

# HP Integrity rx2620-2 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.

Powered by one to two Intel® Itanium® 2 processors, the HP Integrity rx2620-2 Server improves price/performance in enterprise HP-UX, Linux®, Microsoft® Windows®, or OpenVMS environments and provides a cost-effective yet powerful entry into a technology with tremendous growth potential.

The Integrity rx2620-2 Server helps you achieve more performance, improve business processes, and manage your IT more efficiently. It empowers technical computing users to do more simulations, do more in-depth analysis, run complex models faster, and render high-quality images with enhanced performance. Commercial computing users will run their applications with superior performance, decreased costs, and reduced complexity.

## Key features:

### HP Integrity rx2620-2 Server

- Choice of operating systems (HP-UX 11i, Linux, Microsoft Windows Server 2003, OpenVMS)
- Consistent management tools
- Rack-optimized, easy-access 2U chassis—up to 20 servers/rack
- HP Integrated Lights Out (iLO) remote management
- In-box upgrade to the next-generation dual-core Intel Itanium 2 processor

## Key benefits:

### HP Integrity rx2620-2 Server

- Increased flexibility, maximum deploy/redeploy utility
- Easy integration of the HP Integrity rx2620-2 Server into your existing environment
- Efficient maintenance and density
- Lower operational cost, improved IT productivity, and increased system availability
- Investment protection

## HP servers—innovation based on standards

### Taking HP Integrity rx2620-2 Servers to the next level

HP Integrity servers now bring you even more computing power, creating even greater opportunities to take advantage of the Intel Itanium 2 processor for workloads that call for increased performance and scalability.

The industry-leading flexibility, performance, and investment protection you've come to expect from the previous generation HP Integrity rx2600-2 Server have been extended even further with the introduction of a new generation of Intel Itanium 2 processors, which run at clock speeds as high as 1.6 GHz and are available with a Level 3 cache as large as 6 MB.

The new HP Integrity rx2620-2 Server offers both leading price/performance and scalability choice—incorporating a broad range of Intel Itanium 2 processors. The HP Integrity rx2620-2 Server offers tremendous growth potential by enabling in-chassis upgrades to future Intel Itanium processors. And the Integrity rx2620-2 Server is now available with Integrated Lights Out (iLO) functionality, which enables a system administrator to manage and monitor all of their servers remotely from a Web browser.

The performance achieved through the Intel Itanium 2 processor and the accompanying HP Scalable Processor Chipset zx1 is further enhanced when the Integrity rx2620-2 Server is used in HP's proven clustering solutions. Because each HP Integrity rx2620-2 Server is only 3.5 inches high (2U), clustering multiple servers packs unprecedented performance into a densely racked, low-priced solution.

Up to 20 Integrity rx2620-2 Servers can be clustered in an industry-standard cabinet, resulting in increased data integrity, greater efficiency, reduced planned maintenance time, and even higher availability through consolidation of system resources. Clusters allow the consolidation of system resources such as I/O, memory, mass storage, and compute capacity.

### Innovative HP chipset delivers more power

The insights HP has gained as a co-developer, with Intel, of the Intel Itanium processor—and HP's extensive experience with Itanium-based systems—have produced substantial system performance gains through the development of the HP Scalable Processor Chipset zx1. Invented by HP, the zx1 Chipset fully unleashes the power of the Intel Itanium 2 processor by lowering memory latencies and increasing memory and I/O subsystem scalability. With the HP zx1 Chipset, HP Integrity servers achieve industry-leading performance and memory expandability.

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.

#### **Achieve more flexibility from the multi-OS capabilities of HP Integrity servers**

Because HP Integrity servers allow you to choose the operating system that best meets your needs—HP-UX 11i, Linux, OpenVMS, and Windows—you also have a choice of the right application for the right job. In addition, the expertise HP gained by co-developing the Intel Itanium processor has helped facilitate a seamless transition and breakthrough flexibility—applications currently based on HP-UX, IA-32 Windows, and Linux are binary compatible with HP Integrity server platforms.

The HP Integrity rx2620-2 Server includes all of the management, availability, and security features you typically expect to find when running HP-UX, Linux, OpenVMS, or Windows architectures. These features include the tools you need to monitor, deploy, and tailor your servers and solutions for high availability—providing outstanding utilization of your computing resources. And when running HP OpenVMS on the Integrity rx2620-2 Server, you can integrate this system into your existing HP AlphaServer OpenVMS cluster.

#### **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.

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   | 1.6 GHz/6 MB<br>Intel Itanium 2  | 1.6 GHz/3 MB<br>Intel Itanium 2 | 1.3 GHz/3 MB<br>Intel Itanium 2 |
|---|--|---------------------------------|---------------------------------|
| <b>Processors per system</b>  | 1–2  | 1–2                             | 1–2                             |
| <b>Module type</b>  | Single processor   | Single processor                | Low-voltage single processor    |
| <b>Clock speed</b>  | 1.6 GHz  | 1.6 GHz                         | 1.3 GHz                         |
| <b>Front-side bus</b>   | 400 MHz  | 400 MHz                         | 400 MHz                         |
| <b>L1 cache</b>   | 32 KB  | 32 KB                           | 32 KB                           |
| <b>L2 cache</b>   | 256 KB   | 256 KB                          | 256 KB                          |
| <b>L3 cache</b>   | 6 MB   | 3 MB                            | 3 MB                            |
| <b>RAM minimum/maximum</b>  | 1 GB/24 GB   |                                 |                                 |
| <b>RAM type</b>   | PC2100 ECC registered DDR266A  |                                 |                                 |
| <b>Memory protection</b>  | Error checking and correcting (ECC) on memory and caches; memory chip spare  |                                 |                                 |
| <b>Hard drive capacity</b>  | 36 GB, 73 GB, and 146 GB drives available  |                                 |                                 |
| <b>Internal hard drive bays</b>                                       | 3 hot-plug Ultra320 SCSI   |                                 |                                 |
| <b>Maximum internal storage</b>                                       | 438 GB   |                                 |                                 |
| <b>Removable media</b>  | 1 open bay for DVD-ROM or DVD+RW drive   |                                 |                                 |
| <b>Expansion slots</b>  | 4 full-length, 64-bit/133 MHz PCI-X slots available; 4.0 GB/s total I/O bandwidth  |                                 |                                 |
| <b>Network adapter</b>  | Dual-port 10/100/1000Base-TX Ethernet  |                                 |                                 |
| <b>Storage controller</b>   | Dual-channel Ultra320 SCSI, configured as 2 internal/1 external  |                                 |                                 |
| <b>Interfaces</b>   | VGA and 4 USB ports for local human interface; 2 RS-232 serial ports 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  |                                 |                                 |
| <b>Form factor</b>  | Rack-optimized with 2U height; standalone (rack-less) form factor kit available  |                                 |                                 |
| <b>Hot-plug fans</b>  | 4, configured in 2 redundant pairs   |                                 |                                 |
| <b>Operating systems supported</b>                                    | HP-UX 11i v2<br>Microsoft Windows Server 2003 Enterprise Edition<br>Red Hat Enterprise Linux AS 3<br>SUSE LINUX Enterprise Server 9<br>OpenVMS v8.2  |                                 |                                 |
| <b>Performance</b>  | 6.4 GFLOPS per processor (1.6 GHz/6 MB); 6.4 GFLOPS per processor (1.6 GHz/3 MB); 5.2 GFLOPS per processor (1.3 GHz/3 MB)  |                                 |                                 |
| <b>High availability</b>  |  |                                 |                                 |
| <b>Standard server features</b>                                       | <ul style="list-style-type: none"> <li>• N+1 redundant power supplies (N=1)</li> <li>• N+1 fans</li> <li>• Error checking and correcting (ECC) on memory and caches</li> <li>• Memory chip spare</li> <li>• Automatic deconfiguration of memory and processors</li> <li>• Service processor to monitor system status</li> </ul>  |                                 |                                 |
| <b>High-availability and business-continuity solutions (optional)</b> | <ul style="list-style-type: none"> <li>• HP Serviceguard for HP-UX 11i and Linux</li> <li>• HP Serviceguard Extension for RAC for HP-UX 11i</li> <li>• HP Serviceguard Extension for SAP for HP-UX 11i and Linux</li> <li>• HP Serviceguard Manager for HP-UX 11i and Linux clusters</li> <li>• HP Event Monitoring Service</li> <li>• HA Monitors for HP-UX 11i</li> <li>• High Availability Toolkits for HP-UX 11i and Linux</li> <li>• HP Mirroredisk/UX for HP-UX 11i</li> <li>• HP Extended Campus Cluster (including RAC) for HP-UX 11i</li> <li>• HP Metrocluster with EMC SRDF for HP-UX 11i</li> <li>• HP Continentalclusters (including RAC) for HP-UX 11i</li> <li>• OpenVMS clusters, including disaster-tolerant environments with Disaster Tolerant Cluster Services</li> <li>• Microsoft Cluster Service for Windows Server 2003, Enterprise Edition</li> <li>• HP StorageWorks Cluster Extension XP for Windows Server 2003, Enterprise Edition and Linux</li> </ul> |                                 |                                 |

## 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>  | <p><b>Software deployment</b></p> <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> <p><b>Configuration management</b></p> <ul style="list-style-type: none"> <li>• HP System Administration Manager for HP-UX system administration</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>• Integrated Lights Out enables comprehensive remote server management</li> <li>• WBEM for consistent management</li> </ul> <p><b>Workload management</b></p> <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>• Integrated Lights Out 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>• Integrated Lights Out enables comprehensive remote server management</li> <li>• Global Workload Manager for resource optimization</li> </ul>   |
| <b>OpenVMS</b>    | <ul style="list-style-type: none"> <li>• Management Station manages resources across multiple OpenVMS systems</li> <li>• Availability Manager monitors multiple OpenVMS nodes</li> <li>• Class Scheduler manages resources on a per-user basis</li> <li>• Integrated Lights Out enables comprehensive remote server management</li> </ul>  |

## Environmental specifications

|                                  |   |
|----------------------------------|---|
| <b>Altitude</b>                  | Operating: 10,000 ft. (3000 m) maximum<br>Non-operating: 15,000 ft. (4500 m) maximum  |
| <b>Temperature</b>               | Operating: 41 to 95°F (5 to 35°C)<br>Non-operating: -40 to +158°F (-40 to +70°C)<br>Maximum rate of temperature change: 36°F (20°C) per hour  |
| <b>Humidity</b>                  | Operating: 15% to 80% relative non-condensing<br>Non-operating: 8% to 85% non-condensing  |
| <b>Dimensions</b>                |   |
| <b>Rack form factor</b>          | Height: 3.4 in. (86 mm)/2U EIA<br>Width: 19.0 in. (482 mm)<br>Depth: 26.8 in. (680 mm)  |
| <b>Pedestal form factor</b>      | Height: 19.5 in. (495 mm)<br>Width: 11.7 in. (297 mm)<br>Depth: 26.5 in. (672 mm)   |
| <b>Weight</b>                    | Maximum configuration: 56 lb. (25 kg)   |
| <b>Power requirements</b>        | Maximum input current: 8A @ 100–127 VAC; 4A @ 200–240 VAC (autoranging)<br>Line frequency: 50–60 Hz<br>Maximum AC power input: 714 W<br><i>Note: Power figures are per system, not per input line (power supply), and include losses in the power supplies.</i> |
| <b>Power supply</b>              | Maximum output: 600 W   |
| <b>BTU rating</b>                | Typical: 1,897 BTU/hour   |
| <b>Voltage tolerance range</b>   | 90 to 132 VAC (operating range of 100–120 VAC +/-10%)<br>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: RSVLA-403  |

# HP Integrity rx2620-2 Server

## For more information

For more information about the HP Integrity rx2620-2 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/rx2620](http://www.hp.com/go/rx2620)

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