

HP 9000 Series 800 Model 840S Computer System



HP Precision Architecture
systems bring high performance
well within your budget...



HP 9000 Series 800 Model 840S

Put yourself right in the middle of HP Precision Architecture.

The HP 9000, Model 840S is not only the price/performance leader in its class, it also can put you in a world where simpler means better, faster, more reliable.

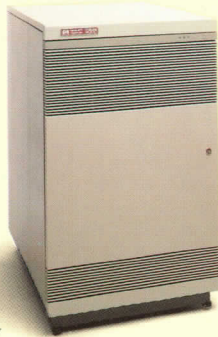
It's the world of Reduced Instruction Set Computer (RISC) architecture where a simplified instruction set implemented directly in hardware delivers superior performance for less money. Hewlett-Packard (HP) has gone *beyond* RISC to create the powerful HP Precision Architecture family of HP-UX* super minicomputers for general purpose, engineering, scientific, industrial, and business applications.

With reduced complexity design, our systems have fewer components, which means higher reliability and lower cost of ownership over the lifetime of your system. And because they're designed to adhere to current and future industry standards for UNIX** operating systems, networking, languages, graphics, and data bases, you can cut development costs while your investment keeps growing.

HP is the first major computer vendor to combine a 32-bit reduced complexity architecture and a real-time, UNIX operating system in a scalable family of compatible computers. Compatibility between the systems assures that the same applications software, subsystems, peripherals, and I/O cards may be used between the processors.

The HP Precision Architecture family delivers excellent computational performance at a low cost. Designed for multi-user environments, you can choose a system to manage your most ambitious application programs.

To protect your current computing investment, our upgrade programs allow you to purchase HP computers now, with the confidence of receiving generous trade-in credits if you require more processing power later.



Enhanced to break new ground.

In 1986, the Model 840S broke new ground as the founding member of the HP Precision Architecture family. Today, in its enhanced version and as the mid-level system in the family, the Model 840S can help *you* break new ground, too.

With a large 128 KB cache memory and fast virtual memory translations, the enhanced Model 840S excels in applications with up to 128 users. It provides excellent price/performance for multi-user applications.

In addition to all its power, an optional I/O expander with 16 I/O slots allows you to get up to 28 I/O cards in the system for your most demanding applications. For faster throughput to complete work more quickly, the Model 840S features peak I/O speeds of 8 MB per second and memory bus speeds up to 21 MB per second. System memory is expandable to 96 MB. To let you connect to other vendors' systems, the Model 840S also provides industry-standard network services such as ARPA/Berkeley and IEEE 802.3.

Versatility for your applications.

With its high performance and affordable price, the Model 840S is an excellent choice for a wide variety of your multi-user, compute-intensive, and real-time applications.

For example, in engineering applications, the Model 840S provides the power needed to perform heavy computational tasks such as large scale system simulation or extensive data base manipulation.

In scientific environments, the Model 840S can serve an entire department of research scientists, performing such tasks as modeling, simulation, statistical analysis, or software development.

In business applications, the Model 840S can perform a variety of tasks. The system is well suited for data entry, accounting, office automation, data base maintenance, as well as manufacturing planning and control.

For communications, the Model 840S is well suited for monitoring switching systems, complex forecasting, and operational support.

Get more for your money.

Because of its innovative, reduced complexity architecture, the entire HP Precision Architecture family offers outstanding price/performance values. The Model 840S SPU package includes:

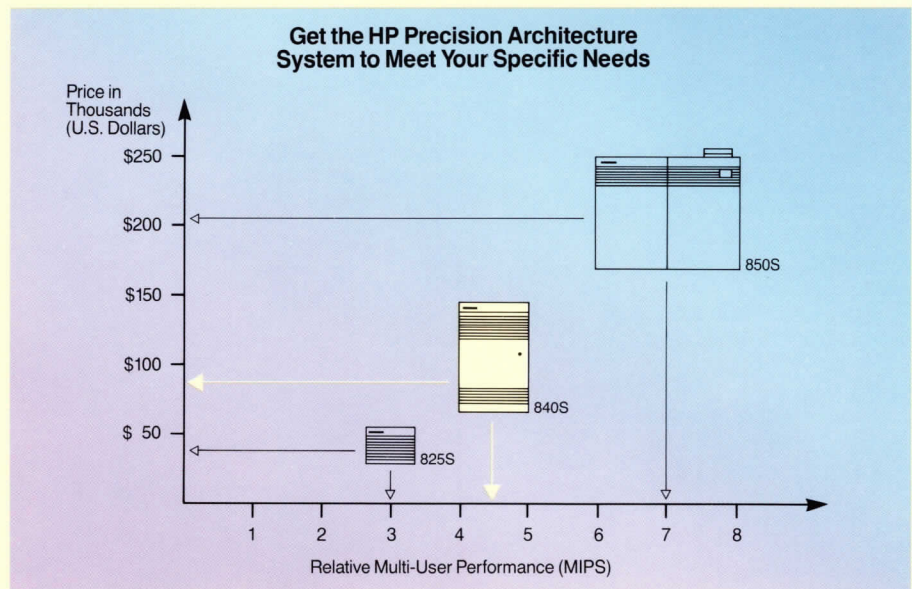
- CPU
- Floating Point Co-processor
- Battery Back-up Unit
- Power Supply

*HP-UX complies with the proven, industry-standard UNIX System V Interface Definition, Issue 2, Volume 1

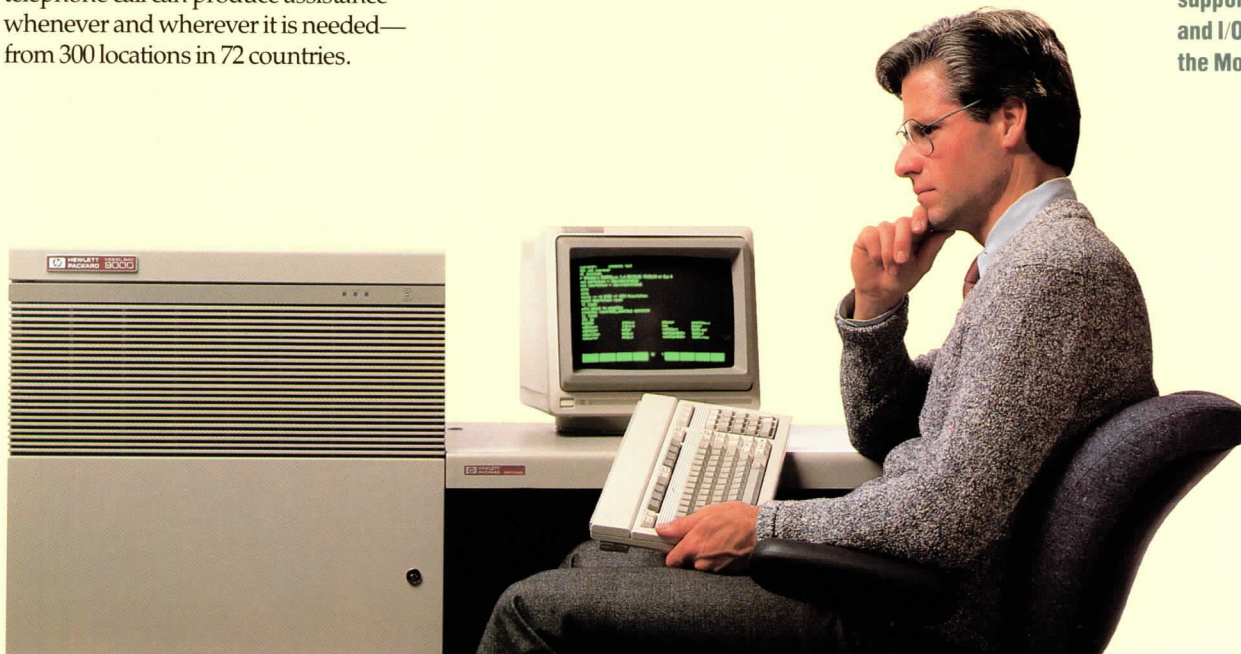
- SPU Cabinet
 - 8 MB Error Correcting Memory
 - HP-IB Interface
 - 6 Channel Serial Multiplexer
 - 5 Channel I/O Slots for connecting peripherals, networking, or instruments
 - Access Port for Remote Diagnostics
 - 16-user HP-UX License
 - Documentation
- Also available:
- 16-slot I/O Extender
 - 32 MB ECC Memory Set

HP is the leader in service and support.

As with all HP products, the Model 840S gives you access to the added value of HP service and support. Over the past six years, HP has been rated #1 in service and support categories, and #1 in overall customer satisfaction more consistently than any other computer vendor in surveys by Datapro Corporation. Our worldwide local support teams are comprised of experienced HP hardware, software, and sales engineers. One telephone call can produce assistance whenever and wherever it is needed—from 300 locations in 72 countries.



For mid-range configurations with 32–64 users, the Model 840S provides 30% better performance depending upon your application. It can support more memory and I/O devices than the Model 825S.



Specifications

Industry Standards	
Operating System	UNIX System V Interface Definition, Issue 2, Volume 1
Data Base	HP's Allbase is compatible with IBM's Structured Query Language (SQL)
Networking	ARPA/Berkeley, TCP/IP, IEEE 802.3
Graphics	Starbase Graphics Library (ANSI/ISO CGI)
Windowing	HP GKS (ANSI/ISO Graphical Kernel System)
Languages	X-Window FORTRAN '77, C, Pascal, COBOL/HP-UX
Capacity	
Memory	8 MB ECC expandable to 96 MB
Available I/O Channels	3 channels provide 28 card slots
Terminals/Serial Ports	128 with expander
Disc Memory	9.14 GB
Central Processor Unit	
Word Size	32-bit
Base Instruction Cycle Time	125 nanoseconds
Cache Size	128 KB
TLB Entry Size	4096
Central System Bus Speed	21/19 (peak/average) MB/second
Channel I/O Speed	8/5 (peak/average) MB/second
Floating Point Co-processor	
Floating Point Instructions	40
Floating Point Format	ANSI/IEEE 754-1985 standard
Instruction Set	
Maximum Number of Base Instructions	140
Number of 32-bit General Purpose Registers	32
Main Memory	
Virtual Memory Address Space	48-bit addressing (281,000 GB)
Physical Address Space	27-bit addressing (128 MB)
Operating Environment	
Temperature	
Operating	0 to 55° C (32 to 131° F)
Non-operating	- 40 to 70° C (- 40 to 158° F)
Relative Humidity	5 to 95% at 40° C Non condensing
Altitude	
Operating	to 4.6 Km (15,000 ft)
Non-operating	to 15.3 Km (50,000 ft)
Maximum Heat Dissipation	4600 BTU/hr
Electrical Specifications	
Line Voltage/Frequency	200-240 VAC, 47.5 to 66 Hz
Maximum Power Required	1350 W
Battery Backup Time	15 minutes minimum
Physical Characteristics	
Weight	160 Kg (352 lbs)
Dimensions	Height 1000 mm (39.4 in) Width 600 mm (23.6 in) Depth 970 mm (38 in)

**UNIX is a registered trademark of AT&T in the U.S. and other countries.

Technical data subject to change.

Achieve more for less.

For more information on how the HP 9000, Model 840S and our other HP-UX systems can help you achieve high performance for less money, simply call your local Hewlett-Packard sales office listed in your telephone directory. Or call one of the HP sales offices listed below.

United States:

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4 Choke Cherry Road
Rockville, MD 20850
(301) 670-4300

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Rolling Meadows, IL 60008
(312) 255-9800

Hewlett-Packard
5161 Lankershim Boulevard
No. Hollywood, CA 91601
(818) 505-5600

Hewlett-Packard
2015 South Park Place
Atlanta, GA 30339
(404) 955-1500

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(416) 678-9430

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