

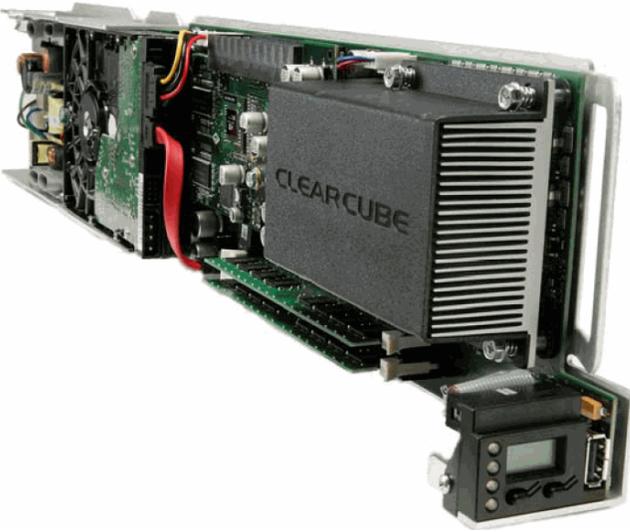
# Quick Start Guide



CLEARCUBE

## R1300

### Single-Processor Blade



The R1300 single-processor blade offers dual integrated Ethernet controllers and optional NVIDIA-based graphics to deliver a high-density, high-performance computing solution to the ClearCube Architecture.

#### INSTALLATION

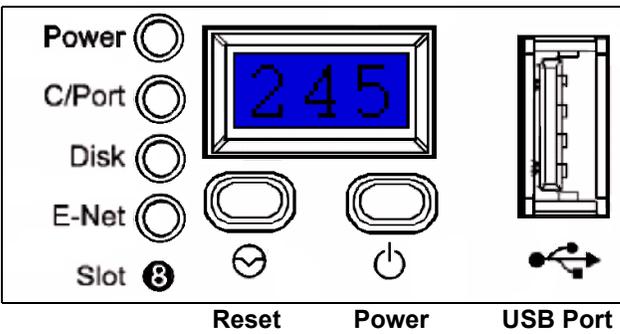
To install an R1300 blade, do the following:

1. Open the front bezel on the chassis by depressing the latches on each side. The bezel swings forward and down.
2. Orient each blade right-side up (LCD panel on the bottom) and then slowly insert the blade into the chassis by lining up the blade edges with both the top and bottom guides in the chassis. There will be a slight resistance to insertion when the back connector goes into the back-plane socket.
3. After inserting all blades, raise the front bezel and snap it into place.
4. Depress the power button on the front of the blade to power it on.

When a blade is inserted into a chassis and powered on, it takes approximately 30 seconds for the chassis and its RMM to detect the blade and relay its information to Sentral.

**Note:** The very first time you insert the R1300 blade, the power does *not* turn on automatically. You must depress the power button on the front of the blade to power it on the first time. After the first power-on, the blade uses its stored power setting to determine its unattended power-on behavior.

R1300 LCD Panel



#### R1300 FEATURES

##### Using the USB 2.0 capability of the R1300

The R1300 provides one USB 2.0 port on the rear apron of the R4300 when the blade has a 44-pin interposer installed. The 30-pin interposer does not bring the USB 2.0 signals into the R4300 signal backplane.

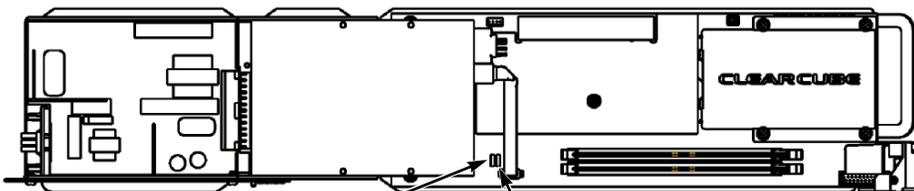
##### Jumpers on the R1300

The R1300 provides jumpers that control CMOS password clearing and Mass Storage Lockout (MSL). The default jumper settings are:

- **JP1**, pins 1 and 2 jumpered, CMOS password is retained on restart.
- **JP6**, pins 2 and 3 jumpered, MSL control is enabled in software.

##### Dual Ethernet Adapters on the R1300

The R1300 provides two Ethernet adapters. Connecting a network cable to each of the blade's Ethernet jacks on the chassis will provide two independent network connections and greater bandwidth. The primary Ethernet controller provides gigabit Ethernet. The secondary Ethernet provides 10/100 Ethernet. The dual Ethernet ports on the R1300 are accessible as follows:



**MSL Jumper JP6**  
 USB Mass Storage devices function normally (default)

**CMOS Jumper JP1**  
 Normal operation (default)

**MSL Jumper**  
 USB Mass Storage devices do not function

**CMOS Jumper**  
 Clears CMOS password on restart

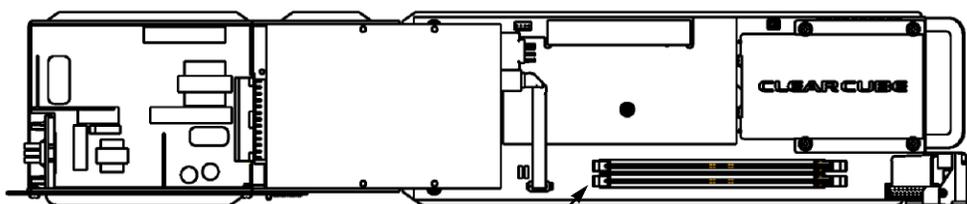


- For a 16-port EP6 module in an R4300 chassis, all ports are available. The primary ports on the blade are connected to the corresponding primary ports on the EP6, and the secondary ports on the blade are connected to the corresponding secondary ports on the EP6. When Ethernet port availability in the data center is an issue, always connect to the primary Ethernet ports on the EP6 first.
- For an R1300 installed in an R4200 chassis, only the primary ports on the R1300 are connected.

### Upgrading the Memory on an R1300

The R1300 can work with a single DIMM, as well as two DIMMs of different sizes and speeds. When equal size DIMMs are used, the memory controller on the R1300 uses interleaved memory to give better performance.

To replace or upgrade the memory on the R1300, do the following:



1. Pull the tabs on either side of the memory socket apart to remove the module.
2. Carefully insert the new memory module into the socket, making sure that the tabs snap inward securing the module in place. Always populate slot U5 (closest to the bottom of the blade) first.

**Note:** Using mismatched DIMMs incurs a performance penalty. With equal-sized DIMMs, a mismatch in speed or timing causes the system to run at the slower of the two DIMMs. With mismatched sizes, the system always runs in non-interleaved mode at the slower speed or timing of the two DIMMs.

Use only ClearCube-approved memory.

### Changing the Interposer on an R1300

ClearCube offers two separate kits that allow changing the interposer on an R1300 from the 30-pin to the 44-pin interposer, or from the 44-pin to the 30-pin interposer. With the 30-pin interposer, the R1300 works in either the R4200 or the R4300 chassis. With the 44-pin interposer, the R1300 works in the R4300 chassis and provides the convenience of a back-apron USB 2.0 port. For more information, contact your Account Executive.

The *R Series Data Center Products Reference Guide* contains more details on the R1300 blade.

### WEEE Disposal Guidelines

In the European Union, this electronic product falls under the European Directive (2002/96/EC) WEEE. When it reaches the end of its useful life or is no longer wanted, it should not be discarded with conventional waste, but disposed of at an approved designated recycling and/or treatment facility.

Laws are different in each country, so please check with your local authorities for proper disposal instructions.

For assistance, contact ClearCube at [recycle@clearcube.com](mailto:recycle@clearcube.com)



For more information, please contact ClearCube Technical Support.

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Outside the US

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