

# HP Integrity rx8620-32 Server

Data sheet



HP servers offer innovation based on standards, laying the foundation for the Adaptive Enterprise, where business and IT are synchronized to capitalize on change. Powered by the industry-standard Intel® Itanium® 2 processor, HP Integrity servers deliver superior choice, focused innovation, and world-class experience. Integrity servers provide you with the leading performance, exceptional scalability, unparalleled flexibility, and mission-critical reliability your business demands.

The HP Integrity rx8620-32 Server achieves a level of performance, functionality, and value unmatched in the midrange class, with scalability up to 32 processors. Combined with the processor-enhancing capabilities of the HP Super-Scalable Processor Chipset sx1000, the HP Integrity rx8620-32 Server delivers breakthrough

performance, outstanding scalability, and simplified management at an exceptional value. In addition, multiple-operating-system support gives you the freedom to run the right solution for your IT requirements. The HP Integrity rx8620-32 Server makes highly available enterprise computing an affordable reality.

## Key features:

### HP Integrity rx8620-32 Server

- Broad OS choice (HP-UX 11i, Linux®, Microsoft® Windows® Server 2003, and, in the future, OpenVMS), and robust partitioning capabilities
- Processor-optimizing HP Super-Scalable Processor Chipset sx1000 and high-end cell-based technology
- Industry-leading high-availability features and solutions
- In-chassis upgrades to future generations of Intel Itanium processors

## Key benefits:

### HP Integrity rx8620-32 Server

- Increased flexibility, maximum deploy/redeploy utility, significant consolidation opportunities
- Blazing-fast application performance
- Unprecedented reliability, protecting your business from unforgiving interruptions
- Superb investment protection without costly box-swaps

## HP servers—innovation based on standards

### **Taking HP Integrity rx8620-32 Servers to the next level**

HP Integrity servers now bring you even more processing power with the introduction of a new generation of Intel® Itanium® 2 processors, which provide more performance than ever. The HP Integrity rx8620-32 Server is also available with the HP mx2 Dual-Processor Module, consisting of two Intel Itanium 2 processors. Developed by HP, the mx2 Dual-Processor Module brings you double the number of processors in the HP Integrity rx8620-32 Server. This significantly enhanced processing power creates greater opportunities for increased performance and greater scalability—allowing additional applications and additional users to be added without needing to purchase additional systems—and it enables low-cost server consolidation as well. What's more, Intel Itanium 2 processors can be mixed with HP mx2 Dual-Processor Modules in the same HP Integrity rx8620-32 Server, offering even more scalability and flexibility.

### **Innovative HP chipset delivers more power**

The extensive experience HP gained as co-developer, with Intel, of the Intel Itanium architecture led to the innovation of the HP Super-Scalable Processor Chipset sx1000. The HP sx1000 Chipset unleashes the full power of Intel Itanium 2 processors by lowering memory latencies and increasing memory and I/O throughput. The result is substantial system performance gains to handle the most demanding business workloads.

### **HP Integrity rx8620-32 Servers offer outstanding choice and a better return on your IT investment**

The HP Integrity rx8620-32 Server offers a full range of operating systems, including HP-UX 11i, Linux, and Microsoft Windows Server 2003 (and, in the future, OpenVMS). This means you can easily deploy and redeploy a very broad range of applications that are best suited for your business on the operating system of your choice. You can even run multiple operating systems simultaneously in the same server. In addition, applications are protected because the HP Integrity rx8620-32 Server has been designed with leading high-availability technologies that virtually eliminate vulnerability in architecture and applications.

HP Integrity servers deliver breakthrough value within and beyond the system, along with outstanding return on your IT investment. They give you the agility to grow with your business so you can manage the cost of change.

Itanium-based servers from HP have broad industry support and longevity. With in-chassis upgrades to future Intel Itanium processors, the HP Integrity rx8620-32 Server is a highly flexible and scalable solution. By choosing the HP Integrity rx8620-32 Server now, you are sure of long-term performance gains by investing in a technology with sustainable performance improvements. In addition, HP offers the industry's best investment protection with in-box upgrades from HP 9000 to Integrity servers—a unique upgrade capability that offers outstanding savings.

The same standards-based technologies and reusable components that make HP Integrity servers more cost-effective to build also make them easier to deploy, maintain, and manage. With comprehensive, leading management tools to provide superior resource utilization and reduce complexity, the HP Integrity rx8620-32 Server frees up IT resources and staff to perform other mission-critical tasks—eliminating costly downtime and system troubleshooting.

HP offers the Virtual Server Environment (VSE), an integrated server virtualization offering for HP Integrity servers that provides a flexible computing environment maximizing usage of your server resources. VSE encompasses a number of fully integrated, complementary components that enhance the functionality and flexibility of your server environment, including workload management, partitions, availability software, and utility pricing. VSE enables you to double your resource utilization, maintain continuous service levels, and pay only for what you use.

## HP StorageWorks solutions— put information to work

HP StorageWorks helps businesses put information to work. Our industry-leading portfolio of network storage solutions makes it easier for businesses to keep the right information at their fingertips, quickly adapt to change and exploit new opportunities, and increase information availability while radically cutting costs.

For more information on StorageWorks, contact your HP sales representative or visit:

[www.hp.com/storage](http://www.hp.com/storage)

## HP Services—get the most out of your HP Integrity server

HP Services professionals take a collaborative approach to help you reduce IT complexity and better control the impact of change on your business. HP has the expertise to design, build, integrate, manage, and evolve IT environments to more closely align business and IT. Our global portfolio of flexible services helps you to create an Adaptive Enterprise that provides greater flexibility and business value, reduces risk, controls costs, and promotes more predictability and improved service levels—while maximizing the value of your IT investments.

HP's end-to-end service solutions offer consistent quality and service levels across multiple platforms, including UNIX®, OpenVMS, Windows, and Linux. Our hardware and software support offerings—from reactive to comprehensive mission-critical—reduce the risks associated with downtime.

For more information on these services, contact your HP sales representative or visit:

[www.hp.com/hps/premium](http://www.hp.com/hps/premium)

## HP Financial Services—put the power of the HP portfolio to work for you

In addition to having the industry's strongest portfolio of products, services, people, tools, methodologies, and world-class partnerships, HP makes it easy on the balance sheet to put the power of the HP portfolio to work for you through HP Financial Services.

Pay per use, a metered utility pricing solution, is available for the Integrity rx8620-32 Server running HP-UX or Windows operating systems—giving you the advantage of paying for the capacity as you use it.

For more information on these services, contact your HP sales representative or visit:

[www.hp.com/go/hpfinancialservices](http://www.hp.com/go/hpfinancialservices)

## Technical specifications

Processor	HP mx2 Module Intel Itanium 2	1.6 GHz/6 MB Intel Itanium 2	1.5 GHz/4 MB Intel Itanium 2
Processors per system	2–32	2–16	2–16
Module type	Dual processor	Single processor	Single processor
Clock speed	1.1 GHz	1.6 GHz	1.5 GHz
Front-side bus	400 MHz	400 MHz	400 MHz
L1 cache	32 KB	32 KB	32 KB
L2 cache	256 KB	256 KB	256 KB
L3 cache	4 MB	6 MB	4 MB
L4 cache	32 MB	N/A	N/A
RAM minimum/maximum	2 GB/256 GB		
RAM type	PC2100 ECC registered DDR266A/B SDRAM		
Memory protection	Error checking and correcting (ECC) on memory and caches; memory chip spare		
Hard drive capacity	36 GB, 73 GB, and 146 GB drives available		
Internal hard drive bays	4 hot-plug Ultra160 SCSI; 4 additional disk drive slots on optional Server Expansion Unit (SEU)		
Maximum internal storage	584 GB		
Removable media	2 (either DVD+RW or DAT); 2 additional removable media bays with optional Server Expansion Unit (SEU)		
Expansion slots	Base system: 16 internal PCI-X hot-plug I/O card slots available Optional Server Expansion Unit (SEU): 16 additional PCI-X hot-plug I/O card slots		
Network adapter	10/100/1000Base-T Ethernet		
Storage adapter	Ultra160 SCSI; Smart Array 6402 RAID adapter (optional)		
Interfaces	3 RS-232 serial ports (remote, local, UPS) and 10BT management LAN		
Form factor	Rack-optimized with 17U height; standalone (rack-less) form factor kit available		
Operating systems supported	HP-UX 11i v2 Microsoft Windows Server 2003, Enterprise and Datacenter Editions Red Hat Enterprise Linux AS 3* SUSE LINUX Enterprise Server 9* OpenVMS v8.2 (by 1H 2006)		

### High availability

#### Standard server features

- Dynamic CPU and memory allocation/de-allocation
- Memory chip-sparing technology
- Hot-plug cell boards
- Hot-plug fans
- Error checking and correcting (ECC) on all CPU, cache, memory, and I/O paths
- Online addition and replacement of PCI I/O cards
- Redundant power inputs for dual-grid connections
- Management Processor failover (core I/O)
- N+1 hot-swappable fans and power supplies
- Hot-spare Instant Capacity CPU functionality (for HP-UX 11i partitions only; requires Instant Capacity CPUs)
- Hardware partitions (nPars)

#### High-availability and business-continuity solutions (optional)

- HP Serviceguard for HP-UX 11i and Linux
- HP Serviceguard Extension for RAC for HP-UX 11i
- HP Serviceguard Extension for SAP for HP-UX 11i and Linux
- HP Serviceguard Manager for HP-UX 11i and Linux clusters
- HP Event Monitoring Service
- HA Monitors for HP-UX 11i
- High Availability Toolkits for HP-UX 11i and Linux
- HP Mirrordisk/UX for HP-UX 11i
- HP Extended Campus Cluster (including RAC) for HP-UX 11i
- HP Metrocluster with Continuous Access XP for HP-UX 11i
- HP Metrocluster with EMC SRDF for HP-UX 11i
- HP Continentalclusters (including RAC) for HP-UX 11i
- OpenVMS clusters, including disaster-tolerant environments with Disaster Tolerant Cluster Services
- Microsoft Cluster Service for Windows Server 2003, Enterprise and Datacenter Editions
- HP StorageWorks Cluster Extension XP for Windows Server 2003, Enterprise and Datacenter Editions, and Linux

\* Linux is supported on single Intel Itanium 2 processors. There are no current plans to support Linux on the HP mx2 Dual-Processor Module.

## Technical specifications (continued)

<b>Management</b>	HP Systems Insight Manager provides a single point of administration across all operating systems supported on HP Integrity servers. In addition, the following tools are available to manage the servers under their specific operating systems:
<b>HP-UX 11i</b>	<b>Software deployment</b> <ul style="list-style-type: none"><li>• HP Ignite-UX for installation and deployment of the HP-UX 11i Operating System</li><li>• HP Software Distributor-UX for software and patch management</li><li>• Update-UX automates updates to HP-UX 11i Operating Environments</li><li>• Software Package Builder packages software into SD-UX packages</li></ul> <b>Configuration management</b> <ul style="list-style-type: none"><li>• HP System Administration Manager for HP-UX 11i system administration</li><li>• Partition Manager to manage nPartitions</li><li>• HP-UX 11i webmin-based Admin allows easy plug-in of open source management tools</li><li>• HP-UX 11i Bastille provides security hardening and lockdown</li><li>• Security Patch Check efficiently improves system security</li><li>• Serviceguard Manager monitors and manages Serviceguard clusters</li><li>• Management Processor enables comprehensive remote server management</li><li>• WBEM for consistent management</li></ul> <b>Workload management</b> <ul style="list-style-type: none"><li>• HP Process Resource Manager manages allocation of resources (optional)</li><li>• Secure Resource Partitions for secure application stacking</li><li>• HP-UX 11i Workload Manager automatically manages resources based upon SLOs (optional)</li><li>• Global Workload Manager to manage large environments</li></ul>
<b>Windows</b>	<ul style="list-style-type: none"><li>• HP Integrity Essentials Foundation Pack (includes Systems Insight Manager and Smart Setup CD for Windows installation)</li><li>• Management Processor enables comprehensive remote server management</li></ul>
<b>Linux</b>	<ul style="list-style-type: none"><li>• HP Enablement Kit for Linux eases installation in Linux environments</li><li>• System Management Home Page for HP Integrity servers with Linux for single-system management</li><li>• Insight Management Agents for HP Integrity servers with Linux</li><li>• Global Workload Manager for resource optimization</li></ul>

## Environmental specifications

<b>Altitude</b>	Operating: 10,000 ft. (3000 m) maximum Non-operating: 15,000 ft. (4500 m) maximum
<b>Temperature</b>	Operating: 41 to 95°F (5 to 35°C); for altitudes >5,000 ft., derate max. temp. by 1.8°F (1°C)/1000 ft. (300 m) Non-operating: -40 to +158°F (-40 to +70°C) Maximum rate of temperature change: 36°F (20°C) per hour
<b>Humidity</b>	Operating: 15% to 80% relative non-condensing; maximum wet bulb = 79°F (26°C)
<b>Dimensions</b>	
<b>Rack form factor</b>	Height: 29.75 in. (776 mm)/17U EIA Width: 19.0 in. (483 mm) Depth: 30.0 in. (762 mm)
<b>Standalone frame</b>	Height: 32.8 in. (834 mm) Width: 19.0 in. (483 mm) Depth: 30.0 in. (762 mm)
<b>Server expansion unit</b>	Height: 15.75 in. (401 mm) Width: 19.0 in. (483 mm) Depth: 30.0 in. (762 mm)
<b>Weight</b>	Base system (maximum configuration): 378 lb. (171.4 kg); Server Expansion Unit: 180 lb. (81.65 kg)
<b>Power requirements</b>	Typical power dissipation: base system 3800 VA (maximum configuration); Server Expansion Unit 662 VA (maximum configuration) Input current: 10.2 A @ 200 VAC AC input power: 200–240 V, 50–60 Hz
<b>BTU rating</b>	Typical: 12,970 BTU/hour
<b>Voltage tolerance range</b>	180 to 264 VAC (operating range of 200–240 VAC +/- 10%)
<b>Frequency tolerance range</b>	48.5 to 61.8 Hz (operating range of 50–60 Hz +/- 3%)
<b>Regulatory</b>	Regulatory model number: S16

# HP Integrity rx8620-32 Server

## For more information

For more information about the HP Integrity rx8620-32 Server, contact any of our worldwide sales offices or visit our Web sites at: [www.hp.com/go/integrity](http://www.hp.com/go/integrity) or [www.hp.com/go/rx8620](http://www.hp.com/go/rx8620)

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