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HARDWARE INSTALLATION GUIDE

Arcserve **UDP** 8100 and **UDP** 8200 Appliance Hardware Installation Guide

Assured recovery™

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1. Safety Notice and Warnings

FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

No Telecommunications Network Voltage (TNV)-connected PCBs shall be installed.

CAN ICES-3 (A)/NMB-3(A)

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Warning

This is a product of VCCI Class A Compliance.

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

Environmental Warning

Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

This notice is required by California Code of Regulations, Title 22, Division 4.5, Chapter 33: Best Management Practices for Perchlorate Materials. This product/part includes a battery that contains perchlorate material.

2. Ratings

AC input voltage:	100 - 240V~
Input frequency range:	50/60 Hz
Rated input current:	6.1–2.6A (x2)

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3. Electrical and General Safety Guidelines

CAUTION

This appliance is intended for installation in restricted areas only. Initial setup and maintenance should be performed by qualified personnel.

CAUTION

Power down the appliance following the operating system's proper power down procedure from the front panel. Unplug the AC power cord(s) before servicing.

CAUTION

To avoid electrical shock, check the power cords as follows:

- This product is to be installed in Restricted Access Location only.
- Use the exact type of power cords required.
- Use power cord(s) that came with safety certifications.
- Power cord(s) must comply with AC voltage requirements in your region.
- The power cord plug cap must have an electrical current rating that is at least 125% of the electrical current rating of this product.
- The power cord plug cap that plugs into the AC receptacle on the power supply must be an IEC 320, sheet C13,type female connector.
- Plug the power cord(s) into a socket that is properly grounded before turning on the power.

CAUTION

Required operating conditions for the appliance are -

- Temperature: 10 to 35°C.
- Humidity, non-condensing: 8 to 90%.

CAUTION

CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1

DISPOSING OF BATTERY BACKUP UNITS - IF APPLICABLE

WARNING

If the BBU is damaged in any way, toxic chemicals may be released.

The material in the battery pack contains heavy metals that can contaminate the environment. Federal, state, and local regulations prohibit the disposal of rechargeable batteries in public landfills. Be sure to recycle the old battery packs properly. Comply with all applicable battery disposal and hazardous material handling laws and regulations in the country or other jurisdiction where you are using the BBU.

WARNING

Risk of explosion if the battery is installed upside down or is replaced by an incorrect type.
Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the instructions.

3. Electrical and General Safety Guidelines (continued)

WARNING

Disconnect the power supply at the circuit breaker before accessing any components. Turning off the system power supply switch does not reduce the risk of electrical shock from the power supply terminal block.

CAUTION

- To prevent the unit from overheating, never install the appliance in an enclosed area that is not properly ventilated or cooled. For proper airflow, keep the front and back sides of the appliance clear of obstructions and away from the exhaust of other equipment.
- Be aware of the locations of the power switches on the chassis and in the room, so you can disconnect the power supply if an accident occurs.
- Take extra precautionary measures when working with high voltage components. Do not work alone.
- Before removing or installing main system components, be sure to disconnect the power first. Turn off the system before you disconnect the power supply.
- Use only one hand when working with powered-on electrical equipment to avoid possible electrical shock.
- Use rubber mats specifically designed as electrical insulators when working with computer systems.
- The power supply or power cord must include a grounding plug and must be plugged into grounded outlets.

CAUTION

Electric Static Discharge (ESD) can damage electronic components. To prevent damage to your system board, it is important to handle it very carefully. The following measures can prevent ESD damage to critical components.

- Use a grounded wrist strap designed to prevent static discharge.
- Keep all components and printed circuit boards (PCBs) in their antistatic bags until ready for use.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Do not let components or PCBs come into contact with your clothing, which may retain a charge even if you are wearing a wrist strap.
- Handle a board by its edges only; do not touch its components, peripheral chips, memory modules or contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard and peripherals back into their antistatic bags when not in use.
- For grounding purposes, make sure your computer chassis provides excellent conductivity between the power supply, the case, the mounting fasteners and the motherboard.

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4. Site Preparation

Setup location, rack and appliance precautions

- **Elevated Operating Ambient Temperature -** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

  Always keep the rack's front door and all panels and components on the appliances closed when not servicing to maintain proper cooling.

- **Reduced Air Flow -** Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. Leave enough clearance, approximately 25 inches in the front, and 30 inches in the back of the rack to enable you to access appliance components and allow for sufficient air flow.

- **Mechanical Loading -** Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

  ALL RACKS MUST BE MOUNTED SECURELY. Ensure that all leveling jacks or stabilizers are properly attached to the rack. If installing multiple appliances in a rack, make sure the overall loading for each branch circuit does not exceed the rated capacity.

  Do not slide more than one appliance out from the rack at a time. Extending more than one appliance at a time may result in the rack becoming unstable. Install your appliance in the lower part of the rack because of its weight and also for ease in accessing appliance components.

- **Circuit Overloading -** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

- **Reliable Earthing -** Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

  Install near appropriate AC outlets, and Ethernet hubs or individual jacks. Be sure to install an AC Power Disconnect for the entire rack assembly. The Power Disconnect must be clearly marked. Ground the rack assembly properly to avoid electrical shock.

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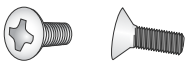
5. Unpacking the 4-Post Rack Installation Assemblies

Verify that the ship kit includes one of the following installation assemblies

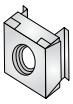
Installation Assembly A – Standard Rail Assemblies with Mounting Hardware

- Two power cords*
- One set of 4-post rack mounting hardware**

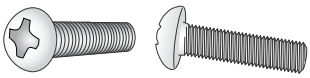


(Eight) M5 x 12
Phillips flat head screws

(Eight) M5 x 12
cone washers



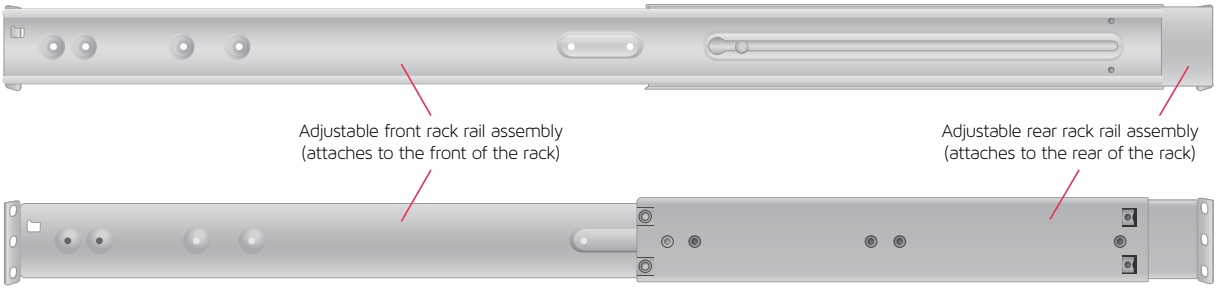
(Ten) M5
cage nuts



(Two) 10-32 x 3/4"
Phillips pan head screws
(used to secure the appliance in the rack)

- One pair of 4-post rack sliding chassis rail rack assemblies that attach directly to the rack

Rack rail assembly, inside view



Rack rail assembly, outside view

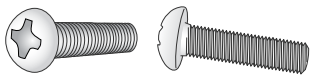
NOTE: Use the hardware supplied with your specific rack if different from the hardware supplied in this kit.

* **NOTE: Only two power cords will be included in your ship kit even if you receive multiple rail kits.**

** **NOTE: There may be additional mounting hardware included that will not be used with this installation assembly kit.**

Installation Assembly B – Quick Mount Rails (for use in 4-post racks with square holes only)

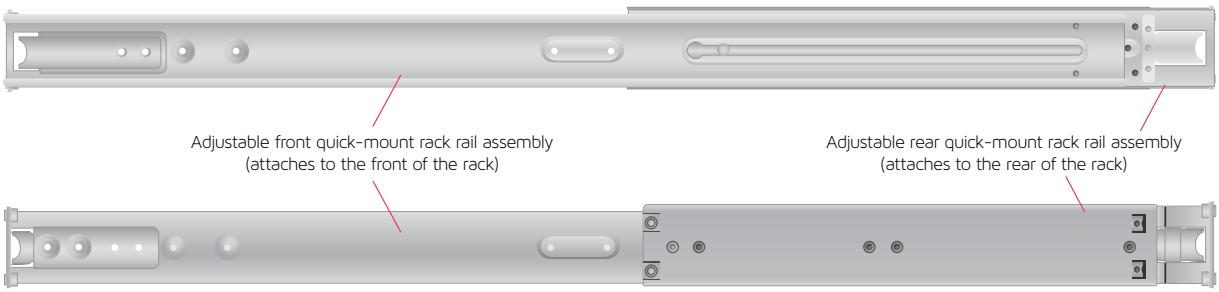
- Two power cords*
- Two 10-32 x 3/4" Phillips pan head screws**



(Two) 10-32 x 3/4"
Phillips pan head screws
(used to secure the appliance in the rack)

- One pair of adjustable quick-mount rack rail assemblies (requires no additional mounting hardware or tools)

Quick-mount rack rail assembly, inside view



Quick-mount rack rail assembly, outside view

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NOTE: **The installation procedures for Sections 6A and 6B, 4-Post Rack, below and on page 9 are for use with the rails and hardware provided in your ship kit. If different style rails are being used, or if your rack requires different hardware, refer to the instructions provided with your rail's or rack's ship kit.**

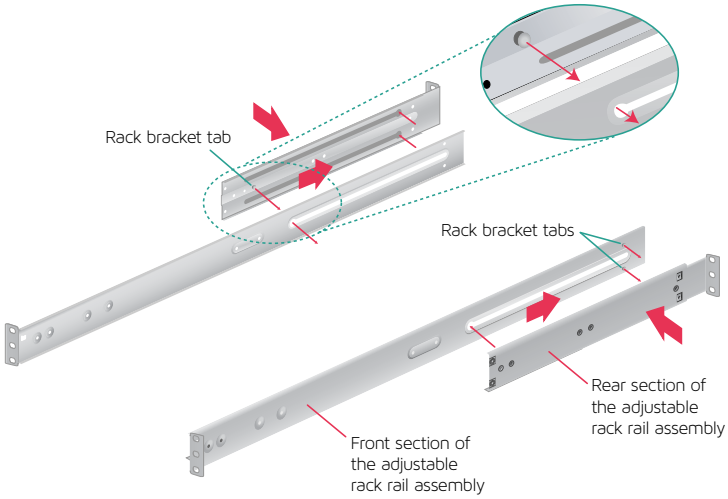
6A. 4-Post Rack Installation with Standard Rails

Locate the mounting hardware and rack rail assemblies shown below

Step 1

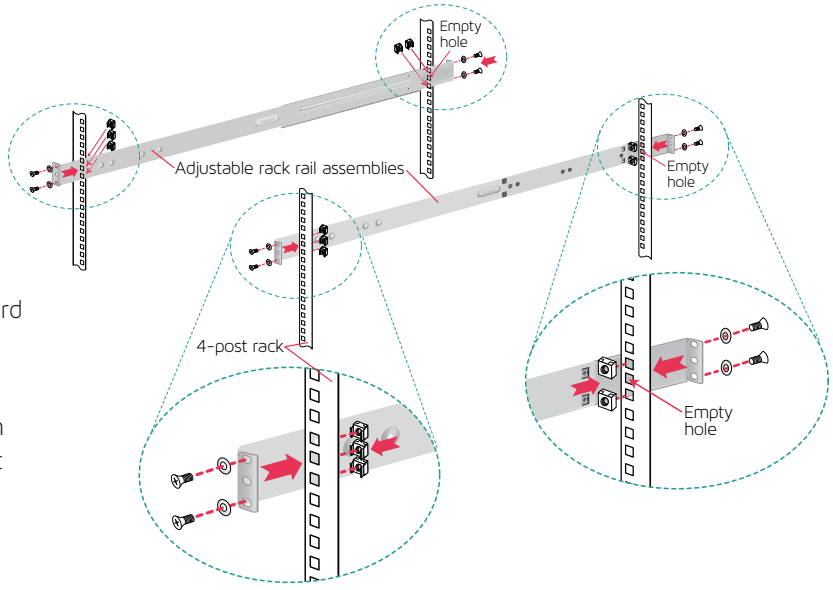
Locate the two adjustable standard rack rail assemblies.

- Insert the tabs on the front section of the adjustable rack rail assembly through the openings in the rear sections of the assemblies.
- Check to make sure the adjustable rack rail assemblies are connected correctly, then slide the front section forward and the rear section back to keep them from coming apart. These assemblies adjust to accommodate different rack depths.



Step 2

- Insert a cage nut into each of the square holes in the rack you will be using as shown (three in the front and two in the rear). They click into place.
- Attach the rack /rail assemblies to the rack using two M5 x 12 flat head screws cone washers in the front and back. The convex side of the cone washers face toward the rack.
- Make sure the rack / rail assemblies and screws are aligned in the rack not only in the front and back, but are level in height on the left and right sides for proper alignment for appliance installation.



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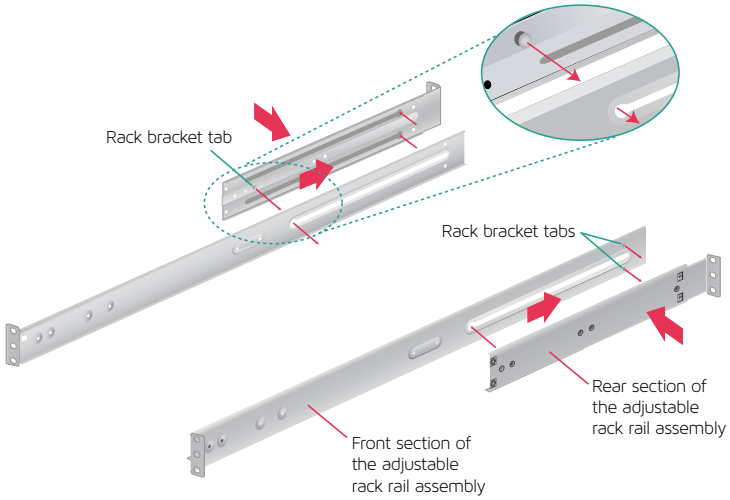
6B. 4-Post Rack Installation with Quick Mount Rails (square hole rack only)

Locate the quick mount rack rail assemblies shown below

Step 1

Locate the two adjustable quick-mount rack rail assemblies.

- Insert the tabs on the front section of the adjustable rack rail assembly through the openings in the rear sections of the assemblies.
- Check to make sure the adjustable rack rail assemblies are connected correctly, then slide the front section forward and the rear section back to keep them from coming apart. These assemblies adjust to accommodate different rack depths.



Step 2

- **Quick-mount rail Installation in the square hole rack:**

A. Insert the quick-mount rail tabs on the front of the rack rail assembly through the selected set of square holes in the rack.

> NOTE: **There is a threaded hole between the two quick-mount tabs in the rail assembly. This hole will be used to secure the appliance in the rack later in this guide.**

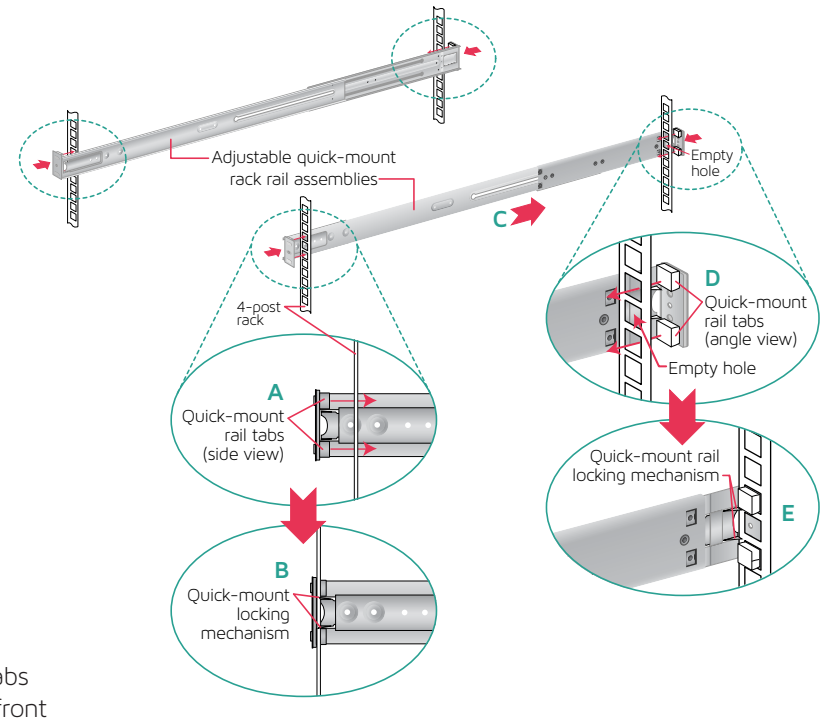
B. Push the tabs into the holes in the rack until you hear the locking mechanism on the rail assembly click into place. The locking mechanism secures the rails to the rack.

C. Slide the rail assembly to the back of the rack.

D. In the rear, insert the quick-mount rail tabs through the square holes level with the front installation.

E. Push the tabs into the holes until you hear the rear locking mechanism click into place.

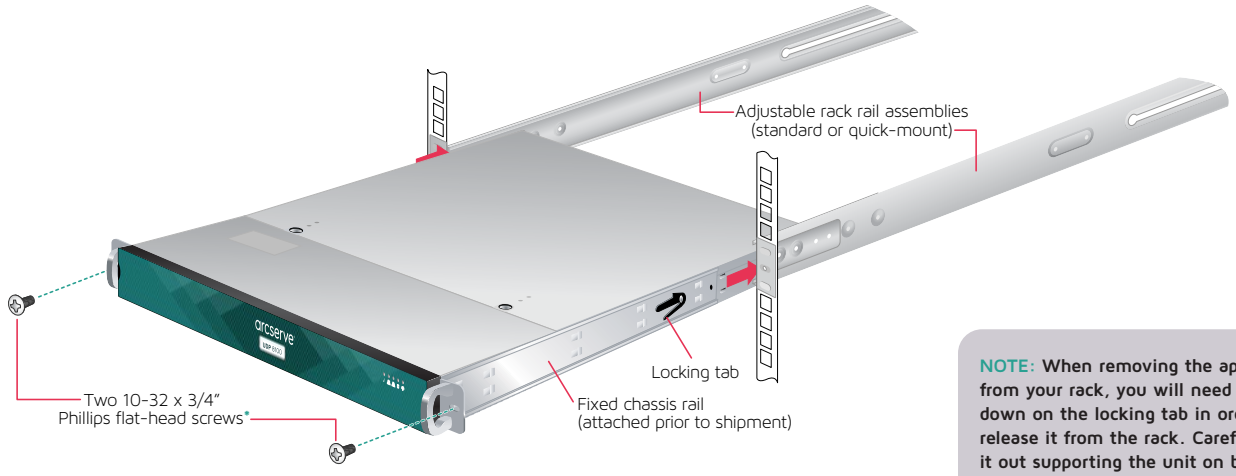
- Repeat these steps for the other side of the rack.*



> * NOTE: **Make sure the quick-mount rail assemblies are aligned in the rack not only in the front and back, but are level in height on the left and right sides for proper alignment for appliance installation.**

7. Installing the Appliance in the 4-Post Rack

- Align the inner fixed chassis rails on the appliance with the fixed chassis rack rail assemblies previously installed in the rack.
- Carefully slide the appliance into the rack rails until you hear the locking tabs on the chassis rails click into place.
- Push the appliance all the way into the rack until it stops.
- Secure the unit in the rack by inserting and tightening two 10-32 x 3/4" Phillips pan head screws*, one on each side.



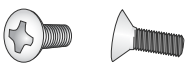
NOTE: When removing the appliance from your rack, you will need to press down on the locking tab in order to release it from the rack. Carefully slide it out supporting the unit on both sides at all times.

8. Unpacking the 2-Post Rack Installation Hardware

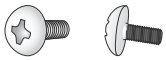
Verify that the ship kit includes the following installation hardware

Installation Hardware

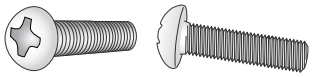
- Two power cords*
- A set of 2-post rack mounting hardware**



(Eight) M5 x 12
Phillips flat head screws

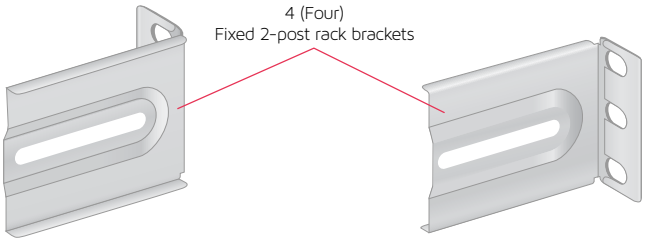


(Twenty-two) M4 x 4
Phillips truss head screws



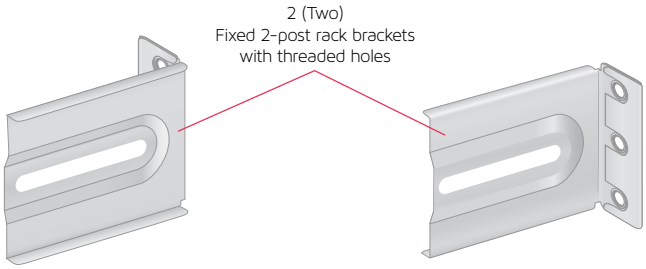
(Two) 10-32 x 3/4"
Phillips pan head screws
(used to secure the appliance in the rack)

- Two pairs of 2-post rack mounting brackets



Inside front view Outside front view

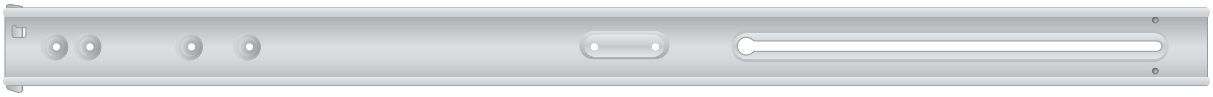
- One pair of 2-post rack mounting brackets with threaded holes



Inside front view Outside front view

- One pair of 2-post rack assemblies that attach directly to the rack

2-post rack rail assembly, inside view



2-post rack rail assembly, outside view

NOTE: Use the hardware supplied with your specific rack if different from the hardware supplied in this kit.

* **NOTE: Only two power cords will be included in your ship kit even if you receive multiple rail kits.**

** **NOTE: There may be additional mounting hardware included that will not be used with this installation assembly kit.**

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NOTE: The installation procedures for Section 9, 2-Post Rack, below and on page 9 are for use with the rails and hardware provided in your ship kit. If different style rails are being used, or if your rack requires different hardware, refer to the instructions provided with your rail's or rack's ship kit.

9. 2-Post Rack Installation

Unpack the appliance and locate the mounting hardware

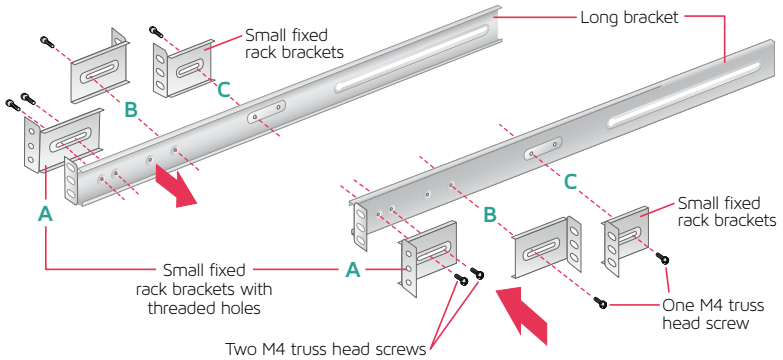
Step 1

Locate the two long and six short rack brackets that came in your ship kit.

A. Securely attach the set of short brackets with the threaded screw holes to the long bracket in the front as shown. Use two M4 truss head screws for each bracket.

B. Loosely attach one set of the other short brackets to the long fixed bracket as shown using one M4 truss head screw on each bracket. The three holes on the flap will face toward the back for later attachment to the 2-post rack.

C. Loosely attach the remaining set of short brackets to the long fixed bracket as shown using one M4 truss head screw on each bracket. The three holes on the flap will face toward the front for later attachment to the 2-post rack.



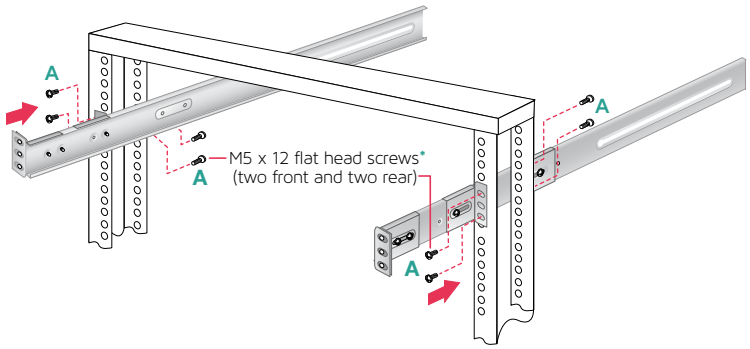
NOTE: Once the assembled rails are attached to the rack, securely tighten the single screws on steps B and C.

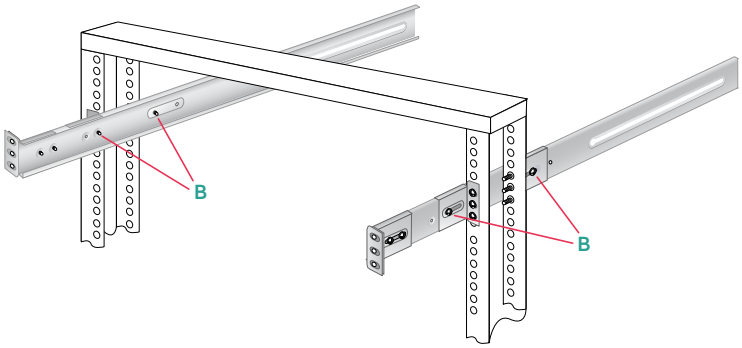
Step 2

Attach the assembled brackets to the 2-post rack.

A. Insert two M5 x 12 flat head screws through the short brackets into the 2-post rack (in the front and back of the rack as shown) and tighten. Make sure the brackets are aligned and level in height, not only in the front and back but also on the left and right sides.

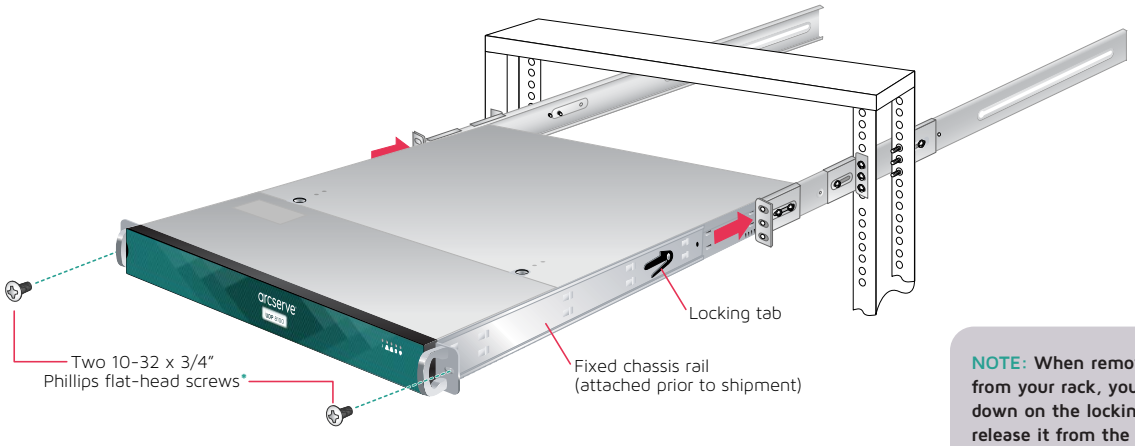
B. Tighten each of the single screws on the small fixed brackets (located on either side of the rack) to secure the brackets in the rack and ensure appliance stability.





10. Installing the Appliance in the 2-Post Rack

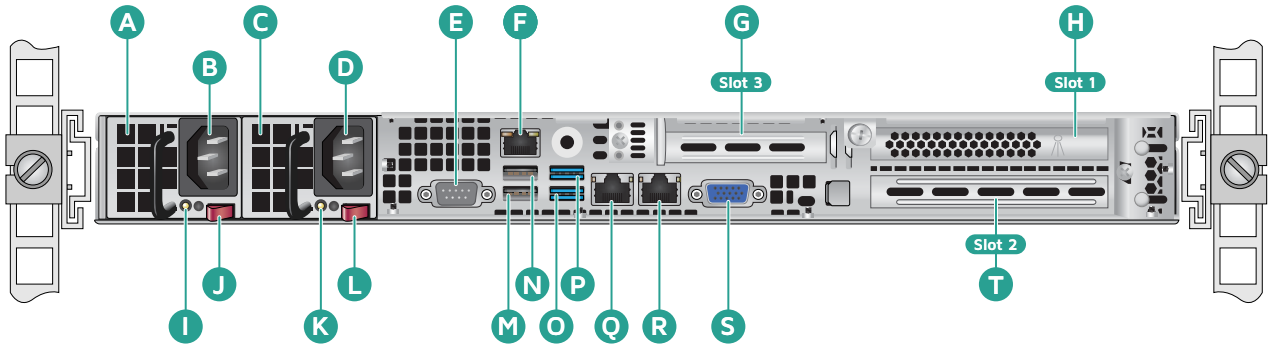
- Align the inner fixed chassis rails on the appliance with the fixed chassis rack rail assemblies previously installed in the rack.
- Carefully slide the appliance into the rack rails until you hear the locking tabs on the chassis rails click into place.
- Push the appliance all the way into the rack until it stops.
- Secure the unit in the rack by inserting and tightening two 10-32 x 3/4" Phillips pan head screws, one on each side.



NOTE: When removing the appliance from your rack, you will need to press down on the locking tab in order to release it from the rack. Carefully slide it out supporting the unit on both sides at all times.

CAUTION
Slide rail/mounted equipment is not to be used as a shelf or a work space.

11. Rear Panel Connections



A	Power Supply Module #1
B	AC Power Inlet #1
C	Power Supply #2
D	AC Power Inlet #2
E	COM Port
F	IPMI Port (Remote Management)
G	**Slot 3** Low Profile PCIe Expansion Slot
H	**Slot 1** RAID Controller Card
I	Power Good LED #1
J	Power Supply Lock #1

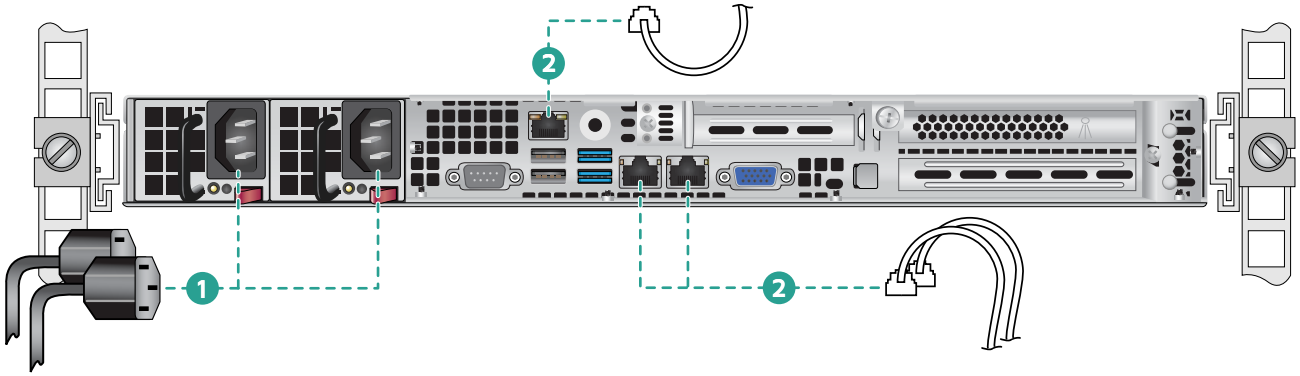
K	Power Good LED #2
L	Power Supply Lock #2
M	USB 2.0 Port 1 (Black)
N	USB 2.0 Port 2 (Black)
O	USB 3.0 Port 3 (Blue)
P	USB 3.0 Port 4 (Blue)
Q	Network Data I/O Port 1 (Eth0 for Network 1)
R	Network Data I/O Port 2 (Eth1 for Network 2)
S	VGA Port
T	**Slot 2** Full Height PCIe Expansion Slot

PCI Card Slot Specifications

Card slot population options are as shown in the table below.

Slot 1	Slot 2	Slot 3
LSI 9361-4i RAID Controller (Always present in Slot 1)	Empty	Empty
		Quad Port NIC
	LSI SAS 9300-8e HBA	Empty
		Quad Port NIC
		Dual Port 10G SPF+
		Dual Port 10G Copper
	QLogic Dual Port HBA	Empty
		Quad Port NIC
		Dual Port 10G SPF+
		Dual Port 10G Copper
	Dual Port 10G SPF+	Empty
		Quad Port NIC
	Dual Port 10G Copper	Empty
		Quad Port NIC

11. Rear Panel Connections (continued)



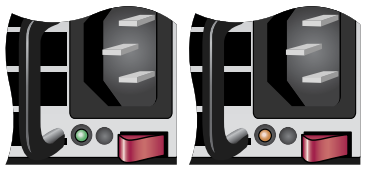
Step 1 Connect the power cord.

Step 2 Connect the Ethernet cables.

Proceed to **Section 12, Front Panel Operation** on page 16.

Power Supply Status LED

There is a single bi-color Power Good LED on each power supply module to indicate power supply status. The LED operation is defined in the table below.



Power Supply Condition	LED State
Output ON and OK	GREEN
No AC power to both power supplies	OFF
AC present / Only 5VSB on (PS off)	AMBER
AC cord unplugged or AC power lost; with a second power supply in parallel still with AC input power	OFF
Power supply warning events where the power supply continues to operate; high temp, high power, high current, slow fan	1Hz Blinking AMBER
Power supply critical event causing a shutdown; failure, OCP, OVP, fan fail	AMBER

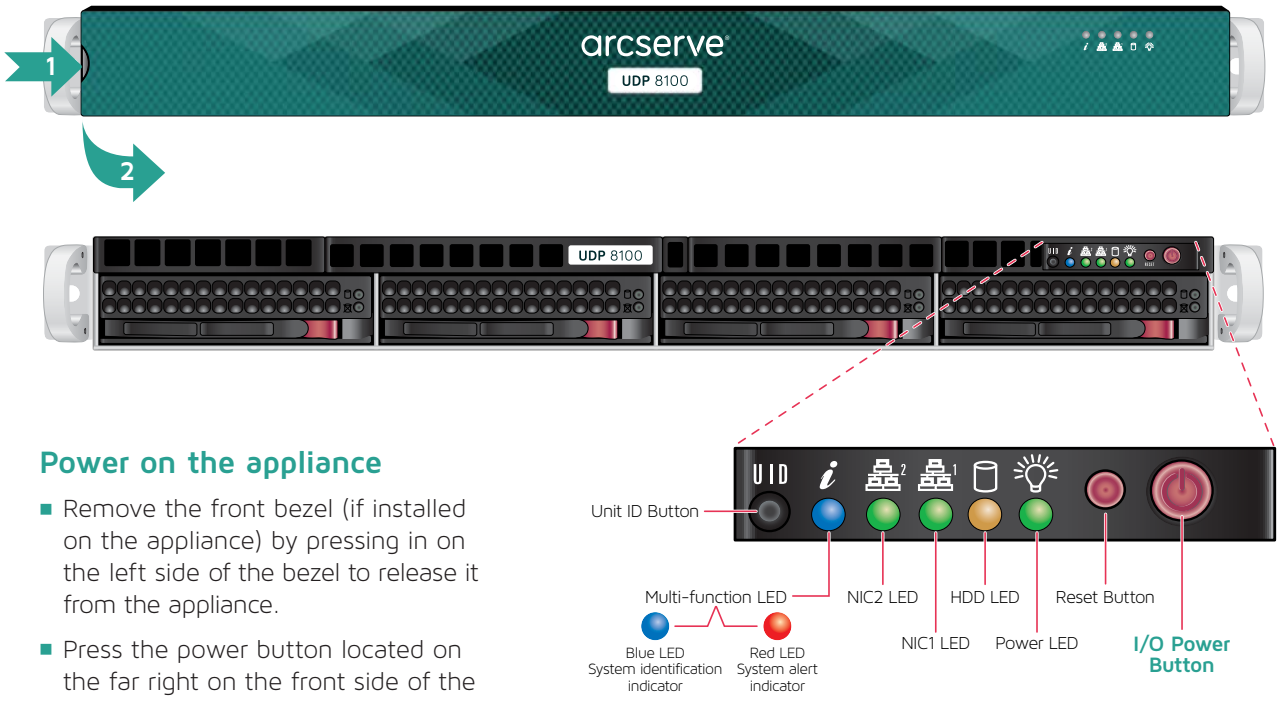
In normal operation the Power Good LED on Power Supply Module 1 and Module 2 will be SOLID GREEN. If the power is down, both LEDs will BLINK GREEN.

CAUTION

The power supply is hot-swappable only when you have a server with redundant power supplies installed. If you only have one power supply installed, before removing or replacing the power supply, you must first take the server out of service, turn off all peripheral devices connected to the server, turn off the server by pressing the power button, and unplug the AC power cord from the server or wall outlet.

NOTE: The server offers redundant, hot-swap capability. The connections to AC mains should be made in a manner appropriate to local code and consistent with customer power distribution with or without redundant sources.

12. Front Panel Operation



Power on the appliance

- Remove the front bezel (if installed on the appliance) by pressing in on the left side of the bezel to release it from the appliance.
- Press the power button located on the far right on the front side of the appliance.
- Once the system has been powered on, replace the bezel.

13. Run Arcserve UDP Appliance Wizard

> 1. When power is initially applied to the appliance, the Arcserve UDP Appliance Wizard is launched. Navigate through each page of the wizard. For more information about the wizard, see the Arcserve UDP Appliance User Guide (**arcserve.com/udp-appliance-userguide**) or view the video at: **arcserve.com/udp-appliance-wizard-video**.

Note: After selecting the Operating System language, a screen to enter Windows license may come up. Skip to **proceed here**, the OS is already licensed and activated.

The wizard lets you perform the following tasks:

- Define the Appliance host name.
- Specify LAN connections for the Appliance.
- Configure email and alert settings.
- Create protection plans. *A protection plan lets you define source nodes, backup destination, and configure a backup schedule.*

Upon completion of the wizard, Arcserve UDP launches the UDP console at the **dashboard** page.

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14. Access Arcserve UDP

> Arcserve UDP is a comprehensive solution to protect complex IT environments. The source-side and global deduplication solution protects your data residing in various types of nodes such as Windows, Linux, and virtual machines on VMware ESX servers or Microsoft Hyper-V servers. You can back up data to either a local machine or a recovery point server. A recovery point server is a central server where backups from multiple sources are stored and can be globally deduplicated. For more information about Arcserve UDP, see the Knowledge Center at: **arcserve.com/udp-knowledge-center**.

Arcserve UDP provides the following capabilities:

- Back up the data to deduplication/non-deduplication data stores on recovery point servers
- Back up recovery points to tape
- Create virtual standby machines from backup data
- Replicate backup data to recovery point servers and remote recovery point servers
- Restore backup data and perform Bare Metal Recovery (BMR)
- Copy selected data backup files to a secondary backup location
- Configure and manage Arcserve High Availability (HA) for critical servers in your environment

15. Contact Support

If you encounter any issues with your appliance, please visit our Arcserve Support site to search our Knowledge Base for solutions to common problems or to get Live Support for immediate assistance (the serial number is located on rear of appliance) at: **arcserve.com/support**.

16. Warranty

Each Arcserve UDP 8000 series appliance comes with a 3-year hardware warranty. For detailed information about this warranty, please visit: **arcserve.com/udp-appliance-warranty**.

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For more information on Arcserve, **please visit arcserve.com, or call +1.844.639.6792**

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