INFOLOCK

# INSIGHT DLP SENSOR 0310S, 0310NTC & 0310NTF

## Appliance Hardware Installation Guide

INFOLOCK

# TABLE OF CONTENTS

# 1. RATINGS

| | |
|---|---|
| **AC input voltage:** | 100 - 240 V (auto-range) |
| **Input frequency range:** | 50/60 Hz |
| **Rated input current:** | 100 - 140V 8.0/6.0A |
| | 200 - 240V 4.5/3.8V |

# 2. 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).

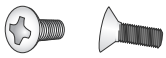
  Install near appropriate AC outlets, and Ethernet hubs or individual jacks. Be sure to install an AC Power Disconnect for the entire rack assembly. The Power Disconnect must be clearly marked. Ground the rack assembly properly to avoid electrical shock.

# 3. UNPACKING THE 4-POST RACK INSTALLATION HARDWARE

**Verify that the ship kit includes the following installation hardware**

## Installation Assembly A: Standard Rail Assemblies with Mounting Hardware

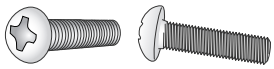
- Two power cords*
- A set of 4-post rack mounting hardware**



(Eight) M5 x 12
Phillips flat head screws

(Eight) M5 x 12
cone washers

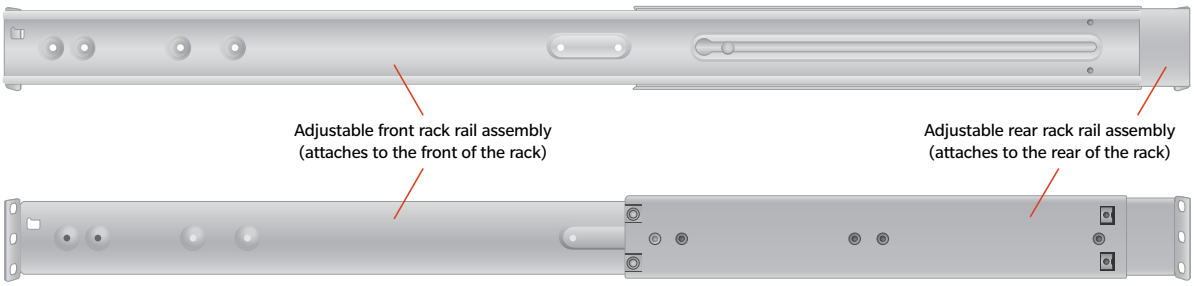
(Ten) M5
cage nuts



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

- A 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**

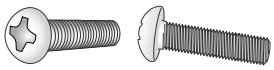
**NOTE:** Use the hardware supplied with your specific rack if different from the hardware supplied in this kit.

* **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 t hat 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)

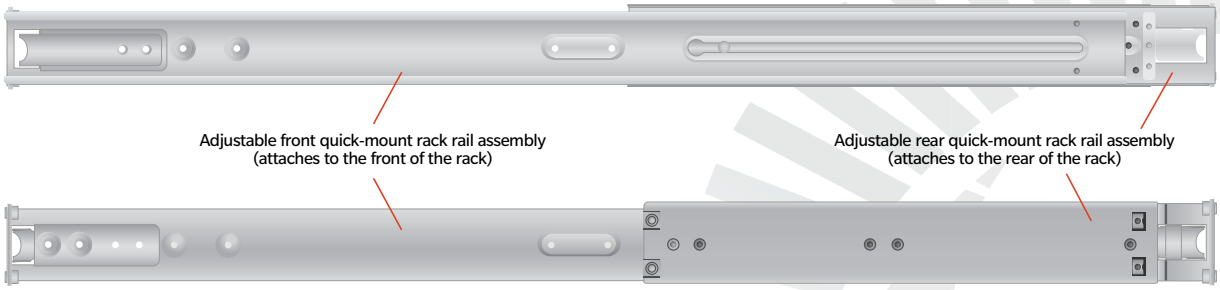
- Two power cords*
- Two 10-32 x 3/4" Phillips pan head screws**



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

- A 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**

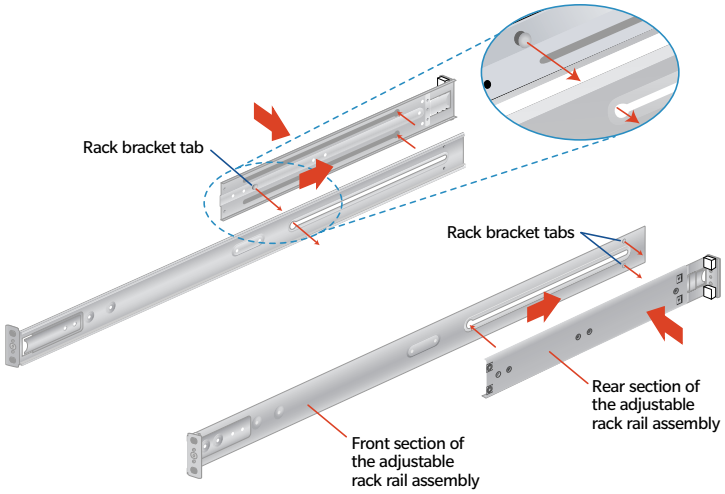
# 4A. 4-POST RACK INSTALLATION WITH STANDARD RAILS

**NOTE:** The installation procedures for Sections 4A below and 4B 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.

## Step 1

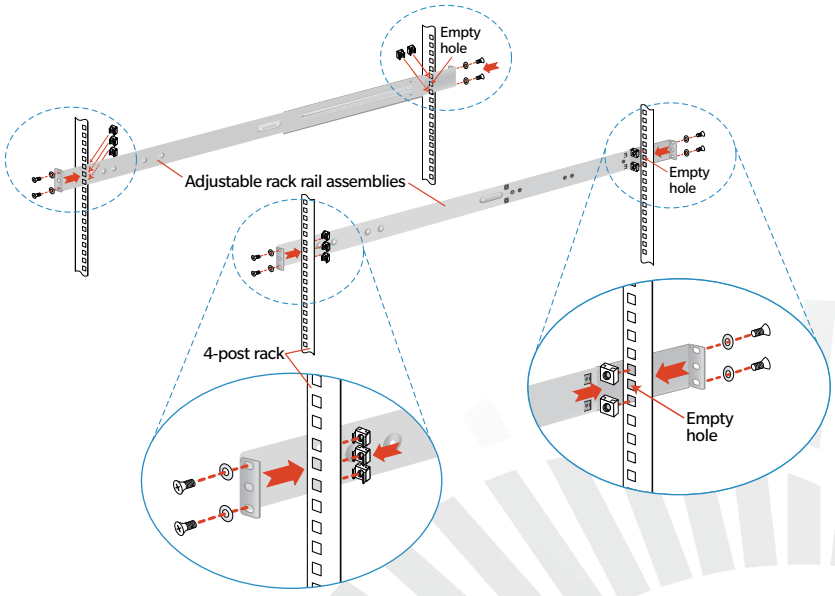
**Locate the two adjustable standard rack rail assemblies.**

- 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 and 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.



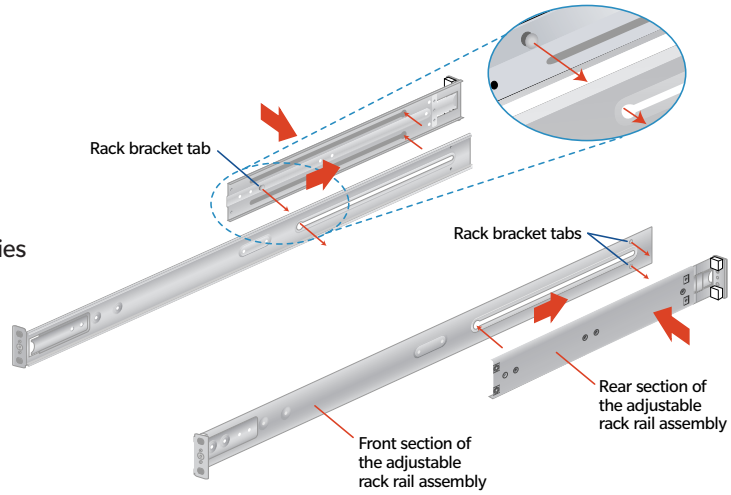
# 4B. 4-POST RACK INSTALLATION WITH QUICK MOUNT RAILS

**(square hole rack only)**

## 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.

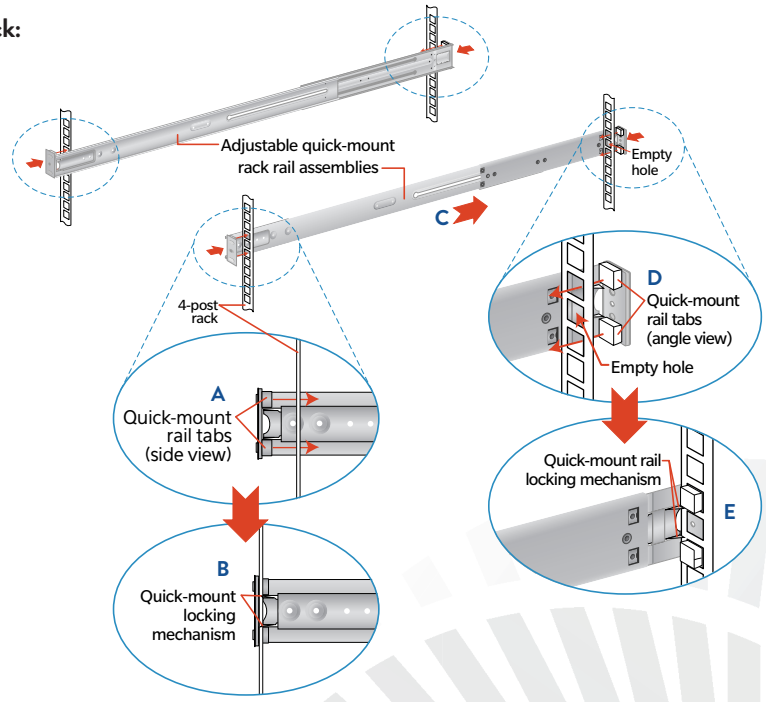



## Step 2

- **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.**

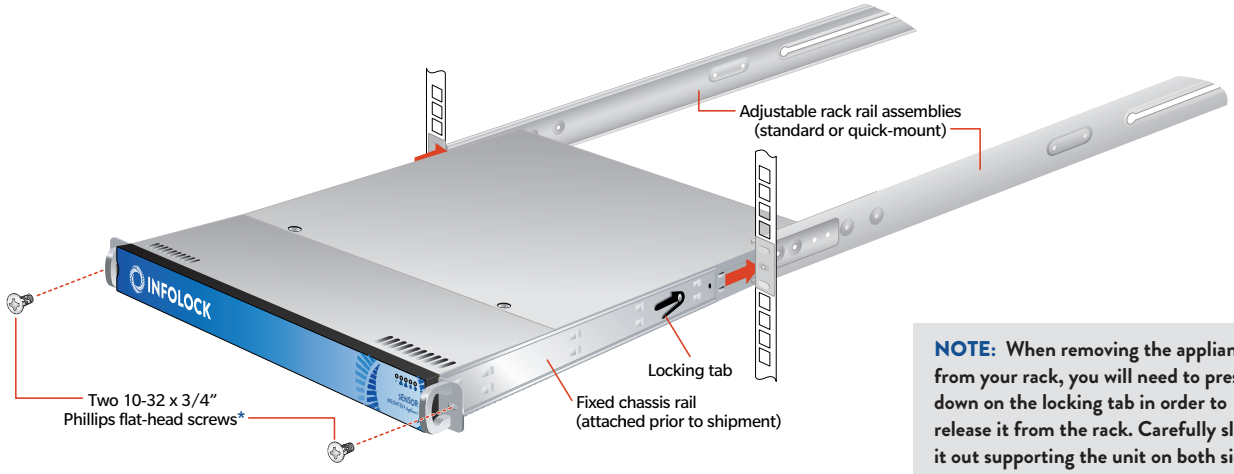
  - **B.** Push the tabs into the holes in the rack until you hear the locking mechanism on the rail assembly click into place. The locking mechanism secures the rails to the rack.
  - **C.** Slide the rail assembly to the back of the rack.
  - **D.** In the rear, insert the quick-mount rail tabs through 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.**

# 5. 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.



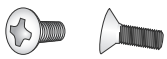

**NOTE:** When removing the appliance from your rack, you will need to press down on the locking tab in order to release it from the rack. Carefully slide it out supporting the unit on both sides at all times.

# 6. UNPACKING THE 2-POST RACK INSTALLATION HARDWARE

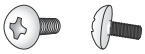
**Verify that the ship kit includes the following installation hardware**

## Installation Hardware

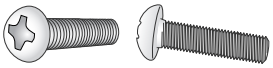
- Two power cords*
- A set of 2-post rack mounting hardware**



(Eight) M5 x 12
Phillips flat head screws

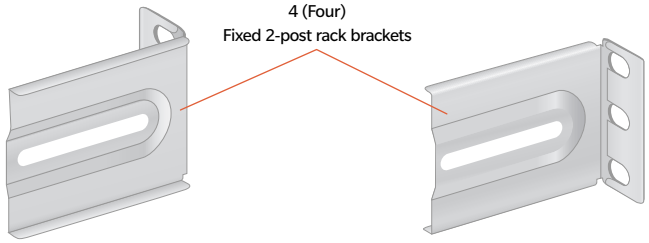


(Twenty-two) M4 x 4
Phillips truss head screws



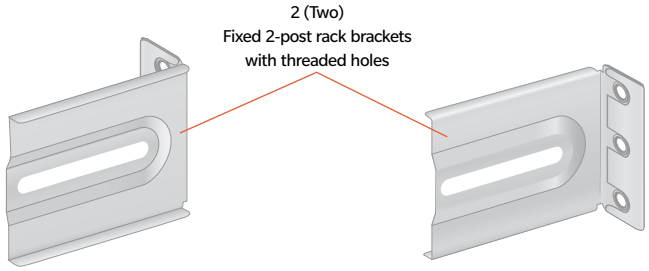
(Two) 10-32 x 3/4"
Phillips pan head screws
*(used to secure the appliance in the rack)*

- Two pairs of 2-post rack mounting brackets




Inside front view  Outside front view

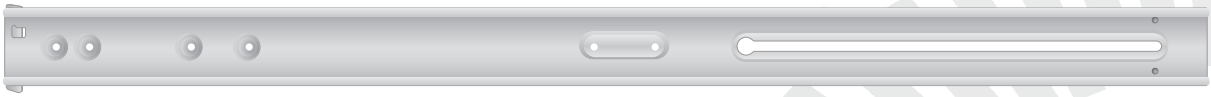
- A pair of 2-post rack mounting brackets with threaded holes

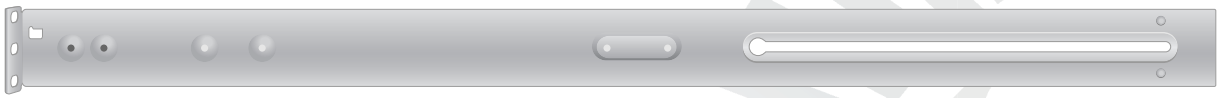



Inside front view  Outside front view

- A 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 t hat will not be used with this installation assembly kit.

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# 7. 2-POST RACK INSTALLATION

**Unpack the appliance and locate the mounting hardware**

**NOTE:** The following installation procedures for the 2-Post Rack 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.

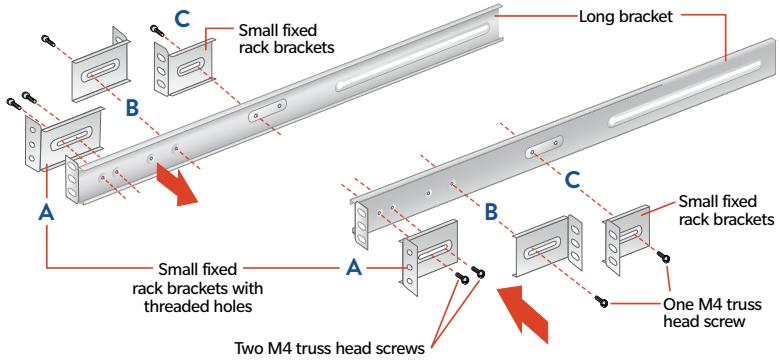
## Step 1

**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.



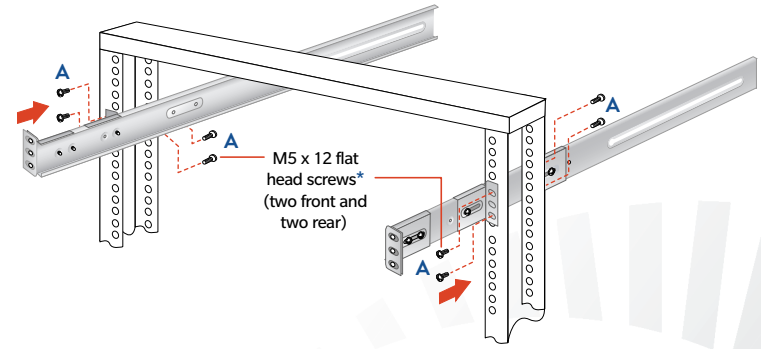

**NOTE:** Once the assembled rails are attached to the rack, securely tighten the single screws on steps B and C.

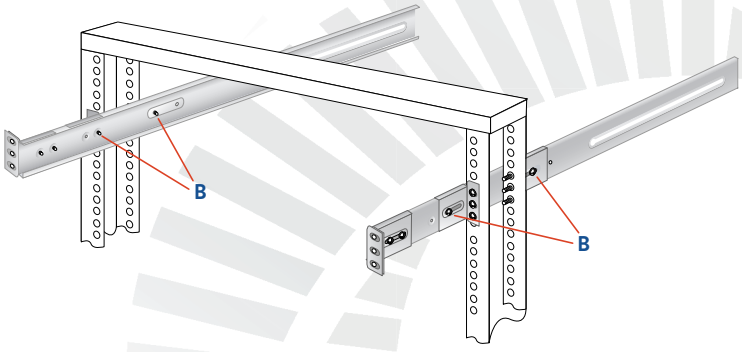
## Step 2

**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.

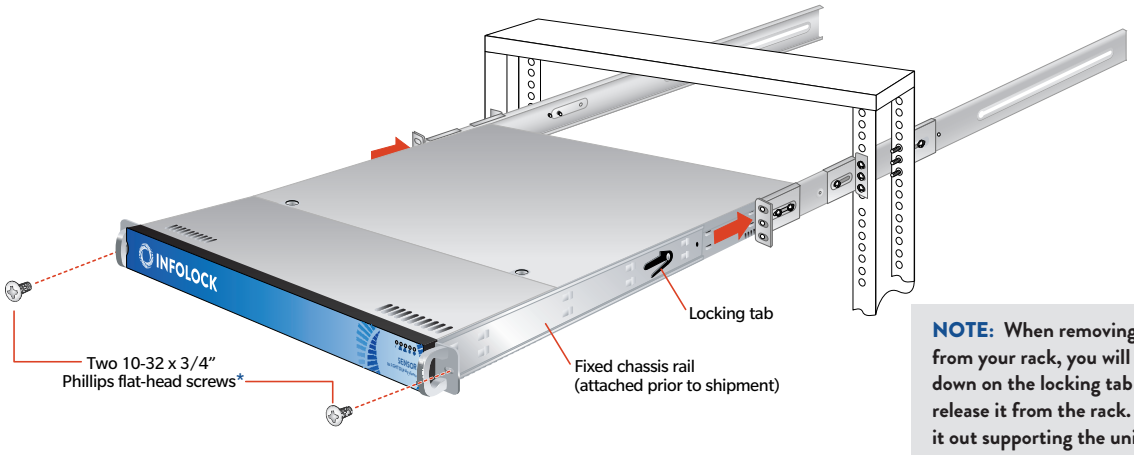
**B.** Tighten each of the single screws on the small fixed brackets (located on either side of the rack) to secure the brackets in the rack and ensure appliance stability.



# 8. INSTALLING THE APPLIANCE IN THE 2-POST RACK

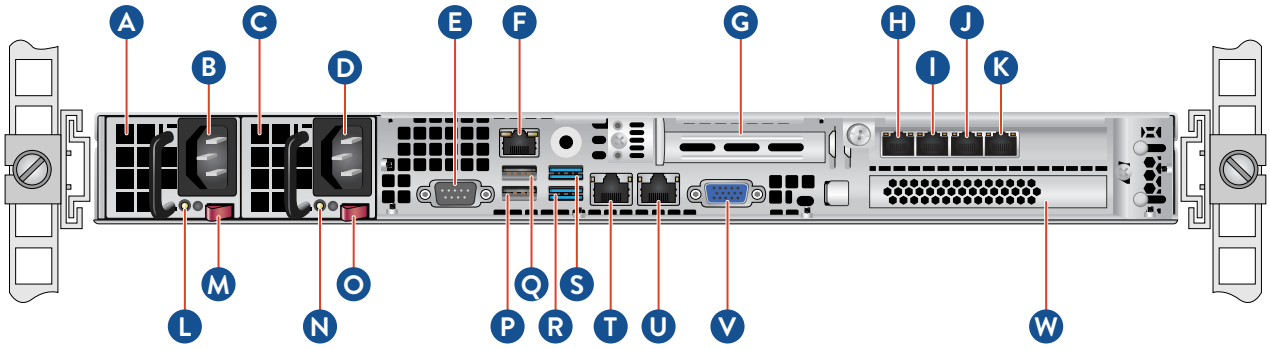
- Align the inner fixed chassis rails on the appliance with the fixed chassis rack rail assemblies previously installed in the rack.
- Carefully slide the appliance into the rack rails until you hear the locking tabs on the chassis rails click into place.
- Push the appliance all the way into the rack 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.

# 9. SENSOR 0310S REAR PANEL CONNECTIONS

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



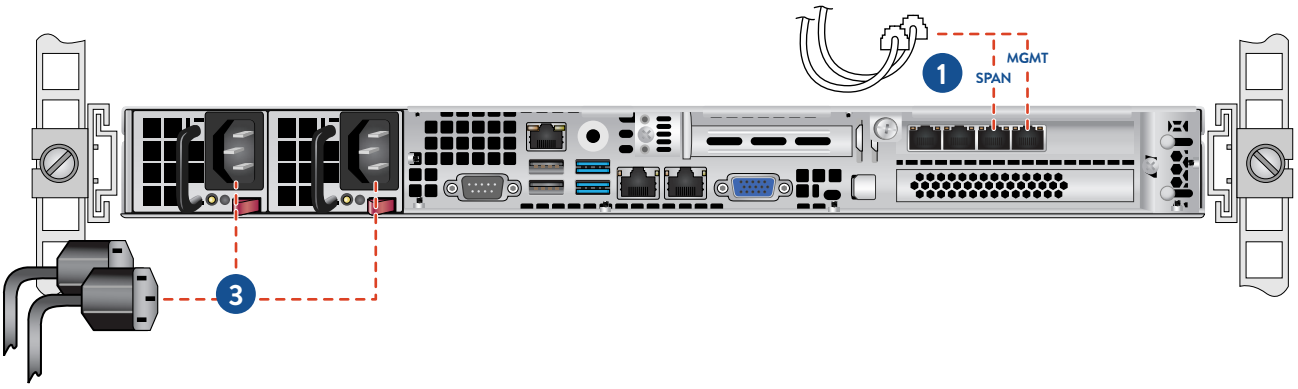

**NOTE:** Do not cable the Ethernet ports at this time.

| | |
|---|---|
| A | Power Supply Module #1 |
| B | AC Power Inlet #1 |
| C | Power Supply #2 |
| D | AC Power Inlet #2 |
| E | COM Port |
| F | Remote Management Port* |
| G | Low Profile PCIe Expansion Slot |
| H | eth3 Port |
| I | eth2 Port |
| J | SPAN Port |
| K | MGMT Port |

| | |
|---|---|
| L | Power Good LED #1 |
| M | Power Supply Lock #1 |
| N | Power Good LED #2 |
| O | Power Supply Lock #2 |
| P | USB Port 1 (generation 2) |
| Q | USB Port 2 (generation 2) |
| R | USB Port 3 (generation 3) |
| S | USB Port 4 (generation 3) |
| T | eth4 Port |
| U | eth5 Port |
| V | VGA Port |
| W | RAID Controller Card |

* **NOTE:** Although IPMI and or Remote Management is available we do not support it. We recommend for the use of KVM with VGA and USB adaptor.

# 9. SENSOR 0310S REAR PANEL CONNECTIONS (continued)




**Step 1** Connect the Ethernet cables for MGMT and SPAN (if required).

**Step 2** Connect any other required cables.

**Step 3** Connect the power cords.

Proceed to **Section 10, Front Panel Operation** on page 15.

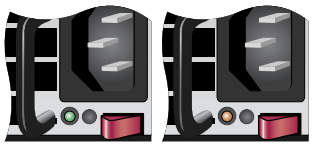
**NOTE:** The server offers redundant, hot-swap capability. The connections to AC mains should be made in a manner appropriate to local code and consistent with customer power distribution with or without redundant sources.

**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.

### 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.

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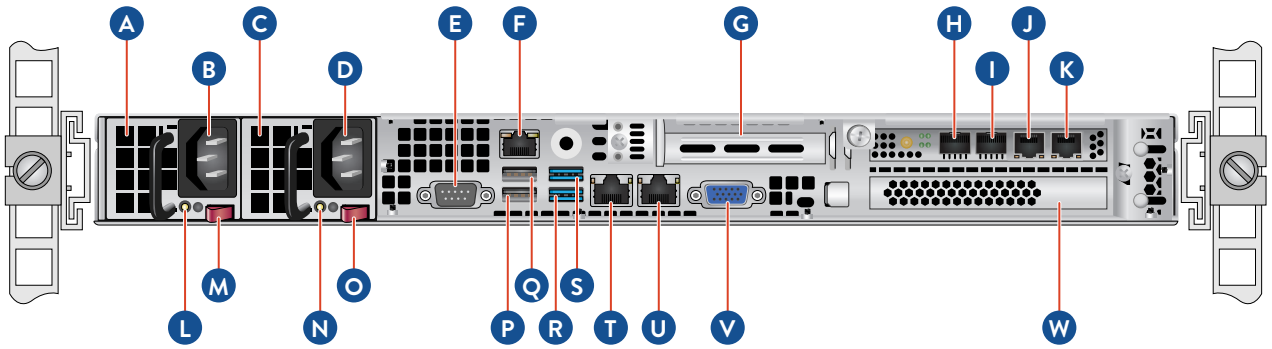
**CAUTION**
Slide rail/mounted equipment is not to be used as a shelf or a work space.

# 10. SENSOR 0310NTC & 0310NTF REAR PANEL CONNECTIONS



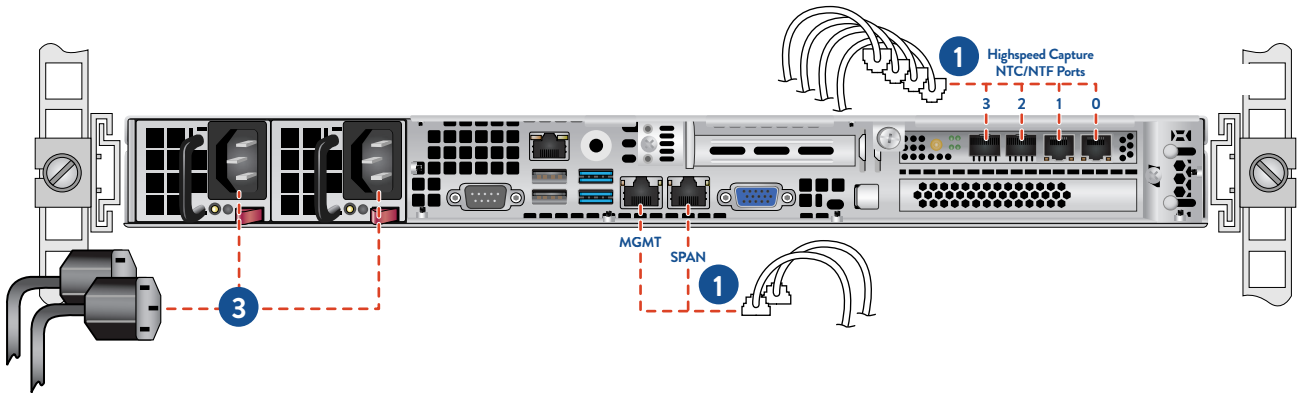

**NOTE:** Do not cable the Ethernet ports at this time.

| | |
|---|---|
| A | Power Supply Module #1 |
| B | AC Power Inlet #1 |
| C | Power Supply #2 |
| D | AC Power Inlet #2 |
| E | COM Port |
| F | Remote Management Port* |
| G | Low Profile PCIe Expansion Slot |
| H | NTC/NTF Port 3 |
| I | NTC/NTF Port 2 |
| J | NTC/NTF Port 1 |
| K | NTC/NTF Port 0 |

| | |
|---|---|
| L | Power Good LED #1 |
| M | Power Supply Lock #1 |
| N | Power Good LED #2 |
| O | Power Supply Lock #2 |
| P | USB Port 1 (generation 2) |
| Q | USB Port 2 (generation 2) |
| R | USB Port 3 (generation 3) |
| S | USB Port 4 (generation 3) |
| T | MGMT/DLP Port |
| U | SPAN Port |
| V | VGA Port |
| W | RAID Controller Card |

* **NOTE:** Although IPMI and or Remote Management is available we do not support it. We recommend for the use of KVM with VGA and USB adaptor.

# 10. SENSOR 0310NTC & 0310NTF REAR PANEL CONNECTIONS (continued)




**Step 1** Connect the Ethernet cables for MGMT and SPAN (if required or NTC/NTF cables).

**Step 2** Connect any other required cables.

**Step 3** Connect the power cords.

Proceed to **Section 10, Front Panel Operation** on page 15.

**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.

**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.

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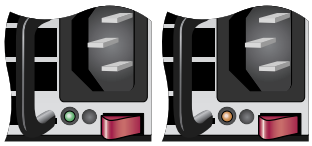
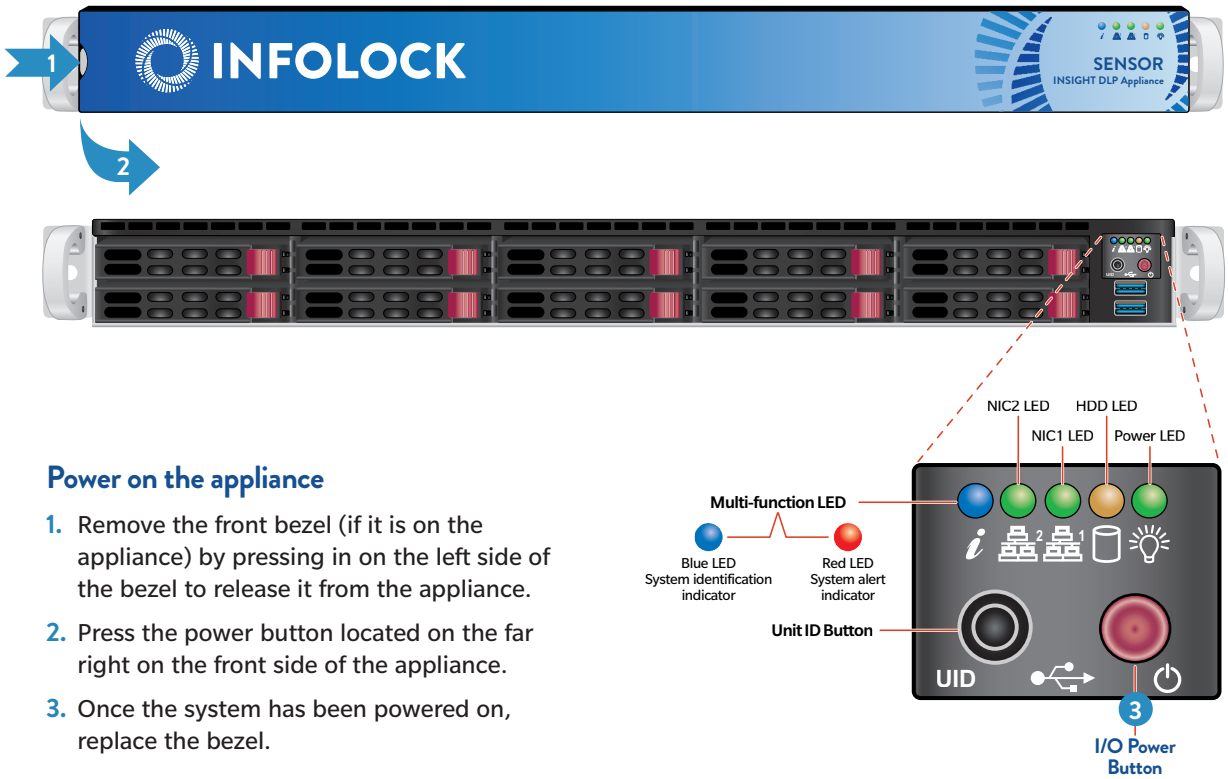


| POWER SUPPLY CONDITION | LED STATE |
|---|---|
| Output ON and OK | GREEN |
| No AC power to both power supplies | OFF |
| AC present / Only 5VSB on (PS off) | AMBER |
| AC cord unplugged or AC power lost; with a second power supply in parallel still with AC input power | OFF |
| Power supply warning 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.

# 11. FRONT PANEL OPERATION




## Power on the appliance

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

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P/N: INK-509-9747-00 REV: 0B

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