the rack by inserting the rack rail screws into the rack holes.
4. Do steps 1 - 3 again to attach the rear end of the outer rail to the rack.

The rear securing clips are marked with the letters **R** (for the right rack rail) and **L** (for the left rack rail).



5. Use a rack mounting screw to secure the rear end of the outer rail to the rack.
6. Do steps 1 - 5 again for the other outer rail.

Step 5 - Installing the Appliance in the Rack

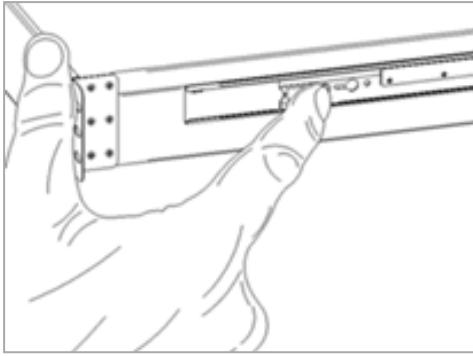
Install the appliance in the telescopic rails in the rack.

- i Important** - To prevent injury or damage, at least two people are required to install the appliance in a rack.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

To install the appliance in the rack:

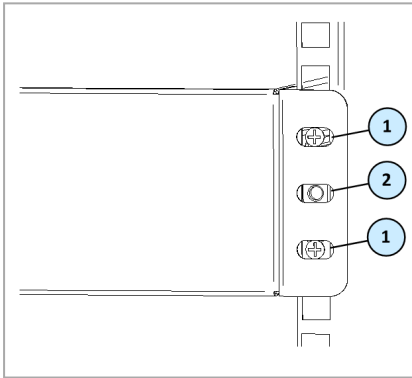
1. Align the inner rack rails to be level with the rack rails.
2. Move the appliance into the rack as far as it can go.
3. On the appliance rails:
 - a. Press and pull gently on the blue release strips on both sides of the appliance.
 - b. While continuously holding the blue release strips, push the appliance into the

rack.



4. Tighten all of the rail mounting screws.
5. For each ear mount, use a rack mount screw to secure it to the rack and make sure that the appliance cannot move. This disables the telescopic rails.

Use the rack post mounting hole that is between the rack rail screws (see item 2 in the figure).



Legend

Item	Description
1	Rack rail screws attached to the outer rack rail
2	Rack post mounting hole for rack mount screw

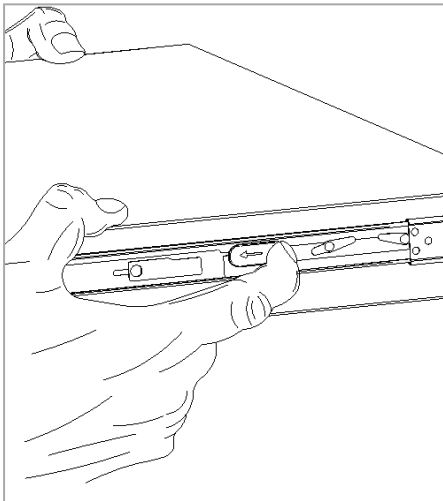
Removing the Appliance

- i Important** - We recommend that at least two people work together to remove the appliance from a rack to prevent injury, or damage to the appliance.
- i Important** - Do not attempt to lift, drag, or otherwise move the appliance using the handles on the power supply units.

Unlock the telescopic rails to remove the appliance from the rack.

To remove the appliance from the rack:

1. Remove the rack mounting screws in the ear mounts to enable the telescopic rails.
2. Move the appliance away from the rack as far as possible.
3. On the inner rack rail, press and pull on the white release levers on both sides of the appliance.



4. While holding the appliance, move the appliance away from the rack rail.

Appliance Air Vents

Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

i Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance.

These appliances are specifically designed to install with these rails.

The air flow in TE250XN appliances:

