

## BladeRack® 2 FL Platform

### The Industry's First Enterprise Class, Highly Customizable, Robust Blade-Based Compute Solution

The BladeRack® 2 FL platform is the newest addition to Cirrascale's data center scale computing solutions and is designed with enterprise class data centers in mind. End users with resource hungry applications and power conscious facility managers will enjoy the best of both worlds with an ultra efficient (90%+) fully redundant power architecture and comprehensive line of available compute and storage blade offerings. In addition, BladeRack 2 FL blade servers are drop-in compatible with the award-winning Cirrascale FOREST Container, which allows for a full scale-out deployment of data center as a service and compute on demand applications.

The BladeRack 2 FL is perfect for mission critical customer installations where high availability, ultra dense systems are a requirement. With its ability to house up to 3.4PB of storage or 2600 processing cores per rack, the BladeRack 2 FL is one of the densest blade server platforms on the market today. BladeRack 2 FL blades also support IPMI as well as the Cirrascale Common Control Module software solution which enables IT managers to manage their Cirrascale solutions.

With the marriage of robust features and performance, customers in the Financial Services industry would find the Cirrascale BladeRack 2 FL an excellent vehicle for Electronic Design Automation and high performance grid installations while its ultra efficient power architecture fits seamlessly in their current power challenged environments. Data center administrators in the Service Provider industry would increase efficiency by utilizing the added connectivity options for virtual machine serving while dramatically cutting power and cooling costs due to the ground-breaking, efficient design.

The BladeRack 2 FL platform employs the industry leading patented Vertical Cooling Technology™. This allows Cirrascale to employ the fastest and most powerful processors available on the market without the performance loss commonly found in blade servers from other vendors. Increased thermal capacity has been incorporated into the design, as well as the ability to adjust airflow within the cabinet. Our patented Vertical Cooling by reducing energy expenditure and ensuring reliability. The efficiency of the BladeRack 2 FL power subsystem allows IT staff to spend fewer resources on heat related failures and provides the ultimate in availability with fully redundant power inputs, power distribution modules, and power supplies. This ultra-redundant power system allows for greater server uptime, further protecting customer investments. Industry re-defining solutions such as the BladeRack 2 FL is how Cirrascale makes good on our promise to deliver Blades Without Boundaries®.

#### Features at a Glance

- The Ideal Platform for EDA, Enterprise Cloud and Service Provider Markets
- Up to 72 Computer or Storage Servers per BladeRack 2 FL Platform
- Up to 2600 Processing Cores per Platform
- Industry Leading Patented Vertical Cooling Technology™
- Supports Cirrascale's Award Winning CirraStor Storage Solutions
- Boost Overall Efficiency and Lower TCO



# BladeRack 2 FL Platform Specifications

## Architecture:

- Separate Management and Data Networks
- Redundant Power Inputs
- Redundant Power Distribution Modules
- Redundant Power Modules
- Patented Vertical Cooling Technology

## Capacity:

- Up to 72 Blades
- Up to 480 Ethernet Connections
- Up to 2600 Processing Cores
- Over 3.4PB of Reconfigurable Storage

## Management:

- Rack Enclosure
  - Single Point Multi-Rack support
  - Fan Control
  - PDM Control
- Blades
  - On / Off / Reset
  - Voltage, Temperature
  - Power Status

## Rack Dimensions and Weight:

Height: 2222 mm (87.5 in.)

Width: 609 mm (24.0 in.)

Depth: 1168 mm (46.0 in.)

Weight: 907.1kg (2000 lbs.)

## Power System:

- Auto-Sensing 208V/400V/480V, 50/60Hz, 3-Phase Input Power
- Redundant Power Inputs (Plug Options)
  - Four Hubbell HBL2721, 30A twist-lock plugs
  - Four Hubbell CS8365C, 50A twist-lock plugs
  - Four Interpower, 63A International Cable Plugs
  - Four Interpower, 32A International Cable Plugs
- Ultra High-Efficiency
  - In Excess of 90% at 480V Input
- MTBF in Excess of 250,000 Hours

## Environmental Requirements - Temperature

### Operating Temperature

- Required: 50°F to 70°F (10°C to 25°C)
- Suggested: 65°F (18°C)

### Temperature Rate of Change

- Required: Less than 10°F (6°C) per hour
- Suggested: Less than 10°F (6°C) per hour

### Non-Operating Temperature

- Required: 34°F to 120°F (1°C to 49°C)
- Suggested: 80°F (27°C)

### Shipping Temperature

- Required: -40°F to 140°F (-40°C to 60°C)
- Suggested: -40°F to 140°F (-40°C to 60°C)

### Storage Temperature

- Required: 34°F to 120°F (1°C to 49°C)
- Suggested: 34°F to 120°F (1°C to 49°C)

## Environmental Requirements - Relative Humidity

### Operating Relative Humidity

- Required: 20% to 80% Non-Condensing
- Suggested: 50% Non-Condensing

### Non-Operating Relative Humidity

- Required: 20% to 80% Non-Condensing
- Suggested: 20% to 80% Non-Condensing

### Shipping Relative Humidity

- Required: 5% to 85% Non-Condensing
- Suggested: 5% to 85% Non-Condensing

### Storage Relative Humidity

- Required: 10% to 80% Non-Condensing
- Suggested: 10% to 80% Non-Condensing

## About Cirrascale

Cirrascale Corporation is a premier provider of blade-based GP/GPU, cloud computing and storage infrastructure for conventional and containerized data centers. Cirrascale leverages its patented Vertical Cooling Technology to provide the industry's most energy-efficient standards-based platforms with the lowest possible total cost of ownership in the densest form factor. Cirrascale sells to large-scale infrastructure operators, hosting and managed services providers, Cloud Service Providers, and HPC users. Cirrascale also licenses its award winning technology to partners globally.

## Contact Us Today

To learn more about Cirrascale and its unique data center infrastructure solutions, please visit us on our website at [www.cirrascale.com](http://www.cirrascale.com) or contact one of our Account Managers by calling (888) 942-3800.

CM003 - REV D - 11/2014

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