



hp rack-optimized  
rp5400 and rp5450 servers  
entry-level unix servers



hp servers  
product brief

## hp rack-optimized servers build your always-on infrastructure

### hp servers rp5400 and rp5450: smart, simple, stress-free



hp servers rp5400  
and rp5450

In today's economy, whether you're managing your own IT infrastructure or hosting someone else's, you have to operate with a faster time-to-solution, within budgetary constraints, and with the highest standards for customer service and operational efficiency.

To create and run an always-on infrastructure with these new business fundamentals, you need a computing platform that will support the way you—and your customers—do business. The HP Servers rp5400 and rp5450 give your business the fastest—and most reliable—means to succeed in this new business environment.

The HP Servers rp5400 and rp5450 deliver the proven performance, scalability, and high availability capabilities of UNIX®—without high maintenance requirements and costs. And they give you plenty of room to grow. You can start at a low-price entry point and scale up to the leading 4-way UNIX performance—in the same rack-optimized form factor, without penalty. And with its industry-leading solution partners, HP has developed business solutions surrounding these servers that are tested, and easy to deploy and manage.

With HP Servers rp5400 and rp5450, owning and operating a UNIX server is smart, simple, and stress-free.

#### smart

HP Servers rp5400 and rp5450 offer best-in-class performance, dynamic scalability, and unparalleled investment protection all within a rack-optimized chassis making them the smart choice for the most demanding applications.

#### optimized form—scalable functionality

- 7U-height, packed with CPUs, memory, and I/O, plus the ability to scale subsystems without compromise
- Rack-optimized to make the best use of valuable floorspace

- Leadership price/performance for entry-level UNIX servers
- Excellent I/O bandwidth for compute-intensive applications

#### unparalleled protected investment

- Seamless scalability with simple in-box upgrades
- Industry's only in-box upgrade from 2-way to 4-way UNIX computing
- Built-in growth path to HP Servers rp5430 and rp5470 and to next-generation Intel® Itanium™ Processor Family (IPF)

# proven solutions for business-critical computing

## simple

### hp makes IT easy

With HP Servers rp5400 and rp5450, HP offers a unique combination of proven solutions designed to help you get started quickly and to manage your IT environment easily and effectively.

### hp-ux: robust, proven enterprise operating environment for mission-critical applications

- Pre-packaged, integrated and production-ready operating environments
- Industry-leading Windows and Linux interoperability
- Centralized software updates that are timely, simple, and efficient
- Powerful alliances with industry-leading software vendors and systems integrators to deliver robust solutions from e-commerce to ERP and beyond

### integrated management capabilities

- HP Servicecontrol Manager and Integrated HP Secure Web Console capability for full remote management, including centralized configuration of multiple servers
- HP Webqos Peak to stabilize website performance and improve site reliability and transaction throughput

### flexible financing

- Operating-leases with a variety of attractive terms
- Tech refresh program for cost-effective upgrades to stay on the leading-edge of new technology
- Bundled Solution Finance program to consolidate and simplify financing arrangements

### instant capacity on demand (iCOD) for your rp5450

- Instant activation of incremental CPU power when you need it
- Pay only for the processing power you use

## stress-free

### make your business your focus

The HP Servers rp5400 and rp5450 solutions handle the demands of users efficiently and reliably—so you can concentrate on running your business, not managing your IT resources.

### high availability for continuous operations

- A rich set of in-box high-availability features
- Affordable high-availability clustering solutions based on industry-leading HP MC/Serviceguard
- Self-healing capabilities, a first for entry-level servers—proactively avoid faults to improve uptime
- A critical building block for an always-on infrastructure, delivering end-to-end solutions for business and technology needs

### total solution support

- Options ranging from web-based services, to industry's only 6-hour Call-to-Repair commitment
- "One-stop" solution support delivered with partners such as Cisco, Oracle, SAP, i2, Inktomi, and many more.

## the right server for today's applications

### ERP (supply-chain management)

High availability, manageability, and scalable performance support demanding end-to-end enterprise applications.

### broadband

The combination of industry-leading speed, I/O throughput and capacity, and high availability with end-to-end solutions deliver more powerful, reliable broadband services.

### internet infrastructure

Highly scalable, reliable, and manageable web server; caching server, load balancing, e-commerce server, firewalls, or mail server.

### e-commerce

Leading performance and I/O bandwidth, in-box scalability, rack-optimized form factor (five per standard 2-meter rack), and high availability, plus Internet management features and HP Webqos Peak for web service stabilization.

### technical computing

Best-in-class performance and throughput, N+1 redundant components, extensive memory capabilities, and clustering solutions to meet the demands of computation, NFS file serving, product data management.

## best UNIX server family—top to bottom

The low-cost entry point to the two-way HP Server rp5400 through the more scalable, price/performance leader HP Server rp5470 are part of the powerful HP UNIX server line—servers that set the standards for business critical computing and total cost of ownership. Simple in-chassis upgrades let you move up the line, as your business grows. HP UNIX servers provide the hardware foundation for your always-on infrastructure. Combining leading technology with proactive and reactive services, HP offers complete, end-to-end solutions that include hardware, software, applications, services, support, consulting, and an extensive portfolio of experienced partners, so you can get to market quickly with a single source of expertise. The HP UNIX server family is robust from the top to bottom—starting with the high-end HP Superdome, going to HP Servers rp8400 and rp7400, midrange performance and price/performance leaders, and the scalable entry-level HP Server rp5400 through rp5470. Rounding out the family are hyper-dense A-Class servers for Internet applications and branch offices.

# hp server rp5400 and rp5450 features and benefits at-a-glance

features	benefits
<b>smart</b>	
1-4 (rp5450) or 1-2 (rp5400) 64-bit 360MHz or 440MHz PA-8500 or 540MHz PA-8600 CPUs with 1.5 MB on-chip cache per CPU	Superior performance over comparable systems with plenty of headroom for growth
Up to 16 GB (rp5450) or up to 8GB (rp5400) SDRAM memory with advanced ECC protection	Fast and reliable processing power for frequently accessed data
7U chassis with up to 5 servers per standard 2-meter rack, also available in standalone (pedestal) configuration	Optimizes use of floor space and delivers high-performance density in a racked configuration
Easy in-box upgrades from rp5400 to the rp5430 as well as rp5450 to rp5470 and to next-generation Itanium Processor Family (IPF)	Architectural scalability ensures these servers can grow with the business, maximizing flexibility and investment protection
Up to 10 (rp5450) or 5 (rp5400) PCI I/O slots with 2.1 GB/s I/O bandwidth	Easily handles I/O-intensive applications and allows the system to scale I/O, CPUs, and memory without compromise
Core I/O including 10/100 Base-T LAN with auto speed-sensing, a second 10/100 Base-T support LAN, Ultra2 LVD SCSI, and RS-232	Provides easy, ready-to-go networking capabilities
Up to 4 internal 18GB, 36GB, or 73GB Ultra2 SCSI hot-plug high-uptime disks	Store critical data with massive internal capacity
1 internal DVD or DAT drive	Protects critical data
<b>simple</b>	
Built-in unlimited user license for proven 64-bit HP-UX 11i and 11.0	Proven, enterprise UNIX operating system for mission critical applications Provides: industry leading Windows, Linux interoperability, centralized software updates, production ready pre-packaged and integrated operating environments
Integrated HP Secure Web Console and Servicecontrol Manager for full local, web, and remote control of servers	Provide complete single-system and multisystem administration capabilities including a range of security features, from any browser-based PC
Integrated HP Webqos Peak	Stabilizes website performance under heavy-loads to improve site reliability and transaction throughput
HP global deployment and partner integration services	Guaranteed error-free solution deployment to reduce implementation time and cost
Flexible financing program	Make initial ownership and modular growth easy and affordable
HP Onesite Solution consolidated manufacturing, streamlined product assembly and testing, and state-of art integration	Ensure superior quality and faster delivery
<b>stress-free</b>	
Error-correcting cache, parity checking on all buses, memory scrubbing and page deallocation, dynamic processor resilience, and deallocation of application processes	Built-in high-availability features deliver superior levels of <ul style="list-style-type: none"> <li>• error correction,</li> <li>• error containment</li> <li>• data protection, and</li> <li>• serviceability</li> </ul> to help maximize uptime for business-critical workgroups and applications
Dual Ultra 2 SCSI buses and controllers for mirrored storage	
Hot-swap, redundant power supplies and fans; redundant, hot-plug PCI; Ultra2 SCSI hot-plug disks	
Integrated Event Monitoring Service (EMS)	Provides superior system up time through constant, proactive fault avoidance, detection, and notification; monitors power, cooling system hardware, processors, memory, HP-UX resources, and external storage
Built-in fault management system with separate support processor and bus	
Integrated with HP MC/Serviceguard, HP toptools for servers, and enterprise management software, such as HP OpenView and CA Unicenter	
Pre-tested and pre-integrated workgroup clustering solutions based on HP MC/Serviceguard	Deliver complete, ready-to-go solutions for clustered high availability that eliminate all single points of failure, at an affordable price
3-year onsite service warranty and HP services and support options ranging from web-based support to mission-critical, 6-hour Call-to-Repair commitment, includes full solution support for hardware and software	Reduce risk through worldwide support for business-critical computing; provide "one-stop shopping" for support through partnerships with Cisco, Oracle, SAP, BroadVision, Inktomi, and others

## stay ahead of the curve

Configuration options	hp server rp5400	hp server rp5450
Processor	360MHz or 440MHz PA-8500 or 540MHz PA-8600	360MHz or 440MHz PA-8500 or 540MHz PA-8600
SMP Configuration	1 to 2 CPUs	1 to 4 CPUs
Supported OS Versions	HP-UX 11i, 11.0, Linux	HP-UX 11i, 11.0, Linux
Minimum/Maximum Memory	256MB/8GB	256MB/16GB upgradeable to 32 GB with future DRAM
On-Chip Cache (Data/Instr)	1MB/512KB	1 MB/512KB
Total I/O Slots	5	10
Internal Removable Media Bays	1	1
Maximum Internal Disk Capacity	292GB (4 Disk Bays)	292GB (4 Disk Bays)
Standard I/O Features	Ultra2 SCSI, 100 Base-T LAN, 3 RS-232 ports, 100 Base-T support LAN, and web-based console	
Supported I/O Connectivity	Ultra2 SCSI RAID, Ultra2 SCSI LVD (single and dual port), FWD SCSI (single and dual port), Fibre Channel, Gigabit Ethernet, 100 Base-TX (single and quad port), 100 Base-FX, ATM 155Mbps (MMF, UTP-5), ATM 622Mbps (MMF), FDDI Dual Attach LAN, Token Ring 100Mbps; X.25/FR/SDLC (dual port), Multiplexer (8 and 16 port)	

### environmental specifications

Electromagnetic Interference	Complies with FCC Rules and Regulations, part 15, as a Class A digital device. Manufacturer's Declaration to EN55022 Level A, VCCI Registered, Class I, Korea RLL
AC Input Power	100-240V 50/60Hz
Maximum Current Requirements	13.8 Amps at 110V
Maximum Power Dissipation	1283 Watts
Physical Dimensions	Depth: 774mm (30.5 in) Width: 482mm (19.0 in) Height: 368mm (14.5 in)/7 EIA units Weight: 68kg (150 lb)
Operating Temperature	+5°-35°C (41°-95°F)
Nonoperating Temperature	-40°-65°C (-40°-149°F)
Maximum Rate of Temperature Change	20°C/hour
Operating Relative Humidity	15% to 80%, noncondensing, max. wet bulb = 26°C
Nonoperating Relative Humidity	5% to 90%, noncondensing
Operating Altitude	To 3.0km (10,000 ft) above sea level
Nonoperating Altitude	To 4.5km (15,000 ft) above sea level
Compliance Model Number	RSVL-0105-A

#### for more information

Contact any of our worldwide sales offices or HP Channel Partners (in the U.S. call 1-800-637-7740) or visit the HP servers website at

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

[www.hp.com/go/rp5400](http://www.hp.com/go/rp5400) or

[www.hp.com/go/rp5450](http://www.hp.com/go/rp5450)

HP product information and technical documentation are available online. In addition, configuration tools and pricing information allow registered users to place orders online.

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