

HP 9000 Series 300 Pricing Information*



Effective date: April 1, 1987

* All data and prices are subject to change without notice.
All prices include factory base plus freight

System Configurations

The Series 300 family of technical computing systems consists of variety of workstations as well as modular components, allowing you to select a system that is matched to your needs. The pre-configured workstations include the components most likely to be needed for some typical applications. Refer to the *Series 300 Technical Data Sheet*, Pub. No. 5954-8262 for understanding the content and applicability of these systems.

If you prefer to build your own system, we have a selection of processors with different performance levels, display systems, memory boards, interface cards, operating systems, and peripherals. Additional details on configuring your own system, beyond those covered in this document, are available in the *Series 300 Configuration Reference Manual*, Part Number 98561-90020.

The workstation systems come bundled with either BASIC 5.0, HP-UX Application Execution Environment, HP-UX Programming Environment, AI Development Environment, or a combination of these operating system elements. An assortment of interfaces are available on the various workstations, depending on the application they are intended for. The detailed system descriptions will help you determine which system contains the components that are right for your application.

Hewlett-Packard offers various hardware and software support services. These services are described beginning on page 24 of this document.

Series 300 Modular Components

Custom ordering a Series 300 system is easy. The following guide will be useful in successfully configuring a system that meets your needs exactly.

You Will Need:

- SPU (System Processing Unit). Includes box with power supply, processor board, memory and HP-IB, RS-232, HP-HIL, interfaces with a battery-backed real-time clock.
- Keyboard and cable.
- Video Board (to generate video signals for a matching monitor). Note that the 98561A SPU comes with 512 x 400 monochrome video output standard. Delete this feature using Opt. 003, adding in its place the desired video board if a different video output is required.

- Monitor (to display signals generated by the appropriate video board)
- Data Storage – pick the data storage best suited to your needs.
- An operating system.
- HP-HIL ID Module (if you plan to use application software that requires it).

You May Want to Add:

- Additional RAM cards
- Interface cards
- An Expander box
- Plotter
- Modem
- Additional HP-HIL devices
- Taboret cabinets, accessories or other furniture
- Additional graphics devices or terminals
- Printer
- Support services
- Networking

Use the diagrams on the following page to help you visualize the accessories that can be added to the Series 300 and how they connect to the system.

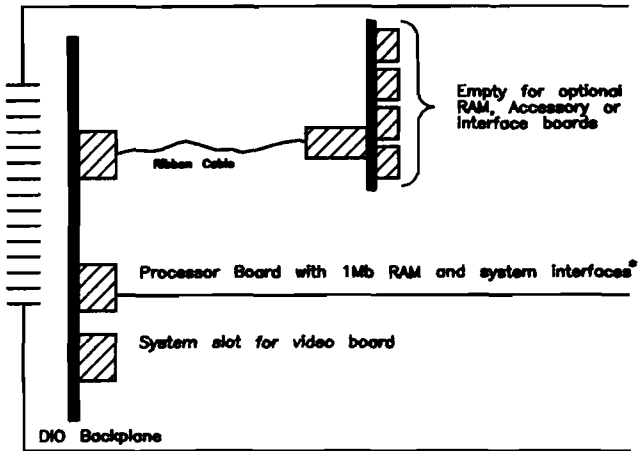
System Processing Units (SPUs)

Localization for Series 300 SPUs

The System Processing Units are available with the following localization options, which include localized documentation. The price does not change. To order the appropriate localized version, add the suffix letter to the product number. For example, to order the German version of the Model 310 SPU, order 98561AD (SPU product number plus "D" for the German version)

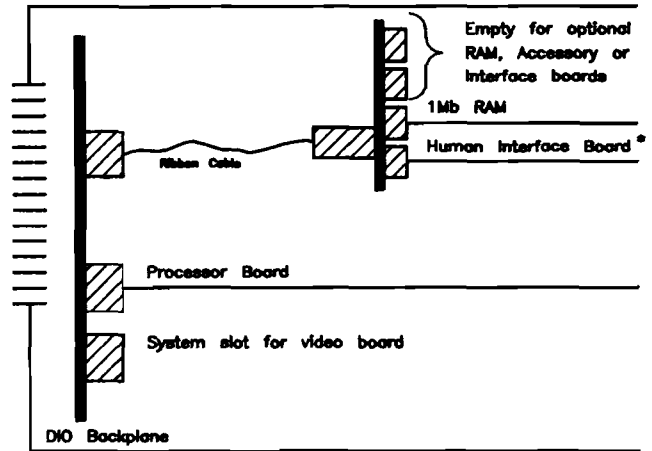
Localization	Suffix	Localization	Suffix
German	D	Katakana	J
Spanish	E	Italian	Z
French	F		

Model 310 SPU



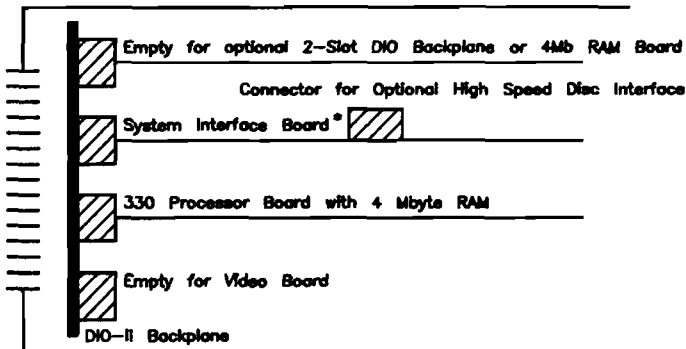
• HP-IB HP-IL
RS-232C Audio

Model 320 SPU



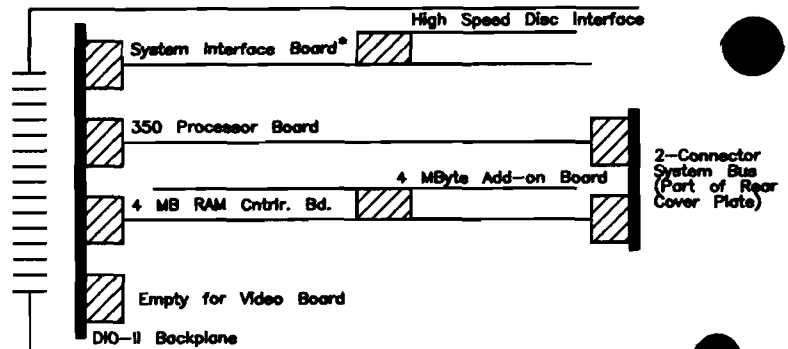
• HP-IB HP-IL
RS-232C Audio

Model 330 SPU



• HP-IB Data
RS-232C HP-IL
LAN Audio

Model 350 SPU



• HP-IB Data
High speed disc HP-IL
RS-232C Audio

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Model 310 System Processing Unit Standard Features

Part/Option Number	Description	Price
98561A	• MC68010 Processor, 10 MHz • 1 Mbyte built-in RAM • 16 Mbytes virtual memory address space per process • 16 bit memory bus • 512 x 400 on-board monochrome video interface • IEEE-488 HP-IB interface • RS-232C Serial interface • HP-HIL interface • Audio interface • 1-meter HP-IB cable, HP-HIL keyboard cable	
Opt. 002*	Delete ½ Mbyte RAM, leaving ½ Mbyte on board.	
Opt. 003*	Delete built-in display interface. Order appropriate display interface and monitor. CPU board will have 1 Mbyte RAM on-board but no display interface.	
Opt. 004	Delete 4-slot I/O card cage. SPU box will be delivered with slots for CPU board and display interface only. The I/O card cage upgrade can be ordered later as Part Number 98242A.	
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair.	

* You cannot order Opt. 002 and Opt. 003 concurrently.

Model 320 System Processing Units Standard Features

Part/Option Number	Description	Price
98561B	Model 320 SPU • MC68020 Processor, 16.67 MHz • MC68881 Floating Point Coprocessor, 16.67 MHz • 1 Mbyte RAM board • 4 Gbytes virtual memory address space per process • 32-bit memory bus • Human Interface board containing: – IEEE-488 HP-IB interface – RS-232C Serial interface – HP-HIL interface – Audio Interface • 1-meter HP-IB cable, HP-HIL keyboard cable • DB9 to DB25 RS-232C adapter cable	
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair.	
98561C	Model 320U SPU • 98561B SPU plus • 98568A expander • Three 1 Mbyte RAM boards • DMA interface • LAN interface† • HP-IB high-speed disc interface	
Opt. 002	Delete 2 Mbyte RAM, for a total of 2 Mbyte remaining	
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair.	



† Must order MAU, AUI cable, and LAN cable separate for LAN hook-up.

Model 330 System Processing Unit Standard Features

Part/Option Number	Description	Price
98562A	- MC68020 Processor, 16.67 MHz - MC68881 Floating Point Coprocessor, 16.67 MHz - Four Mbytes RAM - Four Gbytes Virtual Memory address space per process 32 bit Memory Bus 32 bit DIO-II I/O Bus - System Interface Board with - IEEE-488 HP-IB Interface - HP-HIL Interface - RS-232C Serial Interface - IEEE 802.3/Ethernet LAN Interface with ThinMAU and "T" Connector - Two channel DMA Controller - HP-IB, HP-HIL, and RS-232C adapter cables	22k
Opt. 006	Add 98242B 2-slot backplane	
Opt. 010	Add 98262A Disc Interface	
Opt. W03	Convert 1-year return to HP warranty to 90-day on-site.	

80 Mb 10.5
 4 Channel }
 Main } 1.2
 0/5 = 4.0 (16 users)

Model 350 System Processing Unit Standard Features

Part/Option Number	Description	Price
98562B	- MC68020 Processor, 25 MHz - MC68881 Floating Point Coprocessor, 20 MHz - Eight Mbytes RAM, expandable to up to 32 - Four Gbytes Virtual Memory address space 32 bit System Bus 32 bit DIO-II I/O Bus - System Interface Board with - IEEE-488 HP-IB Interface - RS-232C Serial Interface - Audio Interface - IEEE 802.3/Ethernet LAN Interface with ThinMAU and "T" Connector - High-speed IEEE-488 Disc Interface - Two channel DMA Controller - HP-HIL Interface - HP-IB, HP-HIL, and RS-232C adapter cables	
Opt. 116	Converts 8 Mb RAM to 16 Mb RAM. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on	

SPU Accessories and Upgrades

Part/Option Number	Description	Price
98242A	4-slot DIO backplane. Adds four DIO slots to 98570A Opt. 004.	
98242B	2-slot DIO backplane. Can be added to 98562A/B SPU or to 98570A Opt. 004 expander to provide 2 DIO slots and 3 system slots.	
98243B	Series 300 Processor Upgrade Kit. Upgrade MC68010 to MC68020 CPU. Includes HP-IB/HP-HIL/RS-232C battery-backed real-time clock interface card, and 1 Mbyte RAM board. Must return Model 310 processor board; instructions are provided in upgrade kit.	
Opt. 002	Delete 1 Mbyte RAM board	
98258A	4 Mb RAM Controller. Accepts either a 98582B or 98582C RAM add-on board. Occupies one system slot. For Models 330 and 350. Includes 3-slot system bus connector.	
98258B	4 Mb RAM Add-on. For Model 350 only. Plugs into 98258A for a total of 8 Mbytes RAM.	
98258C	12 Mb RAM Add-on. For Model 350 only. Plugs into 98258A for a total of 16 Mbytes RAM.	
98262A	High-speed disc interface for Model 330 system interface board. Maximum one per system. Uses no system or DIO slots.	
98568A Opt. 132	Direct connect 8-slot I/O expander. Attaches directly to a Series 300 SPU. Required option for Model 330 or Model 350. Connects 98568A directly to Model 330 or Model 350 motherboard, using no system slots.	
98570A Opt. 004	Direct-connect DIO-II Expander. Adds 2 DIO-II slots and 4 DIO slots to a 98582A/B SPU. Delete 4-slot DIO backplane for a total of 4 DIO-II system slots.	
9888A	16-slot DIO Expander. Maximum of two allowed in system. Uses one I/O interface slot.	

Series 300 Workstations

Localization for Series 300 Workstations and Keyboards

The Models 310, 318, 320, 330, and 350 workstations are available in the following localized versions. The localized versions of the workstations include localized keyboard, monitor, SPU, power cord, and applicable manuals. This localization scheme also applies to the HP-HIL keyboards on page 13. The price does not change. To order the localized version of a workstation, simply add the suffix letter to the product number. For example, to order a German version of the Model 310 Measurement Automation System, order 98580AD (workstation product number plus "D" for the German version).

Localization	Suffix	Localization	Suffix
Canadian French	C	Swiss German	P
German	D	Swiss French	Q
European Spanish	E	Swedish	S
French	F	Hebrew	T
Dutch	H	UK English	U
Katakana	J	Belgian Dutch	W
ICON English	K	Finnish	X
Canadian English	L	Danish	Y
Latin Spanish	M	Italian	Z
Norwegian	N		

Model 310 Workstations

Part/Option Number	Component	Description	Price
98580A		Model 310 Instrument Controller	
	98561A 35731A 46021A 98616A Opt. 044	Model 310 SPU plus: 12-inch monochrome monitor HP-HIL keyboard BASIC 5.0 software on 3½-inch flexible discs	
Opt. 002		Substitute ½ Mb (512 Kb) on-board RAM in place of standard 1 Mb	
Opt. 005		Delete HP-HIL keyboard	
Opt. 008		Add 98546A Display Compatibility interface card set	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
Opt. 613		Delete BASIC 5.0	
		<i>Note: This system does not include the HP-HIL ID Module. It must be purchased separately if you plan to use application software which requires ID.</i>	
98581A		Model 310 Low-cost Color Workstation	
	98561A 35741A 98543A 46021A	Model 310 SPU plus: 12-inch color monitor Medium-resolution color video board with RGB cables HP-HIL keyboard	
Opt. 005		Delete HP-HIL keyboard	
Opt. 008		Add 98546A Display Compatibility interface card set	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
		<i>Note: This system does not come with an operating system. It must be ordered separately. Also, not included is the HP-HIL ID Module. It must be ordered separately if you plan to use application software which requires ID.</i>	

PC-308* Workstations

The PC-308 workstations are based on the HP Vectra Personal Computer with the HP BASIC Language Processor plug-in card. Within Series 300, they are instrument and

measurement control computers, but they also run all of the PC-DOS software of the IBM-PC compatible HP Vectra. For localized versions, please consult your HP sales representative.

Part/Option Number	Component	Description	Price
82314A		PC-308M BASIC Controller	
	72445A	HP Vectra Model 45 (640 Kb, 1.2 Mb floppy)	
	35731D	Monochrome Plus Display	
	35732A	Monochrome Plus Video Adapter/Parallel Interface	
	82300A	HP BASIC 5.0 Language Processor (512 Kb, HP-IB)	
	82303A	HP BASIC 5.0 512 Kb RAM Expansion Kit	
	24541A	RS-232, RS-422 Dual Serial Interface	
	45896A	20 Mb Hard Disc Subsystem	
	45951A	HP Vectra DOS/PAM	
82315A		PC-308C BASIC Controller	
	72450A	HP Vectra Model 50 (640 Kb, 20 Mb hard disc, 1.2 Mb floppy, Serial/Parallel Interface)	
	35743A	EGA Color Display	
	45983A	EGA Video Adapter	
	82300A	HP BASIC 5.0 Language Processor (512 Kb, HP-IB)	
	82303A	HP BASIC 5.0 512 Kb RAM Expansion Kit	
	82959S	Tilt/Swivel Base	
	45951A	HP Vectra DOS/PAM	

* Available May 1, 1987.

Model 318 Workstation

The Model 318M is a limited-expansion workstation and therefore has no accessory slots available for interface and

accessory cards. The HP-IB and RS-232C on-board interfaces are available to add printers, plotters and mass storage devices to your system.

Part/Option Number	Component	Description	Price
98563A		Model 318M Workstation SPU consisting of: • MC68020 Processor, 16.67 MHz • MC68881 Floating Point Coprocessor, 16.67 MHz • Four Mbytes RAM • Four Gbytes virtual memory address space per process • 32-bit memory bus • 1024 x 768 on-board monochrome video interface with cable • IEEE-488 HP-IB interface • RS-232C Serial interface • IEEE 802.3/Ethernet LAN interface with ThinMAU and "T" connector • HP Human Interface Link (HIL) Interface • Two-channel DMA controller • HP-IB and HP-HIL cables	
	46021A	HP-HIL Keyboard with cable	
	98786A	17-inch monochrome monitor (1024x768)	
	98515A	Single-user HP-UX Application Execution Environment	
Opt. 022		HP-UX AXE on ¼-inch tape	
Opt. 045		HP-UX AXE on 3½-inch flexible disc	
Opt. 060		Add 46060A HP-HIL mouse	
Opt. 084		Add 48084A HP-HIL ID Module	
Opt. 301		Add 98801V Opt. 022 Alis™/HP-UX software on ¼-inch tape cartridge	
Opt. 302		Add 98801V Opt. 045 Alis™/HP-UX software on 3½-inch flexible discs	
Opt. 305		Add 50952B Opt. 022 NS ARPA software on ¼-inch tape	
Opt. 306		Add 50952B Opt. 045 NS ARPA software on 3½-inch disc	

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Model 320 Workstations

Part/Option Number	Component	Description	Price
98582B		Model 320M Monochrome Workstation	
	98561C 98786A 98544B 46021A 46060A 46084A 98515A Opt. 022 50952B Opt. 022	Model 320U SPU plus: 17-inch monochrome monitor (1024x768) Monochrome video board with cable HP-HIL keyboard HP-HIL 2-button mouse HP-HIL ID Module Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
98582L		Model 320ML Workstation	
	98562B 9133L	Model 320M workstation plus:* 44 Mbyte hard disc with 3½-inch disc drive	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
98583B		Model 320C Color Workstation	
	98561C 98782A 98547B 46021A 46060A 46081A 46084A 98290A 98515A Opt. 022 50952B Opt. 022	Model 320U SPU plus: 19-inch color monitor (1024x768) 6-plane color video board HP-HIL keyboard HP-HIL 2-button mouse Buffer box with speaker HP-HIL ID Module RGB cable Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 785		Substitute 98785A 16-inch monitor	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
98584A		Model 320AIM Monochrome AI Development System	
	98561C 98786A 98544B 46021A 46060A 46084A 98257A 98595A Opt. 022 98587B Opt. 022 50952B Opt. 022 98678A Opt. 022	Model 320U SPU plus: 17-inch monochrome monitor (1024x786) Monochrome video board HP-HIL keyboard HP-HIL 2-button mouse HP-HIL ID Module Two 1-Mbyte RAM cards Multi-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. Multi-user HP-UX Programming Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge. Development Environment for Common LISP. Software on ¼-inch tape cartridge.	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	

* The HP-UX and LAN software are provided on 3½-inch double-sided microfloppies.



Model 320 Workstations (cont'd)

Part/Option Number	Component	Description	Price
98585A		Model 320AIC Color AI Development System	
	98561C 98782A 98547B 46021A 98290A 46060A 46084A 98257A 98595A Opt. 022 98597B Opt. 022 50952B Opt. 022 98678A Opt. 022	Model 320U SPU plus: 19-inch color monitor (1024x768) 6-plane color video board HP-HIL keyboard RGB cable HP-HIL 2-button mouse HP-HIL ID Module Two 1-Mbyte RAM cards Multi-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. Multi-user HP-UX Programming Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge. Development Environment for Common LISP. Software on ¼-inch tape cartridge.	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
98586A		Model 320CX Color Workstation with Graphics Accelerator	
	98561C 98782A 98700A 98710A 98701A 98287A 46021A 46060A 46081A 46084A 98290A 98515A Opt. 022 50952B Opt. 022	Model 320U SPU plus: 19-inch color monitor High-performance Display Controller 3D wireframe graphics accelerator 4-plane frame buffer upgrade Series 300 interface card for 98700A HP-HIL keyboard HP-HIL 2-button mouse Buffer box with speaker HP-HIL ID Module RGB cable Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 301		Add Alis™/HP-UX software	
Opt. W03		Convert 1 year return-to-HP warranty with 90-day on-site repair	
98587A		Model 320SRX Solids Rendering Workstation	
	98561C 98784A 98720A† 98721A 98722A 98725A 46021A 46060A 46081A 46084A 98290A 98515A Opt. 022 50952B Opt. 022	Model 320U SPU plus: 19-inch color monitor Solids rendering display controller with 4-plane memory overlay 3D solid graphics accelerator 8-plane frame buffer Interface card and cable for 98720A HP-HIL keyboard HP-HIL 2-button mouse Buffer box with speaker HP-HIL ID Module RGB cable Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 016		Add one 8-plane frame buffer memory card	
Opt. 024		Add two 8-plane frame buffer memory cards	
Opt. 032		Add three 8-plane frame buffer memory (Limit four 8-plane frame buffer memory)	

† Does not support HP Windows/9000

Model 330 Workstations

Part/Option Number	Component	Description	Price
98580M		Model 330MMA Monochrome Instrument Controller	
	98562A Opt. 010 Opt. 006 98542A 35731A 46021A 98616A Opt. 045	Model 330 SPU plus 98262A High-speed disc interface 98242B 2-slot DIO backplane Medium-resolution monochrome video board 12-inch monochrome monitor HP-HIL keyboard BASIC 5.0. Software on 3½-inch flexible discs. 1-meter HP-IB cable, RS-232 adaptor cable	
Opt. 005		Delete keyboard	
Opt. 613		Delete BASIC 5.0	
Opt. W03		Convert to 90-day on-site warranty	
		<i>Note: This system does not include the HP-HIL ID Module. It must be purchased separately for application software which requires ID.</i>	
98581M		Model 330CMA Color Instrument Controller	
	98562A Opt. 010 Opt. 006 98543A 35741A 46021A 98616A Opt. 045	Model 330 SPU plus: Add 98262A High-speed disc interface 98242B 2-slot DIO backplane Medium-resolution color video board with RGB cable 12-inch color monitor HP-HIL keyboard BASIC 5.0. Software on 3½-inch flexible discs. 1-meter HP-IB, RS-232 adaptor cable	
Opt. 005		Delete keyboard	
Opt. 613		Delete BASIC 5.0	
Opt. W03		Convert to 90-day on-site warranty	
		<i>Note: This system does not include the HP-HIL ID Module. It must be purchased separately for application software which requires ID.</i>	
98583L		Model 330C Color Workstation	
	98562A 98547A 98785A 46021A 46060A 46081A 46084A 98515A Opt. 022 50952B Opt. 022	Model 330 SPU plus: 6-plane Color Video Board with RGB cable 16-inch Color Monitor (1024 x 768) HP-HIL Keyboard HP-HIL Mouse HP-HIL Buffer Box HP-HIL ID Module Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge. 1 Meter HP-IB cable, RS-232 cable, HP-HIL cable	
Opt. 006		Add 98242B 2-slot DIO Backplane	
Opt. 010		Add 98262A Disc Interface	
Opt. 301		Add Alis™/HP-UX Software	
Opt. 782		Replace 16-inch monitor with 98782A 19-inch monitor	
98582M		Model 330M Monochrome Workstation	
	98562A 98544B 98786A 46021A 46060A 46084A 98515A Opt. 022 50952B Opt. 022	Model 330 SPU plus: Monochrome Video Board 17-inch monochrome monitor HP-HIL Keyboard HP-HIL Mouse HP-HIL ID Module Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge. 1 Meter HP-IB cable, RS-232 cable, HP-HIL cable, RGB cable	
Opt. 006		Add 98242B 2-slot DIO Backplane	
Opt. 010		Add 98262A Disc Interface	
Opt. 301		Add Alis™/HP-UX Software	

Model 350 Workstations

Part/Option Number	Component	Description	Price
98587B		Model 350SRX	
	98562B 98720A Opt. 721 Opt. 722 98784A 98725A 98290A 46021A 46060A 46081A 46084A 98515A Opt. 022 50952B Opt. 022	Model 350 SPU plus: Solids Rendering Display Controller with 4-plane memory overlay 3D Solid Graphics Accelerator 8-plane frame buffer memory 19-inch Color Monitor (1280 x 1024) Interface Card and cable for 98720A RGB cable ITF keyboard HP-HIL 2-button mouse Buffer Box with speaker ID Module Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 016		Add one 8-plane frame buffer memory card	
Opt. 024		Add two 8-plane frame buffer memory cards	
Opt. 032		Add three 8-plane frame buffer memory (<i>limit four 8-plane frame buffer memory</i>)	
Opt. 116		Converts 8 Mbyte RAM to 16 Mbyte RAM. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on	
98586B		Model 350CX Color Workstation with Graphics Accelerator	
	98562B Opt. 006 98700A 98710A 98701A 98287A 98782A 98290A 46021A 46060A 46081A 46084A 98515A Opt. 022 50952B Opt. 022	Model 350 SPU plus: Add 2-slot DIO backplane High-performance 3D Wireframe Display Controller (includes 4-plane frame buffer) 3D Wireframe Graphics Accelerator 4-plane Frame Buffer Upgrade Series 300 Interface Card for the 98700A 19-inch High-resolution Monitor (1024 x 768) RGB Cable ITF keyboard HP-HIL 2-button Mouse Buffer Box with Speaker ID Module Single-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge.	
Opt. 116		Converts 8 Mb to 16 Mb. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on.	
Opt. 301		Add Alis™/HP-UX Technical Office Automation software	
98585B		Model 350AIC Color AI Development System	
	98562B 98782A 98547A 46021A 46060A 46081A 46084A 98290A 98595A Opt. 022 98597B Opt. 022 50952B Opt. 022 98678A Opt. 022 79232U Opt. 022	Model 350 SPU plus: 19-inch Color Monitor (1024 x 768) 6-plane Color Video Board HP-HIL Keyboard HP-HIL 2-button Mouse Buffer Box with Speaker ID Module RGB cable Multi-user HP-UX Application Execution Environment. Software on ¼-inch tape cartridge. Multi-user HP-UX Programming Environment. Software on ¼-inch tape cartridge. NS-ARPA. Software on ¼-inch tape cartridge. Development Environment for Common LISP. Software on ¼-inch tape cartridge. Development Environment for HP PROLOG. Software on ¼-inch tape cartridge.	
Opt. 116		Converts 8 Mb to 16 Mb. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on.	
Opt. 232		Delete HP PROLOG	
Opt. 301		Add Alis™/HP-UX Technical Office Automation software	

Model 350 Workstations (cont'd)

Part/Option Number	Component	Description	Price
98584B		Model 350AIM Monochrome AI Development System	
	98562B 98786A 98544B 46021A 46060A 46084A 98597B Opt. 022 98595A Opt. 022 50952B Opt. 022 98678A Opt. 022 79232U Opt. 022	Model 350 SPU plus: 17-inch Monochrome Monitor (1024 x 768) Monochrome Video Board with cable HP-HIL Keyboard HP-HIL 2-button Mouse ID Module Multi-user HP-UX Programming Environment. Software on 1/4-inch tape cartridge. Multi-user HP-UX Application Execution Environment. Software on 1/4-inch tape cartridge. NS-ARPA. Software on 1/4-inch tape cartridge. Development Environment for Common LISP. Software on 1/4-inch tape cartridge. Development Environment for HP PROLOG. Software on 1/4-inch tape cartridge.	
Opt. 116		Converts 8 Mb to 16 Mb. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on.	
Opt. 232		Delete HP PROLOG	
Opt. 301		Add Alis™/HP-UX Technical Office Automation software	
98583C		Model 350C Color Workstation	
	98562B 98547A 98782A 46021A 46060A 46081A 46084A 98290A 98515A Opt. 022 50952B Opt. 022	Model 350 SPU plus: 6-plane Color Video Board 19-inch Color Monitor (1024 x 768) HP-HIL Keyboard HP-HIL 2-button Mouse Buffer Box with Speaker ID Module RGB cable Single-user HP-UX Application Execution Environment. Software on 1/4-inch tape cartridge. NS-ARPA. Software on 1/4-inch tape cartridge.	
Opt. 116		Converts 8 Mb RAM to 16 Mb RAM. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on.	
Opt. 301		Add Alis™/HP-UX Technical Office Automation software	
Opt. 785		Replace 98782A monitor with 16-inch monitor (98785A)	
98582C		Model 350M Workstation	
	98562B 98544B 98786A 46021A 46060A 46084A 98515A Opt. 022 50952B Opt. 022	Model 350 SPU plus: Monochrome Video Board 17-inch Monochrome Monitor (1024 x 768) HP-HIL Keyboard HP-HIL 2-button Mouse ID Module Single-user HP-UX Application Execution Environment. Software on 1/4-inch tape cartridge. NS-ARPA. Software on 1/4-inch tape cartridge.	
Opt. 116		Converts 8 Mbyte RAM to 16 Mbyte RAM. Replaces the 4 Mb RAM add-on with a 12 Mb RAM add-on.	
Opt. 301		Add Alis™/HP-UX Technical Office Automation software	

DOS Coprocessor System

Part/Option Number	Description	Price
98531A Opt. 022 Opt. 045	HP Series 300 DOS Coprocessor Software. For use with 98286A HP Series 300 DOS Coprocessor. Requires HP-UX 5.1 or later, minimum 98515A. (Order one media option below.) Software on 1/4-inch tape cartridge. Software on 3 1/2-inch double-sided discs.	
98531R	Right to Reproduce DOS Coprocessor Software. Includes 98531A manual set and right-to-reproduce certificate.	
98286A Opt. W03	HP Series 300 DOS Coprocessor. Includes interface card only. For use with 98531A DOS Coprocessor Software. Convert 1 year return-to-HP warranty to 90 day on-site repair.	
98286S Opt. 022 Opt. 045 Opt. W03	HP Series 300 DOS Coprocessor System. Includes 98286A DOS Coprocessor and 98531A DOS Coprocessor Software. Requires HP-UX 5.1 or later, minimum 98515A. (Order one media option below.) Software on 1/4-inch tape cartridge. Software on 3 1/2-inch double-sided discs. Convert 1 year return-to-HP warranty to 90 day on-site repair.	
98286T Opt. 022 Opt. 045 Opt. W03	HP Series 300 DOS/Memory Enhancement Kit for Models 310 and 320. Ideal for the BASIC/Pascal customer, includes a 98286S DOS Coprocessor System and 98257A 1 Mbyte RAM card. Requires HP-UX 5.1 or later, minimum 98515A. (Order one media option below.) Software on 1/4-inch tape cartridge. Software on 3 1/2-inch double-sided discs. Convert 1 year return-to-HP warranty to 90 day on-site repair.	

VMEbus Connection

Part/Option Number	Description	Price
98646A	HP 9000 VMEbus Interface. Includes DIO interface card, VME card, interconnecting cable, and hardware manual. (Not currently supported on Model 330/350. Requires 98358X software drivers.)	
98358A Opt. 244 Opt. 242 Opt. 344 Opt. 342 Opt. 444 Opt. 442	VMEbus Software Drivers Pascal Driver on 3 1/2-inch microfloppy with manual. Pascal Driver on 5 1/4-inch flexible disc with manual. HP-UX Driver on 3 1/2-inch microfloppy with manual. HP-UX Driver on 5 1/4-inch flexible disc with manual. BASIC Driver on 3 1/2-inch microfloppy with manual. BASIC Driver on 5 1/4-inch flexible disc with manual.	
98358R Opt. 200 Opt. 300 Opt. 400	Right-to-Reproduce VMEbus Software Drivers Right-to-reproduce Pascal Driver and manual. Right-to-reproduce HP-UX Driver and manual. Right-to-reproduce BASIC Driver and manual.	

PCIB System

Part/Option Number	Description	Price
98647A Opt. 042 Opt. 044 Opt. 045 Opt. 001	PC Instruments BUS (PCIB) Interface and System Software Software on 5 1/4-inch flexible disc Software on 3 1/2-inch single-sided disc Software on 3 1/2-inch double-sided disc Delete system software and manuals	

Video Boards

Part/Option Number	Description	Price
98542A 98543A 98544B 98547A 98546A	Medium-resolution monochrome video board (Order 35731A/B monitor) Medium-resolution 4-plane color video board (Order 35741A/B monitor) High-resolution monochrome video board (Order 98786A monitor) High-resolution 6-plane color video board (Order 98782A or 98785A monitor) Display Compatibility Interface. Medium-resolution monochrome alpha/graphics video board set with cables for Series 200 display compatibility (Order 35731A monitor).	

OK 98545A.

Monitors*

Part/Option Number	Description	Price
35731A	12-inch Monochrome Monitor , 60 Hz, 115 Vac (for use with 98542A video board or 98561A/98546A video output).	
35731B	12-inch Monochrome Monitor , 60 Hz, 115/230 Vac (for use with 98542A video board or 98561A/98546A video output).	
35741A	12-inch Color Monitor , 60 Hz, 115 Vac (for use with 98543A video board).	
35741B	12-inch Color Monitor , 60 Hz, 115/230 Vac (for use with 98543A video board).	
98786A	17-inch High-resolution Monochrome Monitor , 60 Hz, 115/230 Vac (for use with 98544B video board).	
98782A	19-inch High-resolution Color Monitor , 60 Hz, 115/230 Vac (for use with 98547A video board and 98700H Graphics Display System). Monitor and interface are bundled with 98700A.	
98784A	19-inch High-resolution Color Monitor , 60 Hz, 115/230 Vac (for use with the 98720 Display Controller)	
98785A	16-inch High-resolution Monitor , 60 Hz, 115/230 Vac. For use with the 98700A display controller or 98547A video board.	

* 'B' versions are preset to local country power setting and have local product regulatory approval.

Graphics Accessories and Upgrades

Part/Option Number	Description	Price
98287A	Series 300 Interface Card for the 98700A.	
98700A	High-resolution Display Controller. For use with the 98782A/85A monitor and the 98287A interface.	
98720A	Display Controller. Includes four planes which are used as frame buffer if no other frame buffer boards are installed. When frame buffer boards are added, these planes become alpha overlay planes. Also included area a power cord and keyboard cable. RGB cable (98290A) Series 300 Display Controller interface (98724A), and monitor (98784A) are not included.	
98721A	3D Solids Graphics Accelerator	
98722A	Frame Buffer Board , adds eight planes frame buffer memory. Order additional power supply as described below.	
98723A	Additional Power Supply , only required for use with a 16-, 24-, or 32-plane system.	
98724A	16-bit Display Controller Interface to 98720A. Includes RGB cable. (For Model 320 only.)	
98725A	16-bit Display Controller Interface to 98720A. For Models 330 and 350 only.	
98701A	Additional four planes of graphics memory for 98700A	
98710A	Graphics Accelerator for the 98700A	

HP-HIL Input Devices*

Part/Option Number	Description	Price
45911A	HP-HIL Digitizer , 11" x 11", 12 lines per inch resolution	
46021A	HP-HIL Keyboard (U.S. ASCII version)	
98203C	HP-HIL keyboard with rotary knob for BASIC and Pascal systems. US ASCII.	
Opt. 001	Field Upgrade Kit for Series 300 models shipped before September 1, 1986	
46060A	HP-HIL Mouse	
46080A	2.4 meter extension for HP-HIL	
46081A	2.4 meter extension for HP-HIL and Audio	
46082A	15 meter remote extension for HP-HIL, Audio and RGB video	
46082B	30 meter remote extension for HP-HIL, Audio and RGB video	
46083A	HP-HIL Knob	
46084A	HP-HIL ID Module	
46085A	HP-HIL Control Dial Module	
46086A	HP-HIL 32-button box with 32 user-definable special-function keys and one user programmable LED	
46087A Opt. 001	HP-HIL digitizer , ANSI A/ISO A4-size Adds the 46089A 4-button cursor with crosshair	

* For detailed information on model numbers and operating system revisions that support these peripherals, please refer to the **Series 300 Support Matrix** or **Series 300 Configuration Reference Manual**, Part Number 98561-90020. All devices (except keyboard) include cable.

HP-HIL Input Devices (cont'd)

Part/Option Number	Description	Price
46088A Opt. 001	HP-HIL digitizer , ANSI B/ISO A3-size Adds the 46089A 4-button cursor with crosshair	
46089A	4-button cursor with crosshair for 46087/88	
46094A	Quadrature Port allows devices using Logitech quadrature signals to be connected to HP-HIL interface	
46095A	3-button mouse interfaces to HP-HIL via 46094A Quadrature Port	
35723A	HP-HIL Touchscreen bezel (for 12-inch monitors 35731A and 35741A, cable included)	
92916A	HP-HIL Bar Code Reader for commercial and industrial bar code applications	

Interface Products for Series 300

Part/Option Number	Description	DIO Slot		Price
		Accessory	Interface	
36593A	HP-UX Gateway/SNALink for Series 300 Gateway System		X	
50955A Opt. 042 Opt. 045	3278 Display Station Emulator (interface and software) 5¼-inch media 3½-inch media		X	
50962A	SRM Coax Interface for Series 200 and 300 systems		X	
98253A	EPROM Programmer Interface (98255A)		X	
98255A	EPROM Card , 16 sockets for 2764 or 27128 EPROM ICs	X		
98256A	256 Kbyte RAM Card for Models 310 and 320	X		
98257A	1 Mbyte RAM Card with parity check for Models 310 and 320	X		
98259A	128 Kbyte Magnetic Bubble Memory Card	X		
98287A	Interface to connect the Series 300 to the 98700A Display Station		X	
98620B	Two-channel DMA Controller Card for Models 310 and 320	X		
98622A Opt. 001 Opt. 002 Opt. 003 Opt. 004	16-bit GPIO Interface Card Provides 4.6m unterminated cable (P/N 5061-4209) Provides 0.8m terminated cable for 9885M Flexible Disc Drive (P/N 5061-4211) Provides 4.6m terminated cable for 6940A/B Multiprogrammer (P/N 5061-4210) Provides 2.5-m terminated cable for 9866A/B Thermal Printer (P/N 5061-4212)		X	
98623A Opt. 001	43-line BCD Interface Card Provides 4.6-m unterminated cable (P/N 5061-4217)		X	
98624A	HP-IB Interface, standard speed 1-m HP-IB cable, P/N 10833A 2-m HP-IB cable, P/N 10833B 4-m HP-IB cable, P/N 10833C 0.5-m HP-IB cable, P/N 10833D		X	
98625B	HP-IB Disc Interface , high speed		X	
98626A Opt. 001 Opt. 002	RS-232C (Serial) Interface Provides DTE (male) RS-232C cable (P/N 5061-4215) Provides DCE (female) RS-232C cable (P/N 5061-4216)		X	
98627A	RGB Color Video Output Interface with cables		X	
98628A Opt. 001 Opt. 002 Opt. 003	Datacomm Interface , RS-423 and RS-232 Provides DTE (male) RS-232C cable (P/N 5061-4215) Provides DCE (female) RS-232C cable (P/N 5061-4216) Provides DCE (female) RS-449/423 cable (P/N 5061-4250)		X	
98630A Opt. 001	Breadboard Interface Service Extender	X		
98633A	6944A Multiprogrammer Interface		X	
98635A	Floating Point Math Card for Model 310	X		
98640A Opt. 001 Opt. 630 Opt. 655	7-channel ADC Interface Deletes diagnostic software and test hood Provides diagnostic software on 3½" microfloppy Provides diagnostic software on 5¼" floppy		X	
98641A	RJE 2780/3780 Interface . For use with HP-UX and 50967A RJE software.			

Interface Products for Series 300 (cont'd)

Part/Option Number	Description	DIO Slot		Price
		Accessory	Interface	
98642A Opt. 001	4-port RS-232C MUX Interface Deletes modem cable		X	
98643A Opt. 241	LAN/300 Link with ThinMAU (requires 50951A, 50952A, or 50952B) Delete ThinMAU and T-Connector		X	
98644A	RS-232C Serial Interface		X	
98646A	VMEbus Interface		X	
98691A Opt. 001 Opt. 002 Opt. 003	Programmable Datacomm Interface Provides DTE (male) RS-232C cable (P/N 5061-4215) Provides DCE (female) RS-232C cable (P/N 5061-4216) Provides DTE (male) RS-449/423 cable (P/N 5061-4250)		X	

Series 300 Operating and Language Systems[†]

HP-UX Operating System

Product/Option Number		Description	Price (U.S. List)	
Single-user	Multi-user*		Single-user	Multi-user
98515A Opt. 022 Opt. 045 Opt. 100	98595A Opt. 022 Opt. 045 Opt. 003 Opt. 100	HP-UX Application Execution Environment. Includes HP-UX kernel, Installation Software, HP Windows/9000 and PAM. (Order either media Opt. 022 or Opt. 045 below.) Software on ¼-inch tape cartridge. Software on 3½-inch double-sided discs. Single-user to multi-user upgrade. Requires prior purchase of 98515A. Delete manuals		
98517A Opt. 022 Opt. 045 Opt. 100	98597B Opt. 022 Opt. 045 Opt. 003 Opt. 100	HP-UX Programming Environment. Requires Application Execution Environment, 98515A single-user or 98595A multi-user. Includes commands, C Compiler, MC680X0 Assembler, Symbolic Debugger, RS-232 Data Communications, Device I/O Library and Starbase Graphics Library. Order either media option below. Software on ¼-inch tape cartridge Software on 3½-inch double-sided media Single-user to multi-user upgrade. Requires prior purchase of 98517A Delete manuals.		
98518A Opt. 022 Opt. 045 Opt. 100	98598A Opt. 022 Opt. 045 Opt. 003 Opt. 100	HP-UX FORTRAN 77 Compiler. Requires purchase of 98517A for single-user and 98597B for multi-user. (Order either Opt. 022 or Opt. 045 below.) FORTRAN 77 is a full implementation of the ANSI FORTRAN 77 X.39-1978 standard, plus MIL-STD 1753 and other extensions. Software on ¼-inch tape cartridge. Software on 3½-inch double-sided discs. Single-user to Multi-user system upgrade. Requires prior purchase of 98518A. Delete manuals		
98519A Opt. 022 Opt. 045 Opt. 100	98599A Opt. 022 Opt. 045 Opt. 003 Opt. 100	HP-UX Pascal Compiler. Requires purchase of 98517A for single-user and 98597A for multi-user. (Order either media Opt. 022 or Opt. 045 below.) Pascal Compiler is a superset of the proposed ANSI standard with data manipulation, I/O and other extensions. Software on ¼-inch tape cartridge. Software on 3½-inch double-sided discs. Single-user to Multi-user, system upgrade. Requires prior purchase of 98519A. Delete manuals		

* Multi-user systems are licensed to a maximum of 16 users.

[†] This information can also be found in the **HP 9000 Software Pricing Guide** (Pub. No. 5954-7063D).

HP-UX Operating System (cont'd)

Product/Option Number		Description	Price	
Single-user	Multi-user*		Single-user	Multi-user
97054A Opt. 022 Opt. 045	97055A Opt. 022 Opt. 045 Opt. 003	HP-UX Ada Compiler. Requires purchase of 98517A for single-user and 98597A for multi-user. (Order either Opt. 022 or Opt. 045 below.) Includes Ada Compiler, libraries and utilities. Ada Compiler is a full implementation of the ANSI Ada standard (ANSI/MIL-STD-1815A-1983) and is validated by the Ada validation office. Software on 1/4-inch tape cartridge Software on 3 1/2-inch double-sided discs Single-user to multi-user system upgrade. Requires prior purchase of 97054A.		
97066A Opt. 022 Opt. 045 Opt. 100	97066A Opt. 022 Opt. 045 Opt. 100	HP-UX Technical BASIC. Requires purchase of 98515A or 98597A (order either Opt. 022 or Opt. 045 below). BASIC interpreter includes a complete BASIC development and run-time environment. Software on 1/4-inch tape cartridge Software on 3 1/2-inch double-sided discs Delete manuals		
98672A Opt. 022 Opt. 045	98672A Opt. 022 Opt. 045	HP-GKS Graphics Library. (Order either media Opt. 022 or 045 below.) HP-GKS is a full Level 2b implementation of the ANSI/ISO Graphical Kernel System standard. Software on 1/4-inch tape cartridge Software on 3 1/2-inch double-sided discs		
82320A Opt. 022 Opt. 045	82320A Opt. 022 Opt. 045	X Window System Software on 1/4-inch tape cartridge. Software on 3 1/2-inch double-sided media.		
82320R Opt. 100	82320R Opt. 100	Right-to-reproduce the X Window system. Includes manual set and right-to-reproduce certificate. Delete manuals.		
98678A Opt. 022 Opt. 100	N/A	Development Environment for Common LISP. Requires 46084A HP-HIL Security ID Module, 98515A Application Execution Environment, and 98517A or 98597B HP-UX 5.1 Programming Environment. Includes compiler, interpreter, debugger and integrated environment for development of Common LISP applications, and the 98679A Execution License for Common LISP. Software on 1/4-inch tape cartridge Delete manuals		
79232U	N/A	Development Environment for HP PROLOG. Requires 98678A Development Environment for Common LISP. Includes choice of syntax compiler, debugger, interpreter, and integrated environment for development of PROLOG applications.		
98679B	N/A	Execution License for Common LISP/PROLOG. Requires 46084A HP-HIL Security ID Module and 98515A, HP-UX 5.1 Programming Environment. License to execute applications written in Common LISP and/or HP PROLOG.		
98520A Opt. 022 Opt. 045	98600A Opt. 022 Opt. 045 Opt. 003	HP-UX DGL/AGP Graphics Library. Requires 98517A for single-user, 98597B for multi-user. (Order either media Opt. 022 or Opt. 045 below.) Software on 1/4-inch tape cartridge. Software on 3 1/2-inch double-sided discs. Single-user to multi-user system upgrade. Requires prior purchase of 98520A.		
98673X Opt. 022	98673X Opt. 022	DGL Skeleton Device Handler Software on 1/4-inch cartridge		
98693A Opt. 022 Opt. 045	98693A Opt. 022 Opt. 045	SRM Access Utilities for HP-UX Software on 1/4-inch tape cartridge Software on 3 1/2-inch double-sided disc		
98674A	N/A	Optional Starbase Display List		
98053A	N/A	Versatec Hardcopy Support. Includes software, documentation, and cable. Must order HP 98622A GPIO interface separately.		

* Multi-user systems are licensed to a maximum of 16 users.

BASIC 5.0 Language System

Part/Option Number	Description	Price
98616A Opt. 001	RAM-based BASIC 5.0 Language System. Includes one system disc set, BASIC 5.0 Manual Kit and BASIC 5.0 Utilities Pack. (Order one disc media option below.) Upgrade from a previous BASIC Language system.	
98616-11x40*	BASIC 5.0 Compiler Subprogram Utilities (CSUB). For use with BASIC 5.0 and Pascal 3.2. These utilities allow you to develop compiled subprograms in Pascal or Assembly that are callable by BASIC.	
98616-17x40*	BASIC 5.0 CSUB Utility Upgrade. This upgrades previous versions of the Compiled Subprogram Utilities to the current version.	
98616-87901	BASIC Documentation Kit (order from DMK)	†

* The 'X' in the part number indicates media option:

2 is for 5¼-inch external format

4 is for 3½-inch double-sided discs recorded single-sided

5 is for 3½-inch double-sided discs recorded double-sided.

† Price not available at time of printing.

Pascal 3.2 Language System

Part/Option Number	Description	Price
98617A Opt. 001	RAM-based Pascal 3.2 Language System. Includes system disc set and Pascal 3.2 Manual Set. (Order one disc media option below.) Upgrade from previous version of Pascal Language System.	
98617-87901	Pascal Documentation Kit (order from DMK)	†

† Price not available at time of printing.

Media Options

Part/Option Number	Description	Price
Opt. 042 Opt. 044 Opt. 045	Specify one media option for each BASIC or Pascal Language System ordered above. Software on 5¼-inch disc. Software on 3½-inch disc, single-sided format on double-sided media. Software on 3½-inch disc, double-sided format.	

Local Area Network (LAN)

LAN Software

Part/Option Number	Description	Price
50952B Opt. 022 Opt. 045	NS-ARPA Services/300 Networking Software. (Requires 98643A LAN/300 Link for Model 320.) Includes: NS, ARPA, and Berkeley 4.2 Networking Services. Use for single- or multi-user HP-UX. Select media option. Software on ¼-inch tape cartridge Software on 3½-inch double-sided discs	

LAN Hardware

Part/Option Number	Description	Price
98643A Opt. 241	LAN/300 Link (requires 50952B). Includes LAN interface, 28641A ThinMAU with integrated 1 meter AUI cable, and BNC "T" connector. (Use for Models 310 and 320.) Delete ThinMAU and "T" Connector for connecting to ThickLAN cable. (Must order MAU and AUI cable separately.)	
92227A 92227B 92227C 92227D 92227E 92227F 92227G 92227H	LAN Cables and Accessories For connecting to ThinLAN. ThinLAN coax cable (with BNC connectors installed): 1-m coax cable 2-m coax cable 4-m coax cable 8-m coax cable 16-m coax cable 32-m coax cable 64-m coax cable 128-m coax cable	
92227J 92227K	ThinLAN coax cable (without connectors): Cut-to-length, PVC (cost per meter) Cut-to-length, FEP (cost per meter)	
92227L 92227M 92227N 92227P 28641A	ThinLAN Accessories BNC Connector Pair for 92227J/K BNC Connector Tool Kit for 92227J/K BNC "T" Connector ThinLAN Terminator Pair ThinMAU Includes 1 meter AUI cable and BNC T-connector (included with 98643A)	
30241A 92256C	For connecting to Backbone LAN: Backbone LAN MAU and Tap LAN MAU and Installation Kit (order once):	
92254A 92254B 92254C 92254D 92254E 92254F 92254G 92254H	Backbone LAN AUI cables (with connectors attached): 6-m FEP AUI Cable 12-m FEP AUI Cable 24-m FEP AUI Cable 48-m FEP AUI Cable 6-m PVC (11) AUI Cable 12-m PVC AUI Cable 24-m PVC AUI Cable 48-m PVC AUI Cable	
92255A 92255B 92255C	Backbone LAN AUI Cables (without connectors attached) and Tools: FEP Cut-to-length AUI Cable (cost per meter) PVC Cut-to-length AUI Cable (cost per meter) LAN AUI Connector kit (order for each 92255A/B connection)	
92253A 92253B 92253C 92253D 92253E 92253F 92253G 92253H	Backbone LAN Coax Cable (including connectors and terminators): 23.4-m FEP without connectors attached 23.4-m FEP with connectors attached 117-m FEP without connectors attached 500-m FEP without connectors attached 23.4-m PVC without connectors attached 23.4-m PVC with connectors attached 117-m PVC without connectors attached 500-m PVC without connectors attached	
92256A 92229B	Backbone LAN Coax Cable Tools for attaching connectors (order once): LAN Coax Installation Tool Kit LAN Coax Crimp Tool	
92223A 92223C	For repeatered networks: Repeater Kit. Includes repeater, two 5-meter repeater AUI cables, and 2 repeater MAUs. For connecting to ThinLAN or Backbone LAN coax segments. 20-m Repeater FEP AUI. Includes a single 20 meter repeater AUI cable. For extending the distance between the repeater and repeater MAU (up to 50 meters max).	
28645A Opt. 241	ThinLAN Hub. Includes ThinLAN Hub assembly, MAU assembly, MAU Coax Tap, BNC "T" connectors, 5-meter AUI cable, wall mounting bracket, and Installation Manual. Delete MAU, Tap, AUI cable and mounting bracket.	

Note: For complete information on LAN cables and accessories, see the *HP Computer Users' Catalog*.

Series 300-to-IBM Data Communications

Part/Option Number	Description	Price
36590A	HP-UX SNA3270 Datacomm Software for Series 300	
36592A Opt. 0A0 Opt. 0A1	HP-UX SNALink for Series 300 2 session LUs 32 session LUs	
36591A	HP-UX Gateway/SNA3270 Datacomm Software for each Series 300	
36593A	HP-UX Gateway/SNALink for Series 300 Gateway System	

NS for the DEC VAX Computer

Part/Option Number	Description	
50950A Opt. 044 Opt. 200 Opt. 300 Opt. 400	NS for the DEC VAX Computer software For HP 9000 to DEC MicroVAX communications. Software on 5¼-inch floppy (RX50). For HP 9000 to DEC MicroVAX communications. Software on TK50. For HP 9000 to DEC 11/725-85X0 communications. Software on 9-track tape. For HP 9000 to DEC 8600-88X0 communications. Software on 9-track tape.	
50950R Opt. 044 Opt. 200 Opt. 300 Opt. 400	Right-to-reproduce NS for the DEC VAX Computer software For HP 9000 to DEC MicroVAX communications. Software on 5¼-inch floppy (RX50). For HP 9000 to DEC MicroVAX communications. Software on TK50. For HP 9000 to DEC 11/725-85X0 communications. Software on 9-track tape. For HP 9000 to DEC 8600-897X communications. Software on 9-track tape.	

Shared Resource Management (SRM)

SRM Servers

Part/Option Number	Description	
50960A	SRM Server including 98619A operating system, 50962A coax interface, interfaces and cables for video monitor and keyboard, CPU, 1/2 Mbyte RAM memory, DMA, HP-IB and coax terminator kit in 325mm wide case. <i>Must order 82913A monitor and 46021A keyboard separately.</i> <i>¾ Mbyte RAM memory required for on-line back-up of disc; up to 1.5 Mbyte useable for large systems. Order 98256A or 98257A RAM card as required.</i> <i>Requires 9888A bus expander for more than one SRM interface.</i>	

SRM Workstation Hardware

Part/Option Number	Description	
50962A	<i>Hardware required in the Series 300 workstations to connect to the SRM Servers via the coax link:</i> SRM Coax Interface	
50963A	SRM Interface for Vectra. Includes interface card, BNC "T" connector. Requires 82300A or 82302A Language Processor in Vectra. Requires coax interface in server and RG58 C/U coax cables with BNC connectors.	
50961U Opt. 200	SRM Coax Adapter Upgrade Upgrades 98629A SRM interface card installed in a Series 200/300 computer or SRM server. Includes SRM coax adapter and BNC T-connectors.	
92227A 92227B 92227C 92227D 92227E 92227F 92227G 92227H	Coax Cables (PVC insulation, with BNC connector installed): 1-m coax cable 2-m coax cable 4-m coax cable 8-m coax cable 16-m coax cable 32-m coax cable 64-m coax cable 128-m coax cable	

SRM Workstation Hardware (cont'd)

Part/Option Number	Description	Price
92227J	Coax Cable (without connector):	
92227K	Cut-to-length, PVC insulation (300 to 3000 meters; cost per meter)	
92227L	Cut-to-length, FEP insulation (300 to 3000 meters; cost per meter)	
92227M	BNC connector pair for 92227J/K cables	
92227N	BNC connector tool kit	
45695A	BNC T-connector	
	BNC 50 Ohm termination pair	

SRM Workstation Software

Part/Option Number	Description	Price
	<i>Software required in the workstations to connect to the SRM servers:</i>	
	To connect BASIC/Pascal systems in Series 300 and Vectra with Language Processor: The access software is included in BASIC and Pascal operating systems revision 2.1 or later.	
	To connect Series 300 HP-UX systems:	
98693A	SRM Access Utilities for HP-UX	
Opt. 022	Software on 1/4-inch tape cartridge	
Opt. 045	Software on 3 1/2-inch flexible disc	

Series 300 Peripherals, Media and Accessories

For detailed information on model numbers and operating system revisions that support these peripherals, please refer to

the *Series 300 Support Matrix* or the *Series 300 Configuration Reference Manual*, Part Number 98561-90020.

Microfloppy and Hard Disc Storage (270 Kbytes – 40Mbytes)

Part/Option Number	Description	Price
9127A	270 Kbyte , 5 1/4-inch flexible single master disc	
9122D	2 x 630 Kbyte , 3 1/2-inch dual double-sided microfloppy	
9122S	630 Kbyte , 3 1/2-inch single double-sided microfloppy	
9153A	10 Mbyte Winchester hard disc with 3 1/2-inch 630 Kbyte double-sided microfloppy	
9154A	10 Mbyte Winchester hard disc only	
9153B	20 Mbyte winchester hard disc with 3 1/2-inch 630 Kbyte double-sided microfloppy	
9154B	20 Mbyte winchester hard disc with 3 1/2-inch hard disc only	
9133H Opt. 001	20 Mbyte Winchester hard disc with 3 1/2-inch 630 Kbyte double-sided microfloppy 1 Kbyte sectors for UNIX	
9134H Opt. 001	20 Mbyte Winchester hard disc only 1 Kbyte sectors for UNIX	
9133L Opt. 001	40 Mbyte Winchester hard disc with 3 1/2-inch 630 Kbyte double-sided microfloppy 1 Kbyte sectors for UNIX	
9134L Opt. 001	40 Mbyte Winchester hard disc only 1 Kbyte sectors for UNIX	

CS/80 Hard Disc Storage (24 Mbytes to 571 Mbytes)

Part/Option Number	Description	Price
7941A	23.8 Mbyte CS/80 disc drive	
7942A	23.8 Mbyte CS/80 disc/tape drive	
7911P/R Opt. 001 Opt. 140	28 Mbyte CS/80 disc/tape drive Dual controller tape drive Delete cartridge tape drive	
7907A	41 Mbyte fixed/removable drive , 20 1/2 removable, 20 1/2 fixed, CS/80, HP-IB	
7945A	55.5 Mbyte CS/80 disc drive	
7946A	55.5 Mbyte CS/80 disc/tape drive	

CS/80 Hard Disc Storage (cont'd)

Part/Option Number	Description	Price
7912 P/R Opt. 140	65 Mbyte CS/80 disc/tape drive Delete tape drive	
7914CT Opt. 140	132 Mbyte CS/80 disc/tape drive Delete tape drive	
7914P/R Opt. 140	132 Mbyte CS/80 disc/tape drive Delete tape drive	
7933H	404 Mbyte fixed media device	
7935H	404 Mbyte removable media device	
7936H	307 Mbyte fixed disc drive	
7937H	571 Mbyte fixed disc drive	
7957A	81 Mbyte fixed disc drive	
7958A	130 Mbyte fixed disc drive	

Back-up Tape Drives

Part/Option Number	Description	Price
9144A	1/4-inch Cartridge tape drive	
7974A Opt. 800	1600 cpi 1/2-inch tape drive Adds 800 cpi capability	
35401A	1/4-inch Cartridge Autochanger	
7978B	6250/1600 cpi 1/2-inch tape drive	

Series 300 Printers

Character Printers

Part/Option Number	Description	Price
82906A Opt. 001 Opt. 002 Opt. 003 Opt. 004	160 cps Impact Printer, 50-60 Hz 100 Vac HP-IB interface 120 Vac HP-IB interface 220 Vac HP-IB interface 240 Vac HP-IB interface	
2603A	48 cps (peak) Daisy-wheel Printer	
2225A	150 cps Thinkjet Printer	
2227B	160 cps QuietJet Plus Printer; HP-IB interface	
2932A Opt. 046	200 cps Dot Matrix Impact Printer Replace RS-232 interface with HP-IB	
2934A Opt. 046	200 cps Dot Matrix Impact Printer Replace RS-232 interface with HP-IB (required)	

Key: cps = characters per second

Line Printers

Part/Option Number	Description	Price
2563A Opt. 114 Opt. 290 Opt. 510 Opt. 850	300 lpm Impact Line Printer Deletes quietized cabinet, passive stacker, and sound enclosure. HP 9000 HP-IB interface and 4-m cable Bundled option package. Includes Opt. 004, 005, 008, 068. Configures the printer for use with SRM	
2564B Opt. 114 Opt. 290 Opt. 510 Opt. 850	600 lpm Impact Line Printer Deletes quietized cabinet, passive stacker, and sound enclosure, and adds non-quietized cabinet. HP-IB CIPER interface for use with Series 300/500 Bundled option package. Includes Opt. 004, 005, 008, 068. Configures the printer for use with SRM	

Key: lpm = lines per minute

Line Printers (cont'd)

Part/Option Number	Description	Price
2566A Opt. 115 Opt. 290 Opt. 500 Opt. 850	900 lpm Impact Line Printer Passive paper stacker HP-IB CIPER interface for use with Series 300/500 Printer package, includes Options 004, 005, and 115 Configures the printer for use with SRM	
2567B Opt. 115 Opt. 500	1200 lpm Impact Line Printer Passive paper stacker Printer package, includes Options 004, 005, and 115.	
9876A	400 lpm Thermal Line Printer	

Key: lpm = lines per minute

Page Printers

Part/Option Number	Description	Price
2686A Opt. 300	8 ppm Laser Page Printer (LaserJet) Add LaserJet-Plus features	
33440A	8 ppm Laser Page Printer (LaserJet Series II)	
2684A	20 ppm Laser Page Printer (LaserJet 2000)	
2684P	LaserJet 2000 with 2000-sheet paper stacker	
2684D	LaserJet 2000 with 2000-sheet input paper deck and duplexer.	

Key: ppm = pages per minute

Series 300 Graphics Devices

Part/Option Number	Description	Price
7440A Opt. 001	Graphics Plotter, 8-Pen, for A4/A-size media RS-232 interface option HP-IB interface option	
7470A Opt. 002	A-size, 2-Pen Plotter Replace RS-232 interface and cable with HP-IB interface and no cable (required option)	
7475A Opt. 002	A...B-size, 6-Pen Plotter Replace RS-232 interface and cable with HP-IB interface and no cable (required option)	
7550A	A...B-size, 8-Pen Plotter, sheet-feed	
7580B	A...D-size, 8-Pen Plotter	
7585B	A...E-size, 8-Pen Plotter	
7586B Opt. 059	A...E-size, 8-Pen Roll-feed Plotter Orders manual options for use with the HP 9000 Series 500	

Series 300 Terminals

Part/Option Number	Description	Price
2392A Opt. 160 Opt. 301	12-inch Alphanumeric Display Terminal, 47-66 Hz, 115 Vac Adds approximately two pages of display memory U.S. modem cable	
2393A Opt. 301	12-inch Graphics Display Terminal, 47-66 Hz, 115 Vac U.S. modem cable	
2397A Opt. 301	Color Graphics Terminal with selectable 512 x 390 or 640 x 400 resolution. Eight colors from 64-color palette. U.S. modem cable	
45851A	HP 150 II Touchscreen Computer	
45711A	Portable Plus Computer	
45850A	HP 150 Personal Computer Terminal	
9807A	Integral Personal Computer	
98791B	HP 2392A and VT100 Terminal Emulator (requires 46084A HP-HIL Security ID Module)	

Series 300 Miscellaneous Peripherals

Part/Option Number	Description	Price
2334A	x.25 Cluster Controller	
26075A	HP-IB Switch	
92205A	Hayes Smartmodem 1200™ (U.S.), 60 Hz, 120 Vac	
92205C	Hayes Smartmodem 1200™ (Canada), 60 Hz, 120 Vac	

Smartmodem 1200™ is a trademark of Hayes Microcomputer Products, Inc.

Series 300 Accessories

Part/Option Number	Description	Price
10833A	1 meter HP-IB Cable	
10833B	2 meter HP-IB Cable	
10833C	4 meter HP-IB Cable	
10833D	0.5 meter HP-IB Cable	
10834D	Adapter, extends HP-IB connector 2.3 cm	
92240B	Swivel Base Unit	
92211L	Taboret Cabinet for Series 300 and 325 mm-wide peripherals	
92211M	Taboret Cabinet for 9888A and 325 mm-wide peripherals	
92211R	HP Design Plus Mobile Mini-rack for 325 mm-wide peripherals	
97064A	CAD Table, 68-66 Hz, 120 Vac (supports 98782A/B monitors, adapter included)	
98783A	Tilt and Swivel Unit for the 98782A Monitor (unit included with 97064A table)	
98290A	3 meter RGB Cable	
98561-90020	Series 300 Configuration Reference Manual	
92240A	Swivel base unit	
98787A	Tilt and swivel base for the 98785A monitor	
19511A	Stack cabinets for 307/571 Mbyte disc drives	
92213B	CAD table with pull-out work surface and keyboard tray	
19500A	EIA 19-inch rack mounting kit for 91XX, 7945 and 7957/58A disc drives	
98567A	EIA 19-inch rack mounting kit for the 35731A 12-inch monitor	
98567B	EIA 19-inch rack mounting kit for the 35741A 12-inch monitor	
98569A	EIA 19-inch rack mounting kit for Series 300 SPU or SPU and expander	

Series 300 Media

Part/Option Number	Description	Price
92192A	Blank 3½", Double-sided Flexible Discs (box of 10)	
92191A	Blank 3½", Single-sided Flexible Discs (box of 10)	
92190A	Blank 5¼" Flexible Discs (box of 10)	
92195A	Blank 8" Flexible Discs (box of 10)	
97907A	20.5 Mbyte Cartridge Tape for 7907A	
88140LC	Certified, ¼-inch" Tape Cartridges, 600-foot (box of 5)	
88140SC	Certified ¼-inch" Tape Cartridges, 150-foot (box of 5)	

HP 9000 Family Hardware Support Services

Overview

At Hewlett-Packard we want you to get the most out of your workstation products. To meet the goals of maximum uptime and productivity at minimum cost, our products are backed by a range of hardware services. These contractual hardware support programs are designed to meet your price/performance needs and help you get the most out of your HP solution.

In the following section, you will find these services listed alongside Series 300 products, *in the same order and categories you found them in the hardware section (minus descriptions)*. This will allow you to easily look up support services for products in which you are interested.

Summary of Hardware Support Services

Category	Place of Service	Response Time
Standard (SMMC)	Customer Site (0–100 miles radius from HP Maintenance Service)	Four Hours
BASIC (BMMC)	Customer Site (0–100 miles radius from HP Maintenance Service)	Next Day
Priority (WMMC)	Customer Site (0–100 miles radius from HP Maintenance Source)	Four Hours
Next Day (PMMC)	Customer Site (0–100 miles radius from HP Maintenance Source)	Next Day
Courier (CRMC)	Nearest HP Field Repair Center	
Customer Return (FMMC)	Nearest HP Field Repair Center	

You can choose your hardware-maintenance program, depending upon whether your highest priority is a quick response or a low cost for your workstation products. These services are available for most HP personal and desktop computers, plotters, desktop printers, terminals and associated peripherals. You receive the services of an HP Customer Engineer specially trained in the type of equipment you have. And you get the support level that is right for you, for a known cost.

Maintaining a staff of trained Customer Engineers and stocking each Service Responsible Office and Field Repair Center with its own service inventory and tools assures you that quality maintenance service will be available when you need it.

Priority On-Site Service (WMMC)

If your workstation applications call for a high level of availability, Priority On-Site Service offers a four coverage hour on-site response. This service is especially valuable if you do not stock spare equipment at your site. Support coverage is from 8:00 a.m. to 5:00 p.m. every business day excluding HP holidays.

Next Day On-Site Service (PMMC)

Next Day On-Site Service gives you following-day response between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (excluding HP holidays). If you can wait for a one-workday response, then this service is an economical choice for you.

Courier Return Service (CRMC)

Courier Return Service allows you to take advantage of HP's low cost return-to-HP service by providing on-site pickup of your workstation products. Our designated courier picks up and delivers your equipment to our service center and then returns it to you, usually within five days of your initial call.

Customer Return Service (FMMC)

This service provides the lowest cost maintenance for your workstation products. You ship your equipment to an HP Field Repair Center where it will be repaired, tested, and sent back to you within three working days after it is received. If you can afford to be without your equipment or if you have spares at your site, Customer Return Service offers our most economical service.

Note: Two additional categories, Standard Monthly Maintenance (SMMC) and BASIC Monthly Maintenance (BMMC), will be obsoleted over the next year for workstation products, but will be retained for system products.

System Processor Unit (SPU)

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98561A Model 310 SPU Opt. 002 Opt. 003 Opt. 004 Opt. W03						
98561AD through 98561AZ Localized systems						
98561B 32-bit SPU Opt. W03						
98561BD through 98561BZ Localized systems						
98561 Model 320U 32-bit SPU Opt. 022 Opt. W03						
98562A Model 330 SPU Opt. 006 Opt. 010						
98562B Model 350 SPU Opt. 116						

SPU Accessories

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98568A Direct connect I/O expander						
98570A Expander						
98242A DIO Backplane						
98242B Expander						
98243B Processor Upgrade						
98258A RAM Controller						
98258B 4 Mb RAM Add-on						
98258C 12 Mb RAM Add-on						

Series 300 Bundled Systems

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98580A Model 310 Measurement Automation System Opt. 002 Opt. 008 Opt. W03						
98580AC through 98580AZ Localized systems						
98581A Model 310 Low-cost Color Automation System Opt. 008 Opt. W03						
98581AC through 98581AZ Localized systems						
82314A PC-308M						
82314A through 82314AZ localized versions						
82315A PC-308C						
82315A through 82315AZ localized versions						
98563A Model 318M Opt. 060 Opt. 084						
98582B Model 320M Opt. W03						
98582BC through 98582BZ						
98582L Model 320ML Low-cost Monochrome Workstation and Disc Opt. W03						
98582LC through 98582LZ Localized systems						
98583B Model 320C Opt. W03						
98583BC through 98583BZ Localized systems						
98584A Model 320AIM Opt. W03						
98584AC through 98584AZ Localized systems						
98585A Model 320AIC Opt. W03						
98585AC through 98585AZ Localized systems						
98586A Model 320CX Opt. W03						
98586AC through 98586AZ Localized systems						
98597A Model 320SRX						
98581M Model 330MMA Opt. 005 Opt. W03						
98582M Model 330CMA Opt. 005 Opt. W03						

Series 300 Bundled Systems (cont'd)

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98583L Model 330C Opt. 006 Opt. 010						
98582M Model 330M Opt. 006 Opt. 010 Opt. 782						
98587B Model 350SRX Opt. 016 Opt. 024 Opt. 032 Opt. 116						
98586B Model 350CX Opt. 116						
98585B Model 350AIC Opt. 116						
98584B Model 350AIM Opt. 116						
98583C Model 350C Opt. 116						
98582C Model 350M Opt. 116						

Video Boards

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98542A Medium-resolution monochrome video board						
98543A Medium-resolution color video board						
98544B High-resolution monochrome video board						
98547A High-resolution color video board						
98546A Display Compatibility Interface						

Monitors

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
35731A/B 12-inch Monochrome Monitor						
35741A/B 12-inch Color Monitor						
98786A 17-inch High-resolution Monochrome Monitor						
98782A 19-inch High-resolution Color Monitor						

Graphics Accessories

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98720A						
98721A (Opt. 721)						
98722A (Opt. 722)						
98723A (Opt. 723)						
98724A						
98725A						
98784A						
98587A Opt. 016 Opt. 024 Opt. 032						
98587B Opt. 016 Opt. 024 Opt. 032 98710A						

RAM

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98256A 256 Kbyte RAM Card						
98257A 1 Mbyte RAM Card						

HP-HIL Input Devices

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
46021A HP-HIL Keyboard						
46020AC through 46020AZ Localized systems						
46060A HP-HIL Mouse						
46080A 2.4 meter extension for HP-HIL						
46081A 2.4 meter extension for HP-HIL and Audio						
46082A 15 meter remote extension for HP-HIL, Audio and RGB Video						
46082B 30 meter remote extension						
46083A HP-HIL Control Knob						
46084A HP-HIL Knob Security ID Module						
46085A HP-HIL Control Dial Box						
46086A HP-HIL 32-button box						
46087A HP-HIL digitizer, ANSI A/ISO A4-size Opt. 001						
46088A HP-HIL digitizer, ANSI B/ISO A3-size Opt. 001						
46089A 4-button cursor						
46094A Quadrature Port						
46095A 3-button Mouse						
35723A HP-HIL Touchscreen bezel						

Interface Products for Series 300

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
50955A 3278 Display Station Emulator Card						
50961A Resource Management Coax Adapter and Interface for Series 200 and 300 Systems Opt. 200						
98253A EPROM Programmer Interface						
98255A EPROM Card						
98256A 256 Kbyte RAM Card						
98257A 1 Mbyte RAM Card						
98259A 128 Kbyte Magnetic Bubble Memory Card						
98287A Interface to connect the Series 300 to the 98700						
98568A Series 300 Bus Expander						
98620B Two-channel DMA Controller Card						
98622A 16-bit GPIO Interface Card Opt. 001 Opt. 002 Opt. 003 Opt. 004						
98623A 43-line BCD Interface Card Opt. 001						
98624A HP-IB Interface, standard speed						
98625A HP-IB Disc Interface						
98626A RS-232C (Serial) Interface Opt. 001 Opt. 002						

Interface Products for Series 300 (cont'd)

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98627A RGB Color Video Output Interface						
98628A Datacomm Interface Opt. 001 Opt. 002 Opt. 003						
98629A Shared Resource Management Interface						
98630A Breadboard Interface Opt. 001						
98633A 6944A Multiprogrammer Interface						
98635A Floating Point Math Card						
98640A 7-channel ADC Interface Opt. 001 Opt. 630 Opt. 655						
98642A 4-port RS-232C MUX Interface Opt. 001						
98643A LAN/300 Link						
98644A RS-232C Serial Interface						
98690A PDI Development Package for 98791A Opt. 630 Opt. 650 Opt. 655						
98691A Programmable Datacomm Interface Opt. 001 Opt. 002 Opt. 003						

Local Area Network (LAN)

LAN Hardware

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
98643A LAN/300 Link Opt. 241						
28641A Thin MAU						
30241A Backbone LAN MAU						
92254A through 92254H Cables						
92255A through 92255C Cables						
92253A through 92253H Cables						
92256A Tool Kit						
92229B Crimp Tool						
92223A Repeater Kit						
92223C Repeater FEP AUI						

Shared Resource Management (SRM)

SRM Servers

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
50960A SRM Server						

SRM Workstation Hardware

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
50962A SRM Coax Adapter and Interface						
92227A through 92227N Cables						
45695A 50-ohm Termination Pair						

Series 300 Peripherals, Media and Accessories

Data Storage (270 Kbytes – 20 Mbytes)

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
9127A 270 Kbyte, 5¼-inch flexible single master disc						
9122D 2 x 630 Kbyte, 3½-inch dual double-sided microfloppy						
9122S 630 Kbyte, 3½-inch single double-sided microfloppy						
9153A 10 Mbyte Winchester with 3½-inch, 630 Kbyte, microfloppy						
9154A 10 Mbyte Winchester hard disc only						
9133H 20 Mbyte Winchester with 3½-inch, 630 Kbyte, microfloppy						
9133L 40 Mbyte Winchester hard disc with 3½-inch microfloppy						
9134H 20 Mbyte Winchester hard disc only						
9134L 40 Mbyte Winchester hard disc only						

CS/80 Hard Disc Storage (24 Mbytes to 571 Mbytes)

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
7941A 23.8 Mbyte CS/80 disc drive						
7942A 23.8 Mbyte CS/80 disc drive						
7911P/R 28 Mbyte CS/80 disc drive Opt. 001 Opt. 140						
7907A 41 Mbyte fixed/removable drive						
7945A 55.5 Mbyte CS/80 disc drive						
7946A 55.5 Mbyte CS/80 disc/tape drive						
7912P/R 65 Mbyte CS/80 disc/tape drive Opt. 140						
7914CT 132 Mbyte CS/80 disc/tape drive Opt. 140						
7914P/R 132 Mbyte CS/80 disc/tape drive Opt. 140						
7933H 404 Mbyte						
7935H 404 Mbyte						
7936H 307 Mbyte fixed disc drive						
7937H 571 Mbyte fixed disc drive						
7957A 81 Mbyte fixed disc drive						
7958A 130 Mbyte fixed disc drive						

Back-up Tape Drives

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
9144A ¼-inch Cartridge Tape Drive						
7974A 1600 cpi ½-inch tape drive						
7978A 6250/1600 cpi ½-inch tape drive						

Series 300 Printers

Character Printers

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
82906A 160 cps Impact Printer Opt. 001 Opt. 002 Opt. 003 Opt. 004						
2603A 48 cps (peak) Daisy-wheel Printer						
2225A 150 cps Thinkjet Printer						
2932A 200 cps Impact Printer						
2934A 200 cps Office Printer						

Line Printers

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
2563A 300 lpm Impact Line Printer Opt. 110 Opt. 112 Opt. 115 Opt. 117 Opt. 290 Opt. 500 Opt. 850						
2564B 600 lpm Impact Line Printer Opt. 115 Opt. 290 Opt. 500 Opt. 850						
2566B 900 lpm Impact Line Printer Opt. 115 Opt. 290 Opt. 500 Opt. 850						
2567B 1200 lpm Impact Line Printer Opt. 115 Opt. 500						
9876A 400 lpm Thermal Line Printer						

Page Printers

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
2686A 8 ppm Laser Page Printer (LaserJet) Opt. 300 LaserJet Plus						
33440A LaserJet Series II						
2684A LaserJet 2000						
2684P LaserJet 2000						
2684D LaserJet 2000						

Series 300 Graphics Devices

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
7440A Graphics Plotter, 8-pen						
7470A A-size, 2-Pen Plotter Opt. 002						
7475A A...B-size, 6-Pen Plotter Opt. 002						
7550A A...B-size, 8-Pen Plotter						
7580B A...D-size, 8-Pen Plotter						
7585B A...E-size, 8-Pen Plotter						
7586B A...E-size, 8-Pen Roll-feed Plotter Opt. 059						

Series 300 Terminals

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
2392A 12-inch Alphanumeric Display Terminal Opt. 160 Opt. 301						
2393A 12-inch Graphics Display Terminal Opt. 160 Opt. 301						
2397A Color Graphics Terminal Opt. 301						
45610B HP 150 Terminal						
45650B HP 150 Personal Computer with 9122D						
45660B HP 150 Personal Computer with 9133D						
45851A HP 150 II Personal Computer						
45711A Portable Plus Computer						
45850A HP 150 Personal Computer Terminal						
9807A Integral Personal Computer						
98791 HP 2392A/VT100 Terminal Emulator						

Series 300 Miscellaneous Peripherals

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
2334A x.25 Cluster Controller						
26075A HP-IB Switch						
92205A Hayes Smartmodem 1200™						
92205C Hayes Smartmodem 1200™						
98568A Series 300 Bus Expander						
9888A Series 200 Bus Expander						

Series 300 Accessories

Product Number/Name	FMMC	CRMC	PMMC	WMMC	BMMC	SMMC
92240D Swivel Base						
92171Y Swivel Adaptor						
92211L/M Taboret Cabinet						
92211R HP Design Plus Mobile Mini-rack						
97064A CAD Table						
98783A Tilt and Swivel Unit						
98290A 3 meter RGB Cable						

HP 9000 Family Software Support Services

Hewlett-Packard's software services span a broad range – from personal on-site assistance to materials-only services. These levels give flexibility in choosing the level of HP support to meet changing requirements.

Operating Systems Support

The following services are available to support a central system.

Account Management Support – Provides a local account SE, on-site assistance, one Response Center caller (a system manager) and one alternate for telephone assistance, and a Software Materials Subscription.

Response Center Support (RCS) – Provides one Response Center caller and one alternate for telephone assistance and Software Materials Subscription.

Software Materials Subscription (SMS) – Provides software and manual updates, Software Status Bulletins, and *HP communicator* magazine. Updates to ROM-based systems are not provided.

The following services are available to support an additional system:

Additional System Coverage – Extends AMS or RCS coverage on the operating system to one additional system under the same System Manager. All support is delivered through the central system.

Extended Materials Support – Extends SMS by providing the right to make one copy of all central system materials for use on one additional system.

The following optional services are also available for central or additional systems:

Additional Response Center Caller – Provides one additional caller and one alternate for access to the HP Response Center.

Manual Update Service (MUS) – Provides one copy of updates to software reference manuals.

Software Notification Service (SNS) – Provides issues of the *HP communicator* and *Software Status Bulletin*.

Application Software Support

Software Materials Subscription (SMS) – Provides software and manual updates, *Software Status Bulletin*, and *HP communicator* magazine. SMS must be ordered for each piece of subsystem and application software.

Extended Materials Support (EMS) – Extends Software Materials Subscription by providing the right to make one copy of all central system materials for use on one additional system.

Manual Update Service (MUS) – Provides one copy of updates to software reference manuals.

In addition, all HP software, except operating systems, is separated into software support groups. For subsystem software, these groups are referred to as "Categories". For application software, they are referred to as "Families".

If RCS levels of support are selected for the operating system, Category and Family support products must be ordered for subsystem and applications software respectively.

Category Support: Central System – Provides local assistance and/or access to the Response Center through the System Manager in accordance with the level of support selected for the operating system.

Category Support: Additional System Coverage – Extends Category Support on the central system to one additional system. All support is delivered through the central system.

Family Support: Central System – Provides local assistance and/or access to the Response Center in accordance with the level of support selected for the family. Entitles customer to a new Response Center caller and an alternate for each family supported.

Family Support: Additional System Coverage – Extends Family Support on the central system to one additional system. All support is delivered through the central system.

HP Helpline: In the United States, customer support for certain products is provided by HP Helpline at 1-800-858-8867. Support may be purchased either on a per-incident basis (charge per call) or contractually (monthly charge, unlimited calls per month).

Outside of the US, support is provided by the country HP Helpline. For further information, contact your region or local sales office.

Application Support: Support for certain products is provided through the local sales office on a time and materials basis.

Product Numbering for Support Services

A plus (+) symbol followed by a three-character suffix is attached to each software product. The first letter in the suffix identifies the software support service:

Letter	Software Support Service
C	Category Support
H	Response Center Support
P	Additional Response Center Caller
Q	Manual Update Service
S	Software Materials Subscription
T	Account Management Support
V	Additional System Coverage
W	Extended Materials Support

The numbers in the suffix designate the media option, if one is required. A media option must always be specified for the operating system on a central system. If the software configuration on an additional system is not the same as, or a subset of, the central system, then a media option must be specified for the additional system.

Series 300 Operating Systems Support Services

Software Product No.	AMS	RCS	SMS	Additional System Coverage	Extended SMS	MUS	Additional Caller
<u>BASIC</u>							
98616A RAM-based BASIC 5.0							
5¼" flexible disc							
3½" microfloppy, single-sided format							
3½" microfloppy, double-sided format							
<u>Pascal</u>							
98617A RAM-based Pascal 3.2							
3½" microfloppy, single-sided format							
5¼" internal flexible disc							
3½" microfloppy, double-sided format							
<u>HP-UX</u>							
98515A Application Execution Environment							
¼" Tape Cartridge							
3½" microfloppy, double-sided format							
98595A Application Execution Environment Multi-user							
¼" Tape Cartridge							
Programming Environment							
98517A Single-user							
¼" Tape Cartridge							
3½" microfloppy, double-sided format							
98597B Multi-user							
¼" Tape Cartridge, Single-user							
3½" microfloppy, Multi-user							
98066A Technical BASIC		Contact sales office			Contact sales office		

Series 300 Operating Systems Support Services (cont'd)

Software Product No.	AMS	RCS	SMS	Additional System Coverage	Extended SMS	MUS	Additional Caller
98619A SRM Operating System							
1/4" Tape Cartridge							
98693A/94A SRM Access Utilities/HP-UX							
97058A SRM Access Software/BASIC Utilities							
50955A 3278 Display Station Emulator							
<u>DOS</u> 98531A, 98286S/T DOS Coprocessor. Order the following: 99111F.							

Series 300 Operating System Category Support Services

Category	Category Support	Additional System	MUS
Languages 97054A HP-UX Single-user Ada 97055A HP-UX Multi-user Ada 98066A Technical BASIC 98612A Basic Extensions 98518A HP-UX Single-user FORTRAN 98598A HP-UX Multi-user FORTRAN 98519A HP-UX Single-user Pascal 98599A HP-UX Multi-user Pascal 79232U HP PROLOG Development Environment 98678A Common LISP Development Environment			
Data Management 98520A HP-UX Single-user AGP/DGL 98600A HP-UX multi-user AGP/DGL 98672A HP-GKS			
Datacomm A 50955A 3278 Display Station Emulator 98791B HP 2392A/VT100 Terminal Emulator			
Datacomm C 50952B NS-ARPA Services/300			

Series 300 SMS For Products in Categories

Software Product	SMS	Extended SMS
NS for the DEC VAX Computer 50950A		
NS-ARPA Services/300 50952B		
HP-UX FORTRAN 77 98518A Single-user		
HP-UX FORTRAN 77 98598A Multi-user		
HP-UX Pascal 98519A Single-user		
HP-UX Ada 97054A Single-user		
HP-UX Ada 97055A Multi-user		
HP-UX DGL/AGP 98520A Single-user		
HP-UX DGL/AGP 98600A Multi-user		
HP-GKS 98672A Single- or Multi-user		
Development Environment for Common LISP 98678A		

Series 300 Example Configurations

The following modular configurations are suggestions for various applications. Please keep in mind that these are example systems. The configuration that is optimum for your application may be quite different. Consult with your local HP Sales and Service Office for more information.

Low-Cost General-purpose BASIC System

Applications for this system include:

- Instrument control
- General-purpose computation

Order Number

98580A..... Model 310 Measurement System
9122D..... Dual 3½-inch microfloppy disc drive
2225A..... ThinkJet Printer
10833B..... 2m HP-IB cable

Pascal Development System

Applications for this system include:

- Low-cost software development environment

Order Number

98561A..... Model 310 SPU
Opt. 004..... Delete 4-slot I/O backplane
46021A..... HP-HIL Keyboard
35731A..... 12-in medium-res monochrome monitor
9153A..... 10 Mbyte hard/microfloppy disc
2225A..... ThinkJet Printer
10833B..... 2m HP-IB cable
98617A..... Pascal 3.2 Language System
Opt. 045..... on 3½-inch double-sided discs
98617A+H45 .. RCS Support for Pascal 3.2

Single-user HP-UX Software Development System

Order Number

98582M..... Model 330M Workstation
Opt. 010..... Add Disc Interface
7957A..... 80 Mbyte Winchester hard disc
9144A..... 67 Mbyte cartridge tape drive
2225A..... ThinkJet Printer
98517A..... HP-UX 5.1 single-user Programming Environment
Opt. 022..... On ¼-inch tape
98517A+H22 .. RCS support for Programming Environment

High-performance HP-UX Development System (multi-user)

Order Number

98582C..... Model 350M High-performance Monochrome Workstation
98570A..... Direct-connect I/O expander
98642A..... RS-232C MUX interface
7958A..... 130 Mbyte Winchester disc drive
9144A..... 67 Mbyte cartridge tape drive
(2) 92220R..... Two 0.3 meter HP-IB cables
(2) 88140LC..... Two boxes of 5 ea. 67 Mbyte certified cartridges
2392A..... Alphanumeric terminal
40242C..... 5 meter cable to 98642A hardwired port's 15 meter cable
2686A..... LaserJet printer
Opt. 200..... Add LaserJet Plus
92286F..... Tms proportional font cartridge for 2686A
92285F..... Output tray/collator for 2686A
13242G..... 5 meter cable form built-in RS-232 to LaserJet
92205A..... Hayes Smartmodem 1200

Order Number

98597A..... HP-UX Programming Environment
Opt. 022..... On ¼-inch tape cartridge
98598A..... HP-UX FORTRAN 77 Compiler
Opt. 022..... On ¼-inch tape cartridge
98801W..... Alis/HP-UX software, 4-user
Opt. 022..... On ¼-inch tape cartridge
98597A+H22 .. RCS for 98597A, updates on cartridge
98598A+H22 .. RCS for 98598A, updates on cartridge
99106F+H00 .. RCS for 'Office Tools' Family Support
98801W+S00 .. SMS for 98801W Alis/HP-UX
92211L..... Tabet Cabinet, 24-inch high

Low-cost High-resolution Color Workstation

Order Number

98583L..... Model 330C Workstation
Opt. 010..... Add disc interface
Opt. 782..... Substitute 19-inch monitor
Opt. 301..... Add Alis/HP-UX software
46088A..... HP-HIL digitizer
7957A..... 80 Mbyte Winchester disc drive
9144A..... 67 Mbyte cartridge tape drive
7475A..... B-size, 6-pen plotter
Opt. 001..... With RS-232 interface
13242N..... 5 meter RS-232 cable
92211L..... Tabet Cabinet, 24-inch high

Model 350SRX High-performance Design System

Consists of:

Order Number

98587B..... Model 350SRX
Opt. 116..... Replace 4 Mb RAM board with 12 Mb RAM board for a total of 16 Mb RAM
Opt. 024..... Add frame buffer memory boards for a total of 24 planes frame buffer
7936A..... 308 Mbyte disc drive (connecting cable included with Model 350SRX)
35401A..... 536 Mbyte tape cartridge autochanger
2686A..... LaserJet page printer
7485A..... E-size manual feed plotter
46088A..... A-3 size digitizer
10833B..... 2 each, 2-meter HP-IB cable (for tape autochanger, plotter)
46080-61601 .. 2.4-meter HP-HIL cable (for digitizer)
40242G..... RS-232C printer cable
92211L..... 24-inch taboret rack for SPU and display system
92211S..... Rails for 7936A cabinet to hold 35401 Autochanger
98517A..... HP-UX Programming Environment
98518A..... FORTRAN 77 Compiler
98783A..... Tilt and swivel for monitor
19511A..... Disc drive cabinet for 7936A

Model 350C 2D Design System

Consists of:

Order Number

98583C..... Model 350C
Opt. 301..... Alis/HP-UX Software
Opt. 785..... Specify 16-inch display monitor
7958A..... 132 Mbyte disc drive
9144A..... 67 Mbyte tape cartridge drive
2225A..... ThinkJet printer
7550A..... High-speed B-size 8-pen plotter
92211L..... 24-inch taboret for SPU, disc, tape
10833B..... 2 each, 2-meter HP-IB cable (for printer, plotter)

Purchase Plans

Contact one of the Hewlett-Packard worldwide Sales and Service offices for specific prices and plans.

Service

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Maintenance Services

Maintenance agreements are available for all HP computer system products to provide priority service response and a fixed, budgetable annual cost regardless of the amount of service actually required. If a maintenance agreement is not required, Hewlett-Packard also offers service at a Standard Repair Charge (STREP) that allows you to know the actual cost of the repair before it is made. If neither a maintenance agreement nor STREP is the best solution, HP offers service on a time-and-materials basis.

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Warranty Information

In the U.S.A. and Canada, your Series 300 product is warranted by Hewlett-Packard against defects in materials and workmanship from the date of delivery*. The standard warranty requires the product to be returned to a service facility designated by HP and is in effect for one year from the date of shipment. An optional 90-day, on-site warranty is also available. The duration of your HP warranty is based upon the conditions under which your Series 300 product and its associated peripherals were purchased. Contact your local HP Sales and Service Office for the specific warranty terms applicable to your Series 300 product.

Hewlett-Packard will, at its option, repair or replace equipment which proves to be defective during the warranty period. Repairs necessitated by misuse of the equipment, or by use of hardware, software, or interfacing not provided by Hewlett-Packard are not covered by this warranty. HP warrants that the software and firmware designated by HP for use with a CPU will execute its programming instructions when properly installed on that CPU. HP does not warrant the operations of the CPU, software or firmware to be uninterrupted or error free.

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