

# BladeRack® 2 FM Platform

## A Blade-Based Web Serving, Grid and Compute Solution with Extreme Density and Reliability

Cirrascale™ has tailored the BladeRack® 2 Series to provide unparalleled performance and investment protection for data center consolidation efforts in the dynamic enterprise computing landscape. The BladeRack 2 FM (BR2-FM) is an innovative adaptation of the BladeRack 2 platform that provides customers with a higher density compute environment as well as a fully redundant power subsystem and robust management feature set. The BR2-FM is the industry's densest compute solution with support for up to 96 blades, each housing the most cutting edge components and processors available making this platform attractive for demanding grid and web serving environments.

Like all Cirrascale products, the BR2-FM is completely customizable and can be configured with a focus on compute density. With its ability to employ just over 2680 processing cores and over 1PB of local storage space, the potential of the BR2-FM is truly boundless. Customers with high IOPs requirements will find the a full compliment of Solid State Drive offerings to speed up even the most demanding application. Web hosting and Software as a Service (SaaS) providers will find the ultra dense capacity appealing while the 90%+ efficient power subsystem will improve recurring costs in a co-location environment.

The BR2-FM platform employs the same patented Vertical Cooling Technology™ that is found in all of the BladeRack 2 Series platforms. This allows Cirrascale to use the fastest processors available on the market without the performance loss common in blade servers from other vendors due to CPU throttling. Our patented Vertical Cooling Technology has proven to save money by reducing energy expenditure and ensuring reliability, enabling data centers to use their power for compute instead of cooling.

BladeRack 2 FM platform utilizes an ultra-efficient, auto-sensing 208-480VAC, 50/60Hz, 3-Phase input power solution that will drastically reduce your organization's energy expenditure as it coverts to DC power for its blades. The efficiency of this power subsystem also 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 DC converters. This ultra-redundant power system allows for greater server uptime, further protecting customer investments. Industry re-defining solutions such as the BladeRack 2 FM, is how Cirrascale makes good on our promise to deliver Blades Without Boundaries®.

### Features at a Glance

- Blades Offer Powerful Processing for Demanding Cloud, Grid and Web Serving Environments
- Industry Leading Density with up to 96 Compute Servers per BladeRack 2 FM Platform
- Over 2680 Processing Cores per Platform
- Industry Leading Patented Vertical Cooling Technology™
- Supports High-Density GPGPU, Cloud Gaming and Hosting Configurations
- Boost Overall Efficiency and Lower TCO



# BladeRack 2 FM Platform Specifications

## Architecture:

- Redundant Power Inputs (Optional)
- Redundant Power Rectifiers
- Patented Vertical Cooling Technology™
- IPMI Management
- MTBF in Excess of 250,000 Hours

## Capacity:

- Up to 96 Blades
- Up to 384 Ethernet Connections
- Over 2680 Processing Cores
- Over 1PB Storage Capacity per Rack

## Management:

- IPMI 2.0
- Remote power on/off/reset
- KVM-IP (optional)

## 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 - 480V, 50/60Hz, 3-Phase Power Input
  - Hubbell HBL2721, 30A twist-lock plugs (L15-30P)
  - Hubbell CS8365C, 50A twist-lock plugs
  - Hubbell CS8465C, 50A twist-lock plugs
  - Hubbell HBL460P9W, 60A twist-lock plugs
  - Interpower 8415 3351, 50A twist-lock plugs (international)
  - Interpower 8415 2501, 30A twist-lock plugs (international)
- Optional 208V 50/60Hz, 3-Phase Redundant Power Inputs
  - Four Hubbell HBL2721, 30A twist-lock plugs (L15-30P)
  - Four Hubbell CS8365C, 50A twist-lock plugs
  - Four Hubbell HBL460P9W, 60A twist-lock plugs
- High-Efficiency: In Excess of 96% at Input Power

## 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.

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