

Rack Mounting Instructions

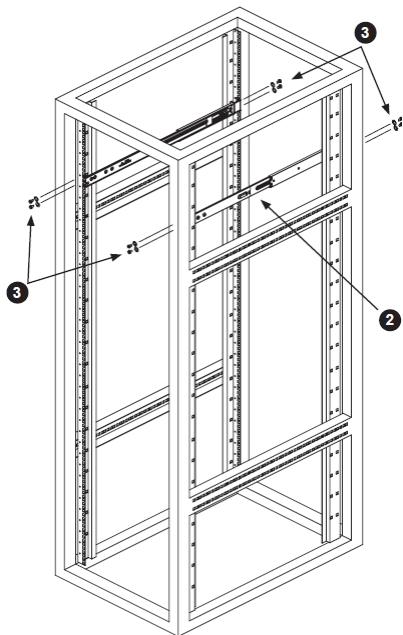
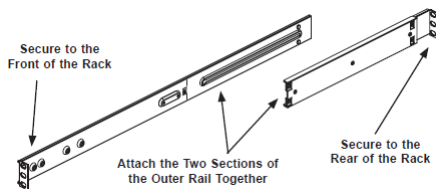
This section provides information on installing the Esri Data Appliance for ArcGIS chassis into a rack unit. There are a variety of rack units on the market, which may mean the assembly procedures will differ slightly. You should also refer to the installation instructions that came with the rack unit you are using.

NOTE: This rail will fit a rack between 26" and 33.5" deep. The inner rails come pre-installed on the Data Appliance for ArcGIS.

Installing the Outer Rails to the Rack

1. Attach the longer section of the outer rail to the outside of the shorter section of the outer rail. You must align the pins with the slides. Both ends of the outer rail must face the same direction in order to be secured to the rack.
2. Adjust both sections of the outer rail to the proper length so that the rail fits snugly within the rack.
3. Secure the longer section of the outer rail to the front side of the rack with two M5 screws and the shorter section to the rear side of the rack with two M5 screws.

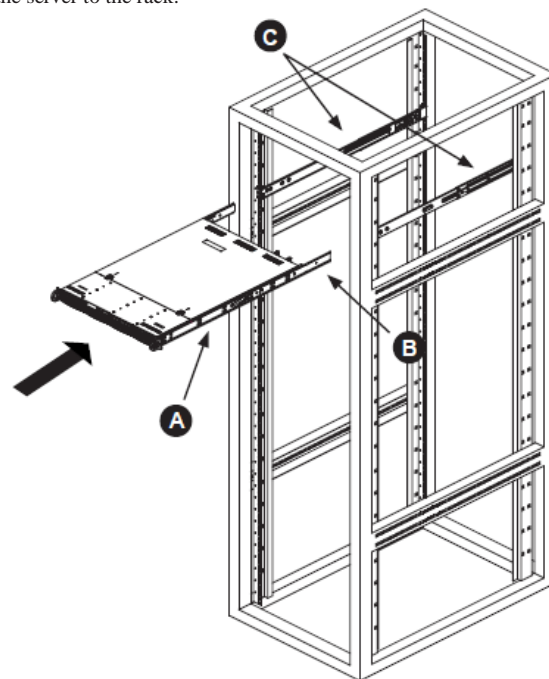
Repeat steps 2-3 for the remaining outer rail.



Installing the Chassis to a Rack

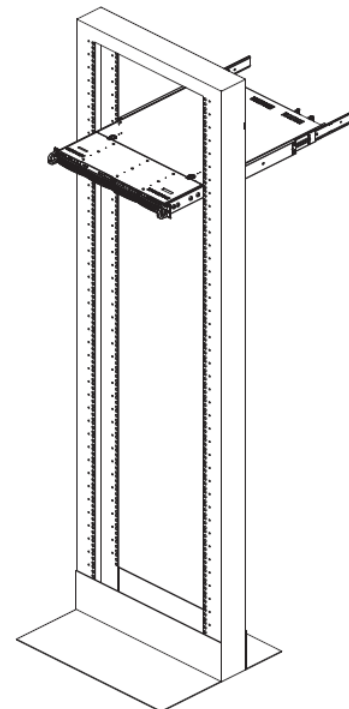
1. Confirm that chassis includes the inner rails (A) and rail extensions (B). Also, confirm that the outer rails (C) are installed on the rack.
2. Line chassis rails (A and B) with the front of the rack rails (C).
3. Slide the chassis rails into the rack rails, keeping the pressure even on both sides (you may have to depress the locking tabs when inserting). When the server has been pushed completely into the rack, you should hear the locking tabs "click" into the locked position.

(Optional) Insert and tighten the thumbscrews that hold the front of the server to the rack.



Installing the Chassis into a Telco Rack

To install the chassis into a Telco type rack, use two L-shaped brackets on either side of the chassis (four total). First, determine how far the server will extend out the front of the rack. Larger chassis should be positioned to balance the weight between front and back. If a bezel is included on your server, remove it. Then attach the two front brackets to each side of the chassis, then the two rear brackets positioned with just enough space to accommodate the width of the Telco rack. Finish by sliding the chassis into the rack and tightening the brackets to the rack.



Rail Screws

The accessory box includes all the screws needed to install the chassis in a rack. This section lists and describes the most common screws used. The chassis may not require all the parts listed.

Item	Qty	Description
1	4	M4 x 4mm (0.157) Flat Head Screw
2	22	M4 x 4mm (0.157) Round Head Screw
3	8	M5 x 12mm (0.472) Flat Head Screw
4	8	Washer for M5 Flat Head Screw



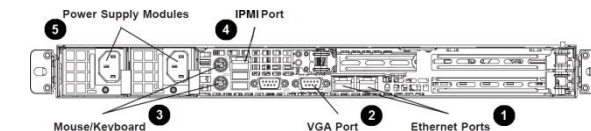
Cabling Instructions

This section provides information on cabling the Data Appliance for ArcGIS before beginning operation.

Cabling the Data Appliance for ArcGIS

Connect cables to the Data Appliance for ArcGIS in the following order.

1. Connect a CAT 6 Ethernet cable to one or both Gigabit Ethernet ports (Ethernet cables are not provided).
2. Connect a monitor cable or KVM monitor adapter to the VGA port (monitor cable or KVM adapter is not provided).
3. Connect a PS2 keyboard cable and mouse cable or KVM keyboard/mouse adapter to the keyboard and mouse ports (keyboard cable, mouse cable or KVM adapter is not provided).
4. Connect a CAT6 Ethernet cable to the IPMI port (Ethernet cable is not provided.)
5. Connect two power supply cables to the two power supplies. To ensure power redundancy use different power circuits. Power supply cables are provided with the Data Appliance for ArcGIS.



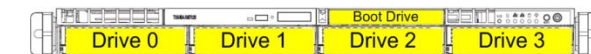
Drive Handling Instructions

This section provides information on the hard drives installed in the Data Appliance for ArcGIS and proper handling of those drives.

Data Appliance for ArcGIS Hard Drives

The hard disk drives (Drive 0 – Drive 3), or HDDs, of the Data Appliance for ArcGIS store the Esri data collection purchased from, and licensed by Esri. The hard drives are mounted in drive carriers to simplify their installation and removal from the Data Appliance for ArcGIS. These carriers also help promote proper airflow for the drive bays. For this reason, even empty carriers without drives installed must remain in the chassis.

IMPORTANT: Regardless of how many hard drives are installed, all drive carriers must remain in the drive bays to maintain proper airflow.

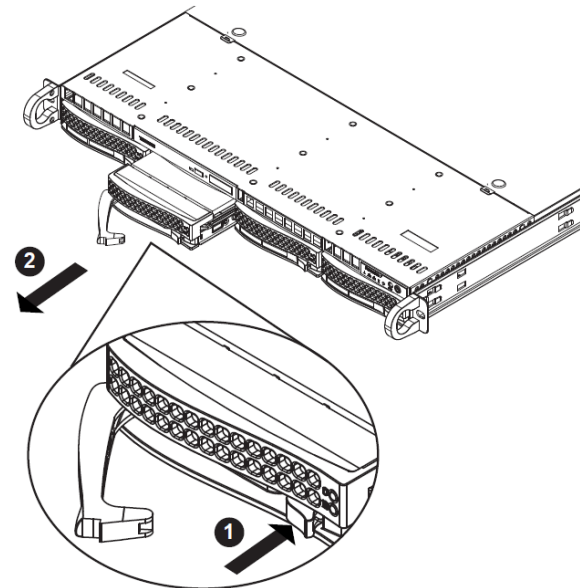


The Boot Drive (shown above) is a solid state disk, or SSD, which stores the Windows Storage Server operating system and is not removable, nor directly accessible from the front of the Data Appliance for ArcGIS.

Removing Hard Drive Carriers

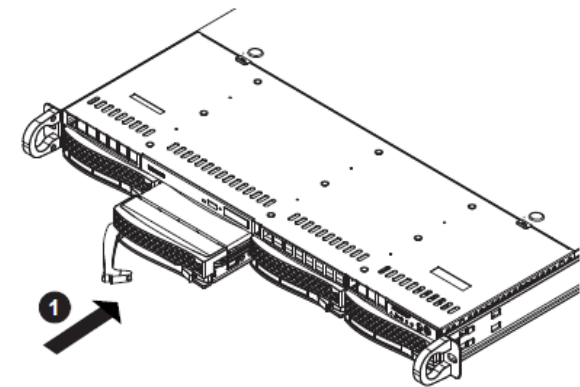
1. Press the release button on the drive carrier. This extends the drive carrier handle.
2. Use the handle to pull the drive carrier out of the chassis.

NOTE: Your Data Appliance for ArcGIS's HDDs have RAID redundancy to ensure data availability in case of an HDD failure and support hot-plug capability of the hard drives. Replacement HDDs with carriers will ship directly from Arxys. Do not remove any hard drives while the unit is powered on without express instruction from a Technical Support Engineer.



Replacing Hard Drive Carriers

1. Replace the drive tray into the chassis. Make sure to press the drive carrier handle closed until it clicks in place.



Power Supply Instructions

This section provides information on the power supply installed in the Data Appliance for ArcGIS and proper handling of the power supply modules.

Power Supplies



The Data Appliance for ArcGIS has a 500-watt high-efficiency 80PLUS Platinum Certified redundant power supply consisting of two power modules. Each power supply module has an auto-switching capability, which enables it to automatically sense and operate at a 100V - 240V input voltage.

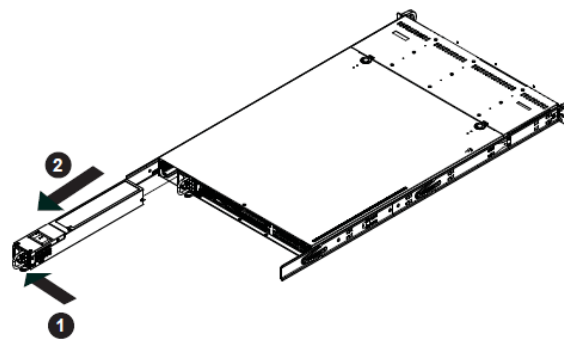
Power Supply Failure

If either of the two power supply modules were to fail, the other module will take the full load and allow the system to continue operation without interruption. The Universal Information LED will flash red slowly and an audible alarm will sound until the failed unit has been replaced. Replacement power supply modules will ship directly from Arxys. The power supply units have a hot-swap capability, meaning you can replace the failed unit without powering down the system.



Removing the Power Supply

- Unplug the AC power cord from the failed power supply module.
1. Depress the locking tab on the power supply module.
 2. Use the handle to pull it straight out with the rounded handle.



Installing a New Power Supply

1. Replace the failed hot-swap unit with another identical power supply unit.
2. Push the new power supply unit into the power bay until you hear a click.
3. Secure the locking tab on the unit.

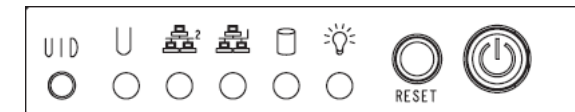
Finish by plugging the AC power cord back into the unit.

System Interface

This section provides information on the buttons and LED indicators located on the front of the Data Appliance for ArcGIS chassis, their use and appropriate responses required.

Data Appliance for ArcGIS Control Panel

There are several LEDs and buttons on the control panel of the Data Appliance for ArcGIS that provide system and component status.



Control Panel Buttons

The Data Appliance for ArcGIS includes three push buttons located on the control panel.



Reset: The reset button is used to manually reboot the Data Appliance for ArcGIS.



Power: The main power switch is used to apply or remove power from the power supply to the Data Appliance for ArcGIS.



UID: The UID button is used to turn on or off the blue light function of the U-LED. Once the blue light is activated, the Data Appliance for ArcGIS can be easily located in very large racks and server banks.

Control Panel LEDs

The Data Appliance for ArcGIS control panel has five LEDs. These LEDs provide critical information related to different parts of the system. This section explains what each LED indicates when illuminated and any action that may be required.



Universal Information LED: The Universal Information LED is used to indicate fan failure, power failure, overheat condition, or to identify the unit within a large rack installation. See the table below for descriptions of the LED states.

State	Indication
Fast Blinking Red (1x/sec)	Fan Failure
Solid Red	CPU Overheat
Slow Blinking Red (1x/4 sec)	Power Supply Failure
Solid Blue	Local UID Button Depressed
Blinking Blue	IPMI-Activated UID



NIC2: Indicates network activity on Gigabit Ethernet LAN2 when flashing.



NIC1: Indicates network activity on Gigabit Ethernet LAN1 when flashing.



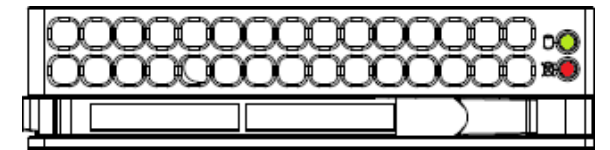
HDD: Indicates SAS/SATA drive and/or DVD-ROM drive activity when flashing.



Power: Indicates power is being supplied to the system's power supply units. This LED should normally be illuminated when the system is operating.

Drive Carrier LEDs

The Data Appliance for ArcGIS uses SATA hard disk drives mounted in drive carriers. Each SATA drive carrier has two LEDs.



Upper Green LED: When illuminated, this green LED indicates drive activity.

Lower Red LED: The red LED indicates a SATA drive failure.

Power Supply LEDs

The Data Appliance for ArcGIS includes two power supply modules. Each power supply module has a dual color LED.

State	Indication
Solid Green	System is powered on
Solid Amber	System is plugged in but powered off
LED Off	Power supply module not plugged in

