

# Sun SPARC Enterprise® M3000 Server

Enabling Enterprise performance and Mission Critical RAS in an ultra dense footprint at an entry-level price



> Growing demand for scalability and 24x7 availability coupled with modern economic realities are re-shaping the design of the multi-tiered datacenter. Customers desire products and solutions that reduce their overall cost and complexity by combining low price, better price/performance, improved environmental requirements, system manageability, and increased availability. Now, for the first time, IT organizations can securely, reliably, and eco-efficiently serve millions of new customers and communities with mainframe class reliability in a 2 RU footprint while maintaining their ability to seamlessly scale up with the Sun SPARC Enterprise® M3000 server.

## Highlights

- 1 CPU, 2 RU entry level enterprise class server based on the quad-core SPARC64® VII processor native to the M-Series portfolio
- Seamless scalability from 1 CPU up to 64 CPUs within the same family and without changing the management system
- Advanced virtualization technologies, methodologies, and services, making Sun SPARC Enterprise® servers ideal for consolidation
- Future proof the datacenter with the unique Solaris Application Guarantee Program and the extended roadmap of the SPARC Enterprise server portfolio
- Enterprise Computing and extreme RAS in a small footprint and low price point
- Compute efficient with a 50 percent reduction in space and power consumption and 2x the performance
- Services expertise available to install, support and optimize your server implementation

## Keep pace with expanding needs

With its compact, low power consumption and lightweight design the SPARC Enterprise M3000 server was architected to help our customers contain existing application fees, deploy new business services and consolidate existing distributed systems more cost effectively and reliably than ever before.

Because it is part of the SPARC Enterprise M-Series family, the M3000 allows our customers to scale from 1 CPU to 64 CPUs all within the same family and without having to learn a new management system. That means our customers can take advantage of Enterprise class RAS features in a 2 RU box and can incrementally grow and configure their business processes exactly as they need them. No wasted resources, just improved utilization that will meet their IT needs well into the future. This system allows our customers to start small and grow big.

## Power efficient virtualization technologies

The compact and flexible SPARC Enterprise M3000 server delivers greatly improved business efficiency and with its high density design the M3000 shows a 50 percent reduction in space and power consumption all while doubling the performance when compared to the Sun Fire™ V445 server. In addition, its light weight design avoids rackmount floor-loading concerns.

In addition to its eco-efficiencies and mainframe-class reliability features, the Sun SPARC Enterprise M3000 server is an easy-to-manage consolidation/virtualization platform, compared to similar systems from IBM and HP.

When combined with Sun and partner service offerings, customers can accelerate their time to market, and capture new revenue streams while dramatically improving throughput, energy efficiency and service level predictability, at reduced costs.

## Sun SPARC Enterprise M3000 Server Specifications

### Processor

One SPARC64 VII quad-core SPARC V9 Architecture, ECC protected	
Cache Level 1	• 64 KB D-cache and 64 KB I-Cache
Cache Level 2	• 5 MB on-chip
Clock speed	• SPARC64 VII: 2.52 GHz

### System

CPU	• One CPU boards (CMU), one CPU per board
Main memory	• Up to 32 GB per domain/system with 4 GB DIMM
I/O	• Four PCIe short low profile slots (x8 lane)
Jupiter Bus	• High-speed, low-latency interconnect system bus with redundant data, address, and response crossbar interconnect
System bus bandwidth	• 17 GB/sec peak, 5.4GB/sec stream (memory) (copy)
System bus bandwidth (I/O)	• 4 GB/sec peak
Optical Drive	• One internal DVD drive
Service processor for	• One Dynamic Domain system management

### Storage

Boot device	• Up to four 146 GB internal, 2.5 in. SAS HDDs
External	• Direct, SAS attached to Sun StorageTek™ disk arrays using the built-in external SAS port (2 lane)
Resource management	• Native Browser interface for complete platform management • Native Sun Management Center 4.0 • Solaris 10 Resource Manager including Solaris Containers

### Software

Operating system	• SPARC64 VII: Solaris 10 10/08
Languages	• C, C++, Pascal, FORTRAN, Java™, Perl, Python
Networking	• ONC™/NFS™, TCP/IP, SunLink™, Netware
System monitoring	• Sun Management Center • Solaris Web Start • Solstice Domain Manager • Solstice Enterprise Manager™ • Solstice Backup™ • xVM Ops Center
Value added software	• VERITAS File System • VERITAS Volume Manager • Solaris Cluster™ • Sun HPC ClusterTools™ • Sun Java Enterprise System

### Environmental

AC power	• 100–240 VAC 1-phase (50/60 Hz), 12 A per power cord, two power cords
Plug	• NEMA-L6-20P (U.S.) or IEC 309-IP44 (INTL) IEC 60320 C19 connector
Receptacle type	• IEC 60320 C20
Operating temperature	• 5°C to 35°C (41°F to 95°F): 0 to 500 m • 5°C to 33°C (41°F to 91.4°F): 501 to 1,000 m • 5°C to 31°C (41°F to 87.8°F): 1,001 to 1,500 m • 5°C to 29°C (41°F to 84.2°F): 1,501 to 3,000 m
Nonoperating temperature	• -20°C to 60°C (-4°F to 140°F) 93% relative humidity, noncondensing
Altitude	• Up to 3000 m (9,842 ft.)

### Regulations (meets or exceeds the following requirements)

Safety	• CSA60950-1-03, UL60950-1, IEC60950-1, 1(2001), GB4943-2001 Scheme with all national deviations
RFI/EMC	• FCC part-15, EN55022/CISPR22, VCCI, AS/NZS CISPR 22, EN 300 386, EN61000-3-2, EN61000-3-3, JISC61000-3-2, KN22, GB9254, GB17625
Immunity	• EN55024, EN 300 386, KN24
Regulatory markings	• CE, FCC, VCCI, CSA C/US
Other marks	• WEEE and Chinese RoHS

### Key RAS features

First Fault Isolation, Non-deferred error logging, Predictive failure analysis, Directive Maintenance, Concurrent maintenance (partial), Environmental monitoring, Dynamic CPU resource de-allocation (fault detection, isolation and recovery), Machine readable FRU-ID, Rich check/recovery mechanism in Processor, ECC on address and data path, dual power feed. Extended-ECC memory, L1 and L2 cache line degradation

### Dimensions and weight

Height	• 8.7 cm (3.43 in.)
Width	• 44 cm (17.33 in.)
Depth	• 65.7 cm (25.87 in.)
Weight	• 22 kg (48.50 lb.)

### Remote services

Sun™ Connection

### Learn More

The Sun SPARC Enterprise M3000 server belongs to the SPARC Enterprise M-series servers designed to satisfy a large range of workloads and applications. For more information, talk to a local Sun sales representative or visit [sun.com/m3000](http://sun.com/m3000)

### Services

From design and implementation to support and management, Sun provides an end-to-end portfolio of services designed to accelerate the alignment of IT infrastructure with business needs, optimize usage of IT assets, and contain costs. Sun's expertise helps you address key datacenter challenges, including virtualization/consolidation, power, space and cooling optimization, planning and implementation, and ongoing maintenance and support. Leverage Sun's more than 25 years of relentless innovation and depth of expertise to help you architect and deploy a reliable, high-performance Sun SPARC Enterprise M3000 solution that gives you a competitive edge. Sun service offerings include installation, integrated hardware and OS support, training, eco/virtualization, consolidation, migration, managed services, and more.

### Upgrade easily—Sun™ Upgrade Advantage Program

The Sun SPARC Enterprise M3000 server is eligible for the Sun Upgrade Advantage Program. Customers can trade in their old Sun or non-Sun servers and receive a discount toward the price of an M3000 server. For more details on the Sun Upgrade Advantage Program, visit [sun.com/tradeins](http://sun.com/tradeins).