

HP Integrity rx1620 Server

Data sheet



The HP Integrity rx1620 Server is a very affordable platform that's ideal for dense technical computing clusters. It enables you to perform complex simulations and in-depth analyses, and to run complex models and render high-quality images with great speed. The Integrity rx1620 Server has great performance for technical applications in MSC Nastran, StarCD, computer-aided engineering, electric design automation, government and defense, life/material/geo sciences, and scientific research. But the Integrity rx1620 Server is equally at home as a platform to manage complex heterogeneous

networks by using advanced management tools, including HP Integrated Lights Out (iLO) remote management pack, HP Systems Insight Manager (HP SIM), and HP OpenView solutions.

Offering the ability to run HP-UX 11i, Microsoft® Windows® Server 2003, Linux, and OpenVMS operating environments, the Integrity rx1620 Server provides flexible capacity with growth potential beyond contemporary RISC- and x86-based architectures.

HP Integrity servers: delivering a better return on your IT investment through flexible capacity, secured availability, and simplified management

Key features and benefits

Flexibility and choice—The HP Integrity rx1620 Server provides you with a choice of operating systems and— with HP-UX 11i—HP is the only vendor to offer a proven mission-critical, enterprise-quality UNIX® operating environment for Itanium®-based systems. The HP Integrity rx1620 Server includes all of the management, availability, and security features you typically expect to find when running HP-UX, Windows, Linux, or OpenVMS environments. These features allow seamless integration and management for deployment and redeployment into a heterogeneous IT environment, providing exceptional utilization of computing resources.

Ideal clustering solution for powerful scalability and attractive price/performance—The Integrity rx1620 Server offers a flexible, highly available, and easily managed cluster solution regardless of operating environment. When running HP OpenVMS on the Integrity rx1620 Server, you can integrate this system into your existing HP AlphaServer OpenVMS cluster. This server also allows consolidation of system resources such as I/O, memory, mass storage, and compute capacity.

High density and better return on IT investment—The 1U rack design of the Integrity rx1620 Server helps make the most of space-constrained environments with one of the smallest form factors in the industry, allowing up to 80 processors (6.4 GFLOPS per processor) to be accommodated in a standard 19-inch rack at a highly affordable price. The small form factor improves ease of use with efficient cooling and simplified cable management. With full graphics support, the Integrity rx1620 Server offers an affordable entry point for software development environments.

Improved IT productivity and secured availability—

Extensive high-availability features—including memory chip spare and error checking and correcting—safeguard data integrity, improve application availability, and reduce planned maintenance time. In addition, HP iLO remote management increases system availability while lowering costs. Plus, HP StorageWorks' industry-leading portfolio of network storage solutions makes it easier for businesses to increase information availability.

Improved utilization and continuous service levels—The HP Virtual Server Environment (VSE) provides flexible capacity that helps you improve server utilization in real time. The VSE uses industry-leading integration of intelligent control with partitioning, high availability (such as HP Serviceguard), and utility pricing, letting you create a pool of virtual servers that can grow or shrink based on your business priorities. To enhance your consolidation initiatives, the Integrity rx1620 Server supports both HP Integrity Virtual Machines and HP Secure Resource Partitions—letting you safely share your server capacity among many different applications.

Technical specifications

Processor	1.6 GHz/3 MB Intel® Itanium 2	1.3 GHz/3 MB Intel Itanium 2
Processors per system	1–2	1–2
Module type	Single processor/single core	Low-voltage single processor/single core
Clock speed	1.6 GHz	1.3 GHz
Front-side bus	533 MHz	400 MHz
L1 cache	32 KB	32 KB
L2 cache	256 KB	256 KB
L3 cache	3 MB	3 MB
RAM minimum/maximum	512 MB/16 GB	
RAM type	PC2100 ECC registered DDR266A	
Memory protection	Error checking and correcting (ECC) on memory and caches; chip spare	
Hard drive capacity	36 GB, 73 GB, 146 GB, and 300 GB drives available	
Internal hard drive bays	2 hot-plug Ultra320 SCSI	
Maximum internal storage	600 GB	
Removable media	1 open bay for DVD-ROM or DVD+RW drive	
I/O slots	2 PCI-X slots—1 full-length, 1 half-length 64-bit/133 MHz; 3.5 GB/s total I/O bandwidth	
Network adapter	Dual-port 10/100/1000Base-TX Ethernet LAN	
Storage controller	Dual-channel Ultra320 SCSI, configured as 2 internal	
Interfaces	VGA (optional, must order processor management card) and 2 USB ports for local human interface; 1 RS-232 serial port for general use; 2 RS-232 serial ports and 10/100Base-T LAN for Integrated Lights Out (iLO) management; optional management processor card with integrated ATI RADEON graphics	
Form factor	Rack-optimized with 1U height	
Hot-plug fans	4, configured in 2 redundant pairs	
Operating systems supported	HP-UX 11i v2 (choice of Mission Critical, Enterprise, or Foundation Operating Environment) Microsoft Windows Server 2003, Enterprise Edition Red Hat Enterprise Linux AS/ES 4 and Novell SUSE Linux Enterprise Server 9 and 10 OpenVMS v8.3 (choice of Mission Critical, Enterprise, or Foundation Operating Environment)	www.hp.com/go/hpux11i www.hp.com/go/integrity/windows www.hp.com/go/integritylinux www.hp.com/go/openvms
Performance	6.4 GFLOPS per processor (1.6 GHz/3 MB); 5.2 GFLOPS per processor (1.3 GHz/3 MB)	
High availability		
Standard server features	Error checking and correcting (ECC) on memory and caches Memory chip spare Automatic deconfiguration of memory and processors Service processor to monitor system status	
HP Virtual Server Environment (VSE)	Workload management, partitions, availability software, and utility pricing (optional)	www.hp.com/go/vse
Environmental specifications		
Altitude	Operating: 10,000 ft. (3000 m) maximum Non-operating: 15,000 ft. (4500 m) maximum	
Temperature	Operating: 41°F to 95°F (5°C to 35°C) Non-operating: –40°F to +158°F (–40°C to +70°C) Maximum rate of temperature change: 36°F (20°C) per hour	
Humidity	Operating: 15% to 80% relative non-condensing Non-operating: 8% to 85% non-condensing	
Dimensions	Height: 1.7 in. (43 mm)/1U EIA Width: 19.0 in. (482 mm) Depth: 26.8 in. (680 mm) Rack-optimized design includes rackmount solution for HP racks (HP Rack System/E and HP 10000 series racks)	
Weight	Maximum configuration: 31 lb. (14.1 kg)	
Power requirements	Maximum input current: ~5.5 A @ 100–127 VAC; ~2.8 A @ 200–240 VAC (autoranging) Line frequency: 50–60 Hz Maximum AC power input: 585 W <i>Note: Power figures are per system, not per input line (power supply), and include losses in the power supplies.</i>	
Power supply	Maximum output: 650 W	
BTU rating	Typical: 1,390 BTU/hour	
Voltage tolerance range	90 to 132 VAC (operating range of 100–120 VAC +/-10%) 180 to 264 VAC (operating range of 200–240 VAC +/-10%)	
Frequency tolerance range	48.5 to 61.8 Hz (operating range of 50–60 Hz +/- 3%)	
Regulatory	Regulatory model number: RSVLA-403	

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For additional information please visit our Web sites at:

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