HEWLETT PACKARD

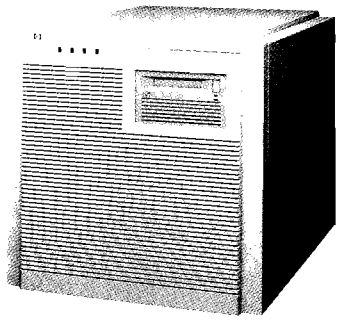
HP 9000 Series 800 Integrated Business Server Family

HP 9000 Models 807S, 817S, 827S, 837S, 847S, 857S, 867S, and 877S

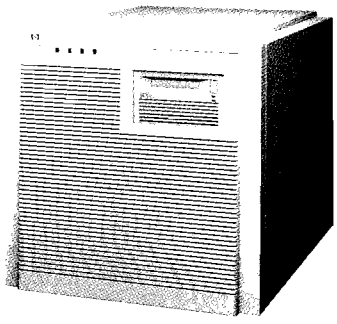
Featuring an open systems design, leading-edge RISC architecture, and robust business functionality, the HP 9000 Business Server family is the industry's premier commercial UNIX® server family. In addition, HP has formed strategic alliances with the foremost software suppliers, systems integrators, and resellers, enabling you to choose from the broadest spectrum of open business solutions available.

The HP 9000 Series 800 Business Server family spans the deskside to the data center to meet a wide range of business needs.

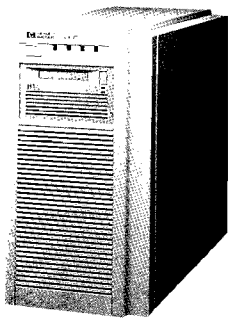
HP 9000 Models 827S/847S/867S



HP 9000 Models 857S/877S



HP 9000 Models 807S/817S/837S



Open for Business

Key Features

- Industry-leading performance in a compact deskside and rack-mountable package with integrated disk and tape drives
- Single-chip VLSI CPU using HP Precision Architecture RISC (PA-RISC)
- Optional high-performance floating point coprocessor
- Balanced high-performance with large instruction and data caches; high-speed, dedicated memory bus and 80 nsec ECC memory; and high-speed HP Precision I/O Bus
- Extensive configurability in memory and disk; memory expandable to 384 Mbytes, disk expandable to 82.3 Gbytes
- High-capacity backup with integrated Digital Audio Tape drive
- Optional Powerfail battery backup and high availability features
- Designed for standard office environments
- HP-UX operating system preinstalled on disk
- Instant ignition
- Wide range of networking and systems management tools
- Support for over 3,500 applications

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Industry-leading commercial performance

Key to the success of your business applications is a server that can deliver very high performance in diverse application areas.

Designed for high performance.
Providing the most powerful, reliable performance in multiuser, multitasking environments, the Series 800 Integrated Business Servers deliver industry-leading performance—from 20.8 TPS to above 70 TPS.

Balanced design for both batch and OLTP processing.
Optimized for single-threaded batch applications as well as for OLTP (on-line transaction processing) applications, the Series 800 Business Servers have been specifically tuned to meet your organization's most demanding business performance requirements.

Figure 1. Transaction performance on HP 9000 Series 800, versus IBM and DEC commercial systems

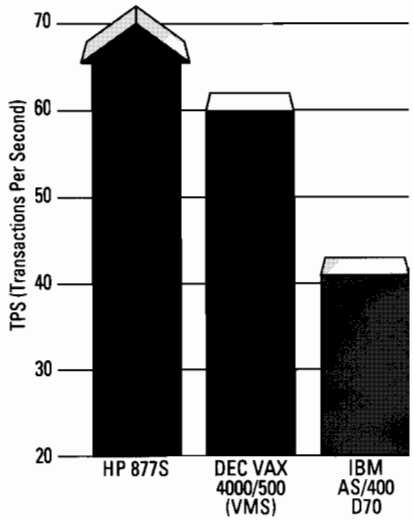
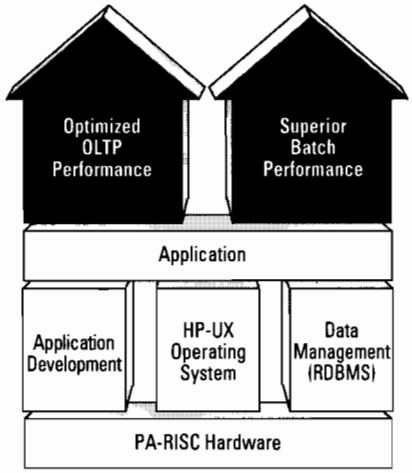


Figure 2. Optimized commercial processing performance



PA-RISC: the premier system architecture

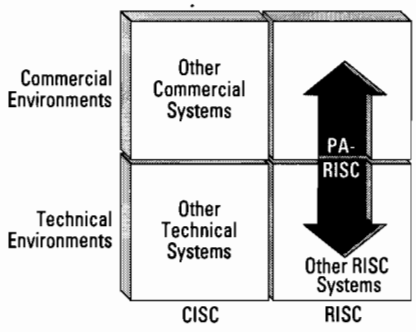
All HP 9000 Business Servers are based on HP's leading-edge PA-RISC architecture.

Designed for commercial applications.
The first major vendor to deliver a RISC-based system to the marketplace, HP is the leading manufacturer of RISC-based computers today. Unlike other vendors who designed their RISC systems only for technical applications, HP designed PA-RISC from the beginning for commercial as well as technical applications. To deliver a very high and balanced system performance, this design approach complements very high-performance chips with a high-speed, dedicated memory bus with high-speed SIMM memory combined with large, high-speed caches, which minimize CPU requests for instructions or data stored in memory or on disk.

Leveraging leading-edge technologies.
HP's PA-RISC architecture design was purposely kept independent of emerging semiconductor and other implementation technologies. This enables HP's integrated business server family to take advantage of leading-edge technologies as they become available. For example, HP's use of leading submicron CMOS VLSI technology enables the entire CPU—including the floating-point coprocessor, instruction and data caches, and translation lookaside buffer (TLB)—to be integrated on a single printed circuit board, further reducing costs and increasing performance and reliability.

Built for growth.
Every aspect of HP's PA-RISC architecture was designed to allow future scaling and expandability. For example, the Series 800 Business Server family's 64-bit virtual address capability with an addressing range of 256 terabytes ensures ample expandability to meet growing software requirements. In addition, the architecture was designed to capitalize on emerging technologies, such as multiprocessing and fault tolerance.

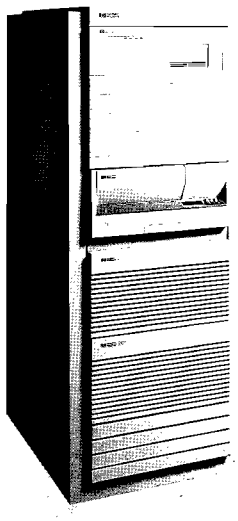
Figure 3. Unlike most RISC architectures, PA-RISC is also optimized for commercial environments



Delivers top reliability.
HP's implementation of the leading-edge PA-RISC architecture combined with state-of-the-art manufacturing and packaging technologies delivers highly reliable solutions for your mission-critical needs. For example, the Model 807S has an estimated MTBF (mean time between failures) of about 4 years, the best in the market.

A modular, flexible design

To meet your specific needs, the Series 800 Business Server family spans a broad range of systems to meet every budget capacity and performance need.



All models can be preintegrated and shipped in racking cabinets.

Integrated, ready-to-go systems.
On all models, the processor, memory, disk storage, high-capacity DDS DAT drive, and I/O slots are integrated into a compact, ready-to-use package—with hardware and HP-UX operating system software preinstalled and preconfigured. In addition, all models are supported in and can be preintegrated and shipped in either a 1.1-meter or 1.6-meter racking cabinet.

A wide array of peripherals and connections.
Then choose from HP's full suite of industry-leading peripherals—disk drives, tape drives, optical drives, printers, plotters, terminals, and data communication devices, and select the appropriate interface—SCSI-2 interface, HP-IB channel card, or HP-FL (Fiber Link) channel card—to get exactly the solution you need. You can also select from HP's array of multivendor networking products to connect your Series 800 Business Servers to TCP/IP, OSI, and SNA environments.

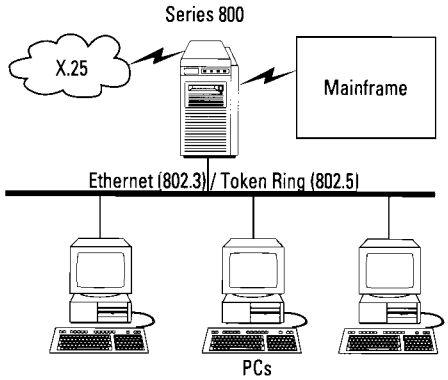
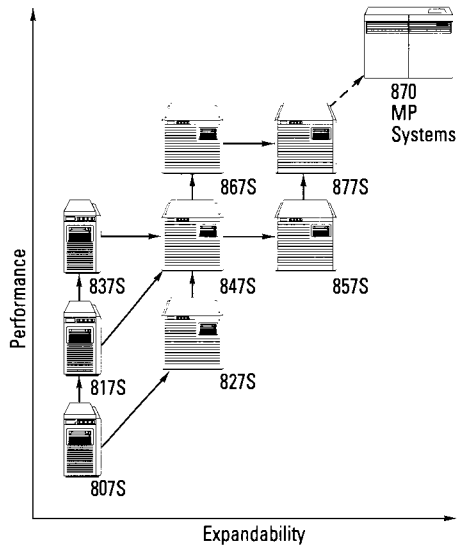


Figure 4. HP 9000 Series 800 Upgrade Paths



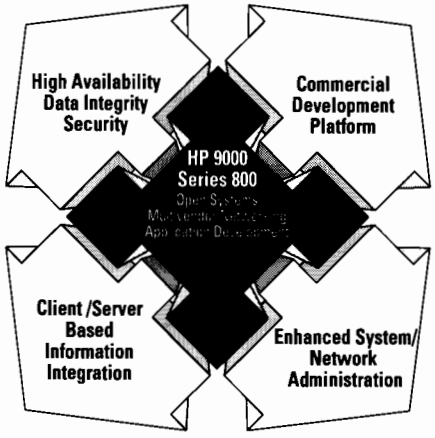
Easy upgrades protect your investments.
With the Series 800 Business Server family, it's both easy and cost-effective to get the price/performance you need today, then grow your system as your business needs grow. All HP 9000 Series 800 models are based on the same PA-RISC architecture and use the same operating system, providing object-code compatibility. In addition, smooth upgrades allow you to conveniently accommodate higher I/O expandability and higher TPS performance needs in the future.

Support Services.
Over the past eight years of U.S. Datapro surveys, HP has consistently ranked the highest in support and service. Contact your HP sales representative for details on the range of support services available.

HP 9000 Series 800: a robust commercial computing environment

To address such business-critical issues as high system availability, data integrity, and security; commercially-tuned performance; information integration; and better system and network management—all within a base of standards—HP fortified the HP-UX computing environment with enhanced commercial capabilities. These enhancements improve performance, increase system control, and enable easy adaptation of software to meet the needs of international markets.

Figure 5. HP 9000 Series 800 Systems provide the enhanced capabilities needed for commercial applications



An X/Open* branded solution.
The HP 9000 family is X/Open branded for XPG3. XPG3 is the open system portability standard backed by OSF, UNIX International (UI), and major computer vendors.

*X/Open is a trademark of X/Open Company Limited in the U.K. and other countries.

Maximizing security and availability.
The Series 800 Business Server family meets your mission-critical needs for system availability and data integrity with powerfail battery backup, disk array technology, transparent disk mirroring, and automatic processor recovery. Also HP has enhanced its HP-UX operating system for commercial security requirements by incorporating features such as auditing and access control lists.

Commercially-tuned development platform.
The Series 800 Business Servers make available potent information management tools—for users, developers, and MIS departments who need a balanced portfolio of powerful databases, languages, and tools. For example, HP's best-in-class commercial CASE tools support development of distributed OLTP applications in a client/server environment. Using Series 800, you can increase programmer productivity while decreasing software development costs.

Client/Server-based information integration.
HP NewWave Office is an integrated, client/server-based system for the HP 9000 Series 800 Business Servers that allows complete information integration in a heterogeneous environment, uniting corporate systems, PCs, peripherals, and applications. Through industry-leading object management technology and the power and consistency of an easy-to-use graphical user environment, HP NewWave greatly increases personal productivity. HP NewWave Office also provides information access to business and corporate servers, resource sharing, and information distribution services to private and public mail systems and image management services.

Enhanced system and network management.
The Series 800 Business Server family offers a full range of enhanced system and network administration capabilities that make it easier to manage enterprise-wide networks. HP network management solutions help improve day-to-day network operations by controlling network faults, configurations, performance, and security. In addition, a comprehensive set of system administration tools is available to control system installation, operations, configuration, and usage. HP's OpenSpool/UX and Omniback provide sophisticated spooling and high-speed network backup capabilities, respectively. Glance Plus/UX, RX Forecast and Laser RX/UX are performance management and capacity planning tools and services that can optimize system and network performance as well as user productivity.

For more information on the HP 9000 Series 800 Business Servers, contact your HP sales representative.

Table 1. HP 9000/8X7S Business Servers at a Glance

	807S	817S	827S	837S	847S	857S	867S	877S
SPU Performance								
Clock Speed	32 MHz	48 MHz	48 MHz	48 MHz	48 MHz	48 MHz	64 MHz	64 MHz
MIPS Dhrystone	34	53	53	53	53	53	71	71
Relative OLTP Performance	1.0	1.6	1.6	2.1	2.1	2.1	2.6	2.6
Floating-Point Coprocessor	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Memory/Cache								
Standard Memory	8 Mbytes	16 Mbytes	16 Mbytes	16 Mbytes	32 Mbytes	64 Mbytes	64 Mbytes	64 Mbytes
Maximum Memory	128 Mbytes	192 Mbytes	384 Mbytes	192 Mbytes	384 Mbytes	384 Mbytes	384 Mbytes	384 Mbytes
Instruction Cache	32 Kbytes	64 Kbytes	64 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes
Data Cache	64 Kbytes	64 Kbytes	64 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes	256 Kbytes
Mass Storage								
Standard Disk	230 Mbytes	320 Mbytes	320 Mbytes	320 Mbytes	670 Mbytes	670 Mbytes	1.36 Gbytes	1.36 Gbytes
Max Internal Capacity	1.36 Gbytes	1.36 Gbytes	4.06 Gbytes	1.36 Gbytes	4.06 Gbytes	4.06 Gbytes	4.06 Gbytes	4.06 Gbytes
Max Disk Capacity	10.9 Gbytes	28.5 Gbytes	101.3 Gbytes	28.5 Gbytes	101.3 Gbytes	130 Gbytes	101.3 Gbytes	130 Gbytes
with SCSI-2	10.9 Gbytes	28.5 Gbytes	47.6 Gbytes	28.5 Gbytes	47.6 Gbytes	47.6 Gbytes	47.6 Gbytes	47.6 Gbytes
with HP-FL	N/A	N/A	82.3 Gbytes	N/A	82.3 Gbytes	82.3 Gbytes	82.3 Gbytes	82.3 Gbytes
with HP-IB	2.7 Gbytes	2.7 Gbytes	5.4 Gbytes	2.7 Gbytes	5.4 Gbytes	5.4 Gbytes	5.4 Gbytes	5.4 Gbytes
Internal 4mm DAT	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes	2.0 Gbytes
Maximum 4mm DAT	4.0 Gbytes	4.0 Gbytes	6.0 Gbytes	4.0 Gbytes	6.0 Gbytes	6.0 Gbytes	6.0 Gbytes	6.0 Gbytes
Connectivity								
Available I/O Slots	2/1* HP-PB	2/1* HP-PB	6/3* HP-PB	2/1* HP-PB	6/3* HP-PB	12/6* HP-PB	6/3* HP-PB	12/6* HP-PB
Standard RS-232 ports	8	8	8	8	8	8	8	8
Max. Mux Connects	40	48	112	48	112	208	112	208
Max Users	336	528	528	624	624	624	768	768
Physical Characteristics								
Height	43.0 cm	43.0 cm	43.0 cm	43.0 cm	43.0 cm	43.0 cm	43.0 cm	43.0 cm
Width	22.2 cm	22.2 cm	44.4 cm	22.2 cm	44.4 cm	44.4 cm	44.4 cm	44.4 cm
Depth	53.3 cm	53.3 cm	53.3 cm	53.3 cm	53.3 cm	53.3 cm	53.3 cm	53.3 cm
Weight	31.8 kg (70 lbs)	31.8 kg (70 lbs)	50 kg (110 lbs)	31.8 kg (70 lbs)	50 kg (110 lbs)	50 kg (110 lbs)	50 kg (110 lbs)	50 kg (110 lbs)
Acoustics	<5.8 bels (A) sound power below 30C	<5.8 bels (A) sound power below 30C	<6.5 bels (A) sound power below 30C	<5.8 bels (A) sound power below 30C	<6.5 bels (A) sound power below 30C	<6.5 bels (A) sound power below 30C	<6.5 bels (A) sound power below 30C	<6.5 bels (A) sound power below 30C
ESD, power transients, vibration	Designed for office and data center environments							
Support in 1.1-m and 1.6-m racking cabinets	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electrical Specifications								
AC Power Input Voltage/frequency	Nominal: 100–120 VAC, 50/60 Hz; 220–240 VAC, 50–60 Hz Range: 90–132 VAC, 47–63 Hz; 198–264 VAC, 47–63 Hz							
Rated current	6.5A 3.5A	6.5A 3.5A	12A 6A	6.5A 3.5A	12A 6A	12A 6A	12A 6A	12A 6A
Power dissipation								
Typical	375 Watts	375 Watts	600 Watts	375 Watts	600 Watts	600 Watts	600 Watts	600 Watts
Maximum	400 Watts	400 Watts	800 Watts	400 Watts	800 Watts	800 Watts	800 Watts	800 Watts
Environmental Specifications								
Temperature	Dperating: +5C to +40C Non-operating: −40C to +65C Non-operating: −40C to +45C (for tape media)							
Maximum rate of temperature change	<20C without DDS DAT tape drive <10C with DDS DAT tape drive							
Relative humidity	Operating: 20% to 80%, non-condensing (max 26C wet bulb temperature) Non-operating: 5% to 80%, non-condensing							
Maximum rate of humidity change	<30%/hr							
Altitude	Operating: to 3000 m (10,000 ft) Non-operating: to 4,500 m (15,000 ft)							
Regulatory Compliance								
Electromagnetic interference	Complies with FCC rules and regulations, Part 15, Subpart J, as a Class A computing device. Manufacturers Declaration to German FTZ 1046. Registered with Japanese VCCI.							
Safety	UL Listed, ETL Listed, CSA certified, compliant with EN 60950.							

* Single-high/double-high slots. One double-high slot equals 2 single-high slots.

HEWLETT PACKARD

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