

Univac 90/25 New Product Announcement

Introduced in February 1977, the Sperry Univac 90/25 represents a lower-priced entry point to the 90 Series and is intended as a migration system for users of Univac's older 9200 and 9300 systems. It is also expected to provide competition for IBM's System/3 Models 10 and 12, the Burroughs B 1830, and Honeywell's Level 62 systems.

The 90/25 offering includes a new floppy disk subsystem, a new fixed/removable disk drive, a new printer, and a new card reader and card punch. Other peripherals that can be attached to a 90/25 include all the card equipment offered with the 90/30, the Uniscope 100 CRT display, and the Uniservo 10 magnetic tape subsystem. A 9000 Series channel adapter is offered to provide communications between the 90/25 and Univac 9200/9300 systems.

At the same time the 90/25 was introduced, Univac announced that it was adding a new CPU to the 90/30 line, and that the same floppy disk subsystem offered with the 90/25 would also be available with the 90/30. The new 90/30B CPU offers 90/30 performance but enables the attachment of the lower-speed peripherals used with the 90/25 system. The 90/25 can be upgraded to a 90/30B system in the field without replacing the peripherals.

The major difference between the 90/30 and the 90/25 is a 30-percent slower CPU, use of 16K memory chips, and modification of the integrated peripheral channel to permit connection of a floppy disk subsystem.

THE 90/25 SYSTEM


The 90/25 can be configured as a card or cardless system. The basic configuration using punched cards includes a central processor with 64K bytes of main memory (expandable to 98K or 128K bytes), an operator's console with a 1024-character CRT and typewriter-style keyboard, a 300-cpm card reader, a 300-lpm printer, and a disk drive with a storage capacity of 33.1 million bytes. An optional 75-160-cpm card punch can also be attached. The cardless version of the system uses a diskette subsystem that has a data storage capacity of 243K bytes; the diskette subsystem replaces the punch card devices. All input/output devices are integrally attached to the central processor. The basic card system, including the card punch, has a purchase price of \$134,500. Monthly rental is about \$3,600 including maintenance. An extended-term lease is available at about \$3,200 per month. The cardless version of the system has a purchase price of \$129,850 and rents for about \$3,500 per month. The monthly rate under the extended-term lease is about \$3,100 per month.

In addition to the integrated input/output devices, the 90/25 can also support a Uniservo 10 magnetic tape subsystem, an 80/96-column card reader, and a Univac 9200/9300 channel adapter on its integrated multiplexer channel. The multiplexer channel operates at a maximum speed of 83K bytes/second.

Communications capability on the 90/25 is provided by the integrated communications adapter. The ICA supports three communications lines and is attached to the 90/25's integrated peripheral channel. The peripheral channel has a transfer rate of up to 50K bytes/second.

The 90/25 runs under the same operating system as the 90/30, but has modified I/O control modules to accommodate the slower peripherals used with the 90/25. Under the OS/3 operating system, Univac is offering emulators for its own 9200 and 9300 systems and for IBM's 360/20 computer. Also available are six IBM System/3 transition aids, including a two-step process for transcribing libraries and data files, an indexed random-access method (IRAM) for disk files, an enhanced RPG II compiler, an enhanced sort/merge, a new OS/3 run processor, and enhanced data utilities. Univac's IMS/90 Information Management System and a new Information Collection System (ICS/90), are also available with the 90/25.

INTEGRATED PERIPHERAL SYSTEMS

The 8413 Diskette Subsystem consists of a cabinet containing two diskette drive mechanisms, a microprocessor controller, and the device and interface logic. The 8413 uses IBM-compatible floppy disks with a capacity of 242,944 bytes. The subsystem can accommodate up to four diskette drives, and can read or write 128-byte records at a rate of 1500 or 850 records per minute, respectively. 

Univac 90/25 New Product Announcement

▷ The 8415 Disk Subsystem is a self-contained disk unit with one removable, interchangeable disk cartridge and two fixed disks that permit on-line and off-line storage. The removable disk cartridge has two recording surfaces and a storage capacity of over 8 million bytes. The two fixed disks are mounted on a vertical shaft to form an integral assembly with a capacity of over 24 million bytes. The total subsystem capacity is 33,995,680 bytes per unit, and up to two 8415 subsystems can be attached to the integrated disk adapter. Average rotational delay is 10.7 milliseconds, and average head positioning time is 33 milliseconds. The data transfer rate is 625,000 bytes/second.

The 0719 Card Reader is a table-top device capable of reading 300 80-column cards per minute. It has one hopper with a capacity of 1000 cards and one 1000-card stacker. Control of the feed mechanism is external to the reader and is on a demand basis. Reading is accomplished column by column in serial mode. With each card feed command that is received from the reader control, a single card is fed into the transport path to be read and stacked.

The optional 0605 Card Punch is an 80-column serial punch that feeds and punches cards at the rate of 75 to 160 cards per minute, the punch rate being dependent on the number of columns punched. After a card is punched, it is verified. An incorrectly punched card is rejected and the next blank card is repunched under program control. Cards can be punched in either extended card code (EBCDIC translation) or column binary code (image mode). A read station is available as an optional feature, enabling read or read/punch operations.

The 0778 Printer Subsystem prints 120 (standard) or 132 (optional) columns at a rated speed of 300 lpm. The printer is a conventional impact-type printer using a flexible, horizontally moving metallic band containing etched characters as the type medium.

ICS/90

A new program product, the Sperry Univac Information Collection System (ICS/90), was also announced for use with the Univac 90/25 and 90/30 systems. ICS/90 collects data entered through the keyboards of visual display terminals such as the Uniscope 100 and 200 and the UTS 400 terminals, and stores it on disk for processing. The terminals may be local or remote.

ICS/90 operates in conjunction with the Univac Information Management System (IMS/90), and includes all the functions necessary to enter, validate, correct, and verify data on-line. Using a simple screen formatting feature, data is entered at display terminals in a fill-in-the-blanks manner, allowing data to be entered by personnel untrained in data entry techniques. Errors detected during entry are brought to the immediate attention of the operator.

Since ICS/90 operates under control of IMS/90, the complete facilities of both are available to terminal users (e.g., file inquiry/updating, transaction processing, and information collection). The same terminals can therefore be used for other on-line applications. Additionally, since the same software and terminals are used for both data collection and transaction processing, the change from one to the other is made easier. While data is being collected on-line with ICS/90, users can implement their transaction-oriented systems via the action program capability of IMS/90.

ICS/90 has a monthly license fee of \$80.

PRICES

The following price list includes only those items peculiar to the 90/25 and 90/30B systems. For all other peripheral and feature prices, please refer to the Equipment Prices section of the Univac 90/30 report (70C-877-04). □

Univac 90/25 New Product Announcement

EQUIPMENT PRICES

90/25 SYSTEM		Purchase Price	Monthly Maint.	Rental (1-year lease)*
PROCESSOR AND MAIN STORAGE				
3029-73	90/25 Processor (includes integrated peripheral channel, operator console, and 65K bytes of main memory)	\$66,096	\$385	\$1,530
F2748-00	Storage expansion; 32,768 bytes	14,256	50	330
F2748-99	65K 90/25 to 65K 90/30B conversion; F2593-00 is also required if 8413 Diskette Subsystem is present	16,632	47	385
F2748-98	Same as F2748-99 but for 98K system	13,176	40	305
F2748-97	Same as F2748-99 but for 131K system	9,720	33	225
8541-84	Console printer	2,570	27	72
F1622-00	Storage protect	648	—	15
F1623-01	Micrologic expansion	4,104	18	95
F2089-00	Internal multiplexer channel	11,232	49	260
INTEGRATED PERIPHERAL SUBSYSTEMS				
0719-93	Card reader; 300 cpm	6,093	35	141
F2324-00	Short card; 51-column	1,512	10	35
F2324-01	Short card; 66-column	1,512	10	35
0605-00	Card punch; 70/160 cpm	8,856	82	205
F1617-00	Punch/read station	648	5	15
0778-00	Printer; 48 characters at 300 lpm	13,824	175	320
F2386-00	132 print positions for 0778-00	1,728	10	40
F1649-00	Expanded character set for 0778-00	1,944	8	45
F2507-XX	Print carriage for 0778-00	1,296	—	30
F1625-02	Communications adapter; controls up to 3 lines	8,208	38	190
F1621-01	Integrated disk adapter	10,800	55	250
8415-00	Disk drive; 24.9 million bytes fixed, 8.3 million bytes removable storage	14,040	85	325
F1215-00	Removable disk cartridge	153	—	10
8413-00	Diskette/Dual; includes two floppy diskette drives	10,800	50	250
F2653-00	Diskette/Dual expansion; expands 8413-00 by two additional diskette drives	3,546	15	82
F1624-00	Diskette/CA interface; required to connect F1625-02 or F2121-02 to the 90/25 processor	216	—	5
F2121-02	Diskette/CA interface expansion; required when both 8413-00 and F1625-02 are present	1,080	5	25
5045-00	Uniservo control	12,192	70	254
90/30B SYSTEM				
PROCESSOR AND MAIN STORAGE				
3029-71	90/30B Processor (includes integrated peripheral channel, operator console, 65K bytes of main memory)	82,728	432	1,915
F2748-92	Storage expansion, 32,768 bytes; expands 90/30B processor from 65K to 98K to 131K bytes	10,800	43	250
F2748-01	Storage expansion, 32,768 bytes; expands 90/30B processor from 131K to 163K or 163K to 196K bytes	9,720	35	225
F2748-95	Storage expansion, 65,536 bytes; expands 90/30B processor from 196K to 262K bytes	19,440	70	450
F2748-94	Storage expansion, 65,536 bytes; expands 90/30B processor from 262K bytes up to a maximum of 524K bytes	17,250	55	400
INTEGRATED PERIPHERAL SUBSYSTEMS				
0719-93	Card Reader; 300 cpm	6,093	35	141
F2324-00	Short card; 51 columns	1,512	10	35
F2324-01	Short card; 66 columns	1,512	10	35
0778-00	Printer; 300 cpm	13,824	175	320
0778-02	Printer; 500 cpm	19,872	191	460
F2694-00	Speed upgrade; upgrades 0778-00 to 0778-02	6,048	16	140
F2386-00	136 print positions	1,728	10	40
F1649-00	Expanded character set	1,944	8	45
F2507-XX	Print cartridge	1,296	—	30
F1621-01	Disk adapter; interface and control for up to two 8415 and two 8418 disk drives	10,800	55	250
F2408-00	IDA expansion; enables IDA (F1621-01) to control two additional disk drives	8,160	33	170
8415-00	Dual drive; 24.9 million bytes of fixed and 8.3 million bytes of removable disk storage	14,040	85	325
F1215-00	Removable disk cartridge	153	—	10
F1624-00	Diskette interface	216	—	5
F2121-02	Diskette/CA expansion; to connect the 8415 and CA to the 90/30B processor when both are present	1,080	5	25
8413-00	Diskette/Dual; includes two floppy disk drives	10,800	50	250
F2653-00	Diskette/Dual expansion; adds two diskette drives to 8413-00	3,546	15	82
F2593-00	8413 Capability; required to connect an 8413 subsystem to a 90/30B processor	1,080	5	25

*Rental prices do not include equipment maintenance.

Univac 90/25
New Product Announcement*Rev 9/77*

EQUIPMENT PRICES

90/25 SYSTEM

PROCESSOR AND MAIN STORAGE

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
3029-73	90/25 Processor (includes integrated peripheral channel, operator console, and 65K bytes of main memory)	\$73,440	\$385	\$1,530
F2748-00	Storage expansion; 32,768 bytes	15,840	50	330
F2748-99	65K 90/25 to 65K 90/30B conversion; F2593-00 is also required if 8413 Diskette Subsystem is present	18,480	47	385
F2748-98	Same as F2748-99 but for 98K system	14,640	40	305
F2748-97	Same as F2748-99 but for 131K system	10,800	33	225
8541-84	Console printer	2,856	27	72
F1622-00	Storage protect	720	—	15
F1623-01	Micrologic expansion	4,560	18	95
F2069-00	Internal multiplexer channel	12,480	49	260

INTEGRATED PERIPHERAL SUBSYSTEMS

0719-93	Card reader; 300 cpm	6,770	35	141
F2324-00	Short card; 51-column	1,680	10	35
F2324-01	Short card; 66-column	1,680	10	35
0605-00	Card punch; 70/160 cpm	9,840	82	205
F1617-00	Punch/read station	720	5	15
0778-00	Printer; 48 characters at 300 lpm	15,360	175	320
F2386-00	132 print positions for 0778-00	1,920	10	40
F1649-00	Expanded character set for 0778-00	2,160	8	45
F2507-XX	Print carriage for 0778-00	1,440	—	30
F1625-02	Communications adapter; controls up to 3 lines	9,120	38	190
F1621-01	Integrated disk adapter	12,000	55	250
8415-00	Disk drive; 24.9 million bytes fixed, 8.3 million bytes removable storage	15,600	85	325
F1215-00	Removable disk cartridge	170	—	10
8413-00	Diskette/Dual; includes two floppy diskette drives	12,000	50	250
F2653-00	Diskette/Dual expansion; expands 8413-00 by two additional diskette drives	3,940	15	82
F1624-00	Diskette/CA interface; required to connect F1625-02 or F2121-02 to the 90/25 processor	240	—	5
F2121-02	Diskette/CA interface expansion; required when both 8413-00 and F1625-02 are present	1,200	5	25
5045-00	Uniservo control	12,192	70	254

90/30B SYSTEM

PROCESSOR AND MAIN STORAGE

3029-71	90/30B Processor (includes integrated peripheral channel, operator console, 65K bytes of main memory)	91,920	432	1,915
F2748-92	Storage expansion, 32,768 bytes; expands 90/30B processor from 65K to 98K to 131K bytes	12,000	43	250
F2748-01	Storage expansion, 32,768 bytes; expands 90/30B processor from 131K to 163K or 163K to 196K bytes	10,800	35	225
F2748-95	Storage expansion, 65,536 bytes; expands 90/30B processor from 196K to 262K bytes	21,600	70	450
F2748-94	Storage expansion, 65,536 bytes; expands 90/30B processor from 262K bytes up to a maximum of 524K bytes	19,200	55	400

INTEGRATED PERIPHERAL SUBSYSTEMS

0719-93	Card Reader; 300 cpm	6,770	35	141
F2324-00	Short card; 51 columns	1,680	10	35
F2324-01	Short card; 66 columns	1,680	10	35
0778-00	Printer; 300 cpm	15,360	175	320
0778-02	Printer; 500 cpm	22,080	191	460
F2694-00	Speed upgrade; upgrades 0778-00 to 0778-02	6,720	16	140
F2386-00	136 print positions	1,920	10	40
F1649-00	Expanded character set	2,160	8	45
F2507-XX	Print cartridge	1,440	—	30
F1621-01	Disk adapter; interface and control for up to two 8415 and two 8418 disk drives	12,000	55	250
F2408-00	IDA expansion; enables IDA (F1621-01) to control two additional disk drives	8,160	33	170
8415-00	Dual drive; 24.9 million bytes of fixed and 8.3 million bytes of removable disk storage	15,600	85	325
F1215-00	Removable disk cartridge	170	—	10
F1624-00	Diskette interface	240	—	5
F2121-02	Diskette/CA expansion; to connect the 8415 and CA to the 90/30B processor when both are present	1,200	5	25
8413-00	Diskette/Dual; includes two floppy disk drives	12,000	50	250
F2653-00	Diskette/Dual expansion; adds two diskette drives to 8413-00	3,940	15	82
F2593-00	8413 Capability; required to connect an 8413 subsystem to a 90/30B processor	1,200	5	25

*Rental prices do not include equipment maintenance.