

Sun Blade™ 8000 P Chassis

Specialized to your datacenter needs



Highlights

- Up to 240 processor cores and 1.344 TFLOPs per rack
- 3X the density of rackmount servers
- Up to 43 percent less power than rackmount servers
- Operating system flexibility — runs the Solaris™ 10 Operating System, Linux, Windows, or VMware
- Sun Blade transparent management — direct management of each server module, for seamless integration into existing management infrastructures
- Simple, low-cost integration into existing IT environments
- Shared infrastructure designed for superior availability, with no fans or power supplies on the blades



The Sun Blade™ 8000 P chassis is an extension of the Sun Blade 8000 modular system and provides specialized functionality while leveraging the series' common compute, I/O, and management module. The system has the only chassis that provides modular, hot-pluggable I/O for Ethernet, InfiniBand, and Fibre Channel, and its I/O and server modules may be serviced independently without requiring custom software management and configuration software.

Many of today's blade solutions are based on a "one-size-fits-all" strategy that attempts to force-fit the same solution into every market and configuration, leading to complexity and compromise when choosing blades for clusters and grids. The requirements for engineering and scientific applications such as simulation, design, and analysis are simply different from those of business applications. The Sun Blade 8000 P chassis is specialized for high-end x86 clusters and grids, with triple the density of typical rackmount systems. It supports up to 240 processor cores (this grows to 480 processor cores with future quad-core processors) in a single rack, surpassing 1.3 TFLOPS within this small footprint. Its aggregated I/O technology helps improve density by 50 percent and helps decrease the I/O power draw for the overall system by 120 percent compared to the Sun Blade 8000 modular system.

The chassis delivers enterprise-class capabilities for reliability, availability, and serviceability by aggregating 10 server modules into a common, compact 14U chassis with hot-pluggable, redundant, and externally accessible modules that share I/O, power, and cooling. The Sun Blade 8000 P chassis delivers superior investment protection by providing power, cooling, I/O, and headroom designed to support new server and I/O modules for up to five years from now, helping eliminate forklift upgrades.

In addition to helping reduce system support costs and increase reliability, the Sun Blade 8000 P chassis can be deployed more quickly than traditional rackmount solutions, with transparent management architecture requiring no custom or proprietary blade-specific systems management licensing, training, or development — helping reduce the time and complexity of integrating the chassis into your existing environment.

Sun Blade 8000 P Chassis Specifications

The Sun Blade 8000 P chassis is also available as a Sun™ System Pack, combining the server with carefully selected services that help enable you to yield the most value from your assets. Sun System Packs deliver higher-value services such as better coverage, automatic operating system updates, and training credits — for significant advantages over traditional warranty plans.

I/O modules

PCI Express (PCIe) Network Express Modules (NEMs) (up to two per chassis or six per rack)

- GbE 20-port passthru PCIe NEM (Intel 82571EB GbE controller-based)
- 4 Gb Fibre Channel 20-port passthru PCIe NEM (Emulex Zephyr IOC FC controller-based)
- 4x InfiniBand, DDR, 10-port passthru PCIe NEMs (Mellanox MT25204 InfiniHost III Lx controller-based)

Environment

Acoustic noise	Noise levels within two feet of the rear of the system measured at 107 dB; within two feet of the front measured at 80 dB
AC power	200–240 V AC, 50–60 Hz
Operating temperature	Single nonrack system: 5° to 35° C (41° to 95° F), 10–90% relative humidity, noncondensing, 27° C max. wet bulb
Operating altitude	Single nonrack system: up to 2,286m (7,500 ft.), max. ambient temperature derated by 1° C per 300m above 900m
Nonoperating altitude	Single nonrack system: up to 3,048m (10,000 ft.)

Power

- Power supply: N + 1 (3 + 1) high-efficiency, hot-swappable, load-sharing, load-balancing
- N + 1 PSU rating: 3,000 W each power supply

Regulations

Meets or exceeds the following requirements:

- Safety: IEC60950, UL/CSA60950, EN60950, CB Scheme with all country differences
- RFI/EMI: FCC Class A, Part 15 47 CFR, EN55022, CISPR 22, EN300-386: v1.31, ICES-003
- Immunity: EN55024, EN300-386: v1.3.2

Certifications

- Safety: cULus Mark, TUV GS Mark, CE Mark, GOST-R, S-Mark
- EMC: CE Mark (93/68/EEC); Emissions and Immunity Class A Emissions Levels: FCC, VCCI, C-Tick, MIC, GOST-R, BSMI
- Other: labeled per WEEE (Waste Electrical and Electronic Equipment) Directive

Chassis dimensions and weight

Height	616.21mm (24.26 in.) 14U
Width	444.5mm (17.5 in.)
Depth	722mm (28.43 in.)
Weight (empty chassis with midplane)	34.02 kg (75 lbs.)
Weight (fully configured)	190.51 kg (420 lbs.)

Learn More

To learn more about the Sun Blade 8000 P chassis, go to sun.com/blades.

Mounting option

- 19-in. rackmount rail kit (included)



Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA Phone 1-650-960-1300 or 1-800-555-9SUN Web sun.com

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