A3100 Chassis
Quick Start Guide
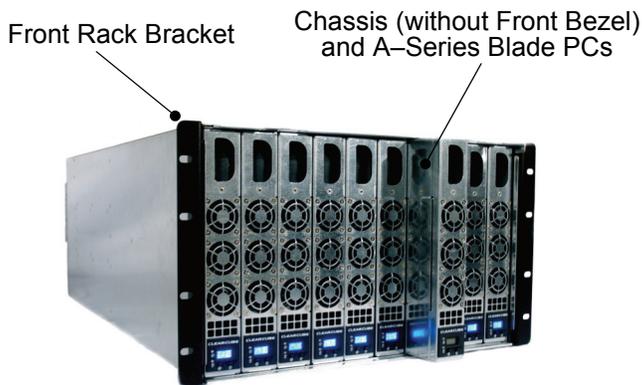
Chassis with Front Bezel

Front Bezel   Release Latch

Blade PCs in Chassis

Front Rack Bracket   Chassis (without Front Bezel) and A–Series Blade PCs
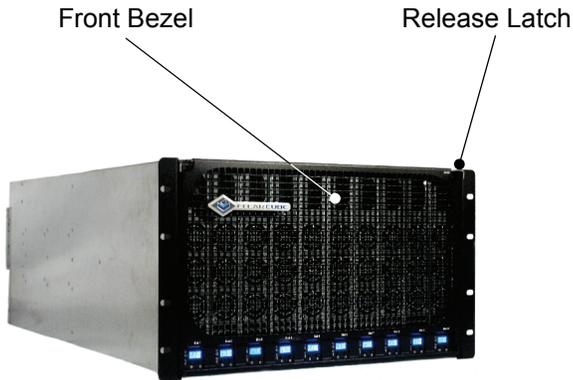
Rear of Chassis

Expansion Backplane   AC Tray
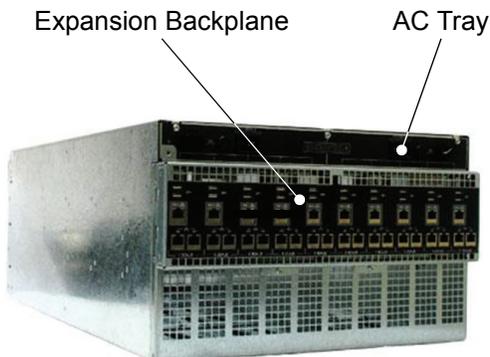
Package Contents

• A3100 chassis (with front bezel, expansion backplane, AC tray, and front rack brackets attached)

• Chassis Accessory Kit

  – Power cable (× 4)

  – Adjustable rear rack brackets (× 2)

  – Chassis ground strap and screw with washer (× 2)

  – Power cable clip (× 2)

  – Pan-head screws (× 20)

• This *Quick Start Guide*

About A3100 Chassis

The ClearCube A3100 chassis is a centralized 6U-form factor chassis that holds up to 10 A–Series Blade PCs. A standard 42U, 19-inch rack can hold up to seven A3100 chassis, for a total of 70 Blade PCs. Each A3100 chassis contains an *expansion backplane* (shown on this page) to provide all signal connectors for Blade PCs and for the chassis's electronic asset tag.

Installing the A3100 Chassis

The A3100 chassis is shipped with rack-mount brackets that allow universal mounting in standard 19-inch racks or cabinets. When installing an A3100 chassis, be sure to follow the rack or cabinet vendor's installation guidelines.

⚠	**CAUTION** Never install an A3100 chassis in a two-post rack.

If you use a cabinet enclosure, ensure that there is at least 36 inches (86 cm) of interior depth measured from the front of the enclosure to accommodate the cabling and air flow that exits from the rear of the chassis. If the cabinet enclosure front doors are not vented, add an additional 4 inches (11 cm) in front of the chassis for proper airflow. The spacing between the front and back rack or cabinet rails can be no more than 30 inches (76 cm).

The ClearCube standard Chassis Accessory Kit fits all standard 19-inch racks and cabinets and contains two front

brackets, two back brackets, and mounting hardware. The optional ClearCube Chassis Rapid-Mount (CRM) kit fits standard four-post racks with square mounting holes for snap-in rack nuts.

Installing the Ground Strap

After installing the A3100 chassis, use the included 10-32 screws to attach the ground strap to the ground point on the right-hand side of the AC tray and to the rack or cabinet in which the A3100 chassis is installed. Ensure that the rack or chassis is properly grounded. See the figure below.

AC Tray   Ground Strap
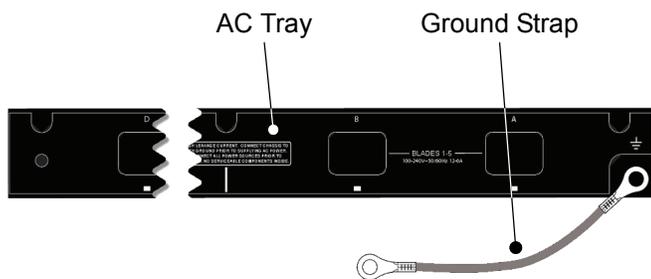
NOTE	To screw the ground strap to a rack, insert a snap-in rack nut. A rack nut is not provided in the kit.

Power Inputs and Failover Power Feature

⚠ **CAUTION: High Leakage Current**

Connect chassis earth ground before supplying AC power to chassis.

Be sure to connect the chassis ground strap (as explained in the section above) before connecting power.

As shown in the figure below, the A3100 chassis has four power receptacles: two for each half of the chassis providing power and redundant power.

- Receptacles A and B power Blade PCs in slots one through five.
- Receptacles C and D power Blade PCs in slots six through ten.

The picture below shows the A3100 power receptacles.

Power Receptacles for Blades 6 to 10   Power Receptacles for Blades 1 to 5

D   C   B   A
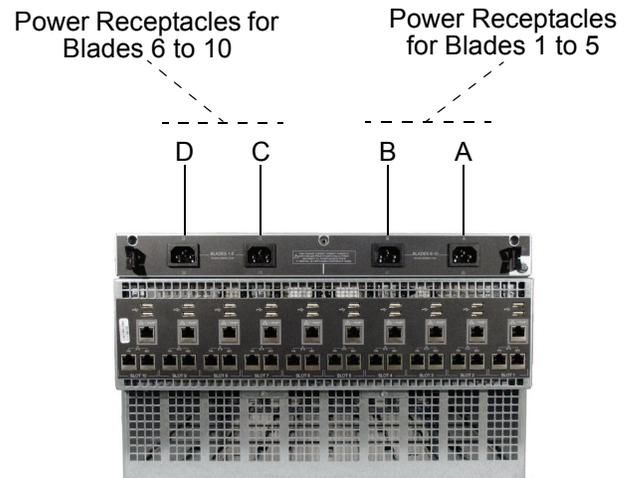
Power indicator LEDs are below each power receptacle. LEDs are illuminated when receptacles receive power.

To enable the A3100 failover power feature, connect power to all power inputs:

- Receptacles A and C provide primary power.
- Receptacles B and D provide failover power. Connect the cords in receptacles B and D to a backup power supply, such as a different power circuit or to a UPS.

See *A–Series Setup and Installation Guide* for more information about chassis power inputs and about using the chassis without the failover power feature.

Installing and Removing A–Series Blade PCs

⚠ **CAUTION**

Never lift an A3100 chassis with Blade PCs installed.

To install an A–Series Blade PC

1. Open the chassis front bezel by pressing in on the latch located on the upper-right side of the chassis.

NOTE	When pressing the latch to open the front bezel, hold the bezel with one hand to ensure that the bezel does not fall.

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2. From the top, pull the bezel toward yourself and lift it up slightly.

3. To insert a Blade PC, hold the blade so the D-shaped handle in the front panel is upright and is facing you. Align the Blade PC with the top and bottom guides in the chassis and slowly insert the Blade PC into the chassis. (Chassis slots are numbered from 1 to 10.)

   There is a slight resistance when Blade PC signal and power connectors are inserted into backplane connectors. When properly seated, a Blade PC is flush with the front edge of the bottom guide bracket.

4. Replace the bezel after inserting Blade PCs.

5. Insert Ethernet cables in the active port or ports, located on the expansion backplane, for each Blade PC in the chassis. Active ports are indicated by illuminated LEDs.

6. To power on a Blade PC, press the right-most button ⏻ on the front of the Blade PC.

To remove an A–Series Blade PC

1. Open the chassis front bezel by pressing in on the latch located on the upper-right side of the chassis.

2. Power down the Blade PC by pressing the power button (the right-most button ⏻ located on the front of the Blade PC).

3. Use the D-shaped handle on the front panel to pull gently on the blade until it slides out. Support both ends of the blade when you remove it completely from the chassis.

Related Documentation

See *A–Series Setup and Installation Guide* for additional information about A–Series Chassis and Blade PCs.

Documentation is available on the ClearCube Support site.

Contacting Support

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