UNIVAC 1100 Series

NINE THOUSAND REMOTE (NTR) 9000 INTERFACE: Enables a UNIVAC 9200/9300, 90/30, or 90/40 computer system equipped with a Data Communications Subsystem (DCS) or Communications Adapter to operate as a remote batch terminal to an 1100 Series host processor through full-duplex communications lines. Fieldata, ASCII, and EBCDIC codes can be handled. NTR supports 9000 Series systems configured with the 0711 and 0716 card readers, 0603 and 0604 card punches, the bar printer and the 0768-00, 0768-02, 0768-99, and 0770 printers, a CalComp plotter, and paper tape reader/punches. Provisions are available for off-line operation of the 9000 Series computer and for diagnostic services for the 9000 Series peripherals. The software supports console-to-console communications between the 1100 Series host processor and the remote 9000 Series system and handles message compression to enhance communications line efficiency. Message integrity and recovery are achieved by assigning a unique number to each message transmitted in both directions. NTR was announced in 1974 and can be tailored to each installation through a relatively straightforward Symbolic Stream Generator.

COBOL: The newest and most powerful COBOL compiler offered by UNIVAC is 1100 Series ASCII COBOL. This compiler implements the modules of the 1974 American National Standard COBOL. Numerous extensions are also included. The ASCII COBOL compiler is re-entrant and produces re-entrant code.

ASCII COBOL recognizes ASCII characters as the standard data code at both source and object time, with 6-bit Fieldata character code handling facilities available as an option. In addition to the character modes, binary and floating-point data forms are supported. Some of the 1974 American National Standard COBOL facilities implemented include: Debugging, Report Writer, Communications (via TIP or Message Control System), and the INSPECT, STRING, and UNSTRING verbs. Principal language extensions based on CODASYL development efforts include: data base management (via DMS), interprogram communication, and asynchronous processing. Additional nonstandard extensions include: debugging features (including MONITOR and EXHIBIT), a TRANSFORM verb to develop one character string from another, expanded forms control facilities including 160-character print line and variable print density control, indexed sequential file handling including generic START and conditional START facilities, and numerous compatibility features for upgrading from earlier 1100 COBOLs or other vendors' COBOLs.

UNIVAC also offers a conversational COBOL Processor (BCOB) that permits time-sharing users to construct, edit, and debug COBOL programs from demand terminals. BCOB executes as a fully re-entrant submodule of the conversational Time-Sharing System (CTS) and supports the full CRT command set. Its syntax analysis facilities are compatible with both ASCII COBOL and an earlier Fieldata COBOL compiler. Syntax analysis is performed either statement-by-statement as the program is entered from the terminal or in blocks as the program is called from the file system.

ASCII FORTRAN: ASCII FORTRAN is a new, re-entrant UNIVAC FORTRAN compiler that handles ASCII data codes and contains useful extensions for the manipulation of both numeric and non-numeric data. The ASCII FORTRAN language is an extension of the previous UNIVAC FORTRAN V language and implements the new FORTRAN 77 Standard. It contains features specified by the standard as well as many language extensions, including the following ASCII extensions. A CHARACTER type statement allows handling of character variables, character scalars, and character arrays. A set of character operations is provided, including concatenation of strings, relational comparisons of strings, character-valued functions, and a string function that permits character variables to be extracted from or assigned to substrings of character variables. ASCII FORTRAN provides the double-precision complex data type, in which complex numbers are represented internally as a pair of double-precision floating-point numbers. This data type supports a precision of approximately 17 significant decimal digits and an exponent range of 10^{-308} to 10^{308} for both real and imaginary components of a complex number. ASCII FORTRAN also expands the use of expressions by permitting expressions to be used in positions that previously (in FORTRAN V only) allowed simple variables or array elements.

ASCII FORTRAN is a four-pass, re-entrant, common-banked compiler that provides for extensive optimization, generates re-entrant programs, and contains facilities designed to fully utilize 1100 Series hardware features and the operating system. Some of these features are I/O data format compatibility, interlanguage communication with COBOL and PL/1, sort/merge capability, and an interface with DMS 1100. In addition, the ASCII FORTRAN compiler contains a checkout option that provides for direct execution of FORTRAN programs and subroutines, with interactive debugging also provided.

UNIVAC also offers a re-entrant ASCII FORTRAN Syntax Analyzer (BTFN), which is used in conjunction with the Conversational Time-Sharing software. BFTN aids the time-sharing user in constructing, editing, and debugging the syntax of ASCII FORTRAN programs from a demand terminal.

ALGOL: UNIVAC's NU ALGOL language is based upon ALGOL 60, extended through the provision of input/output logic, facilities for complex and double-precision arithmetic, and the ability to name strings. Procedures written in FORTRAN V or Assembler language can be included. The ALGOL compiler runs under 1100 Operating System control.

BASIC: UNIVAC's BASIC compiler is an interactive processor that accepts source-language statements from remote users, checks their syntax, and issues diagnostics immediately whenever it detects an error. After the whole program has been checked, a RUN command causes it to be compiled and executed. A file controller package permits manipulation of saved program files, and re-entrant capability enables multiple time-sharing terminals to use the compiler simultaneously. The system need not be dedicated exclusively to BASIC operations.

JOVIAL: UNIVAC offers an 1100 Series compiler for JOVIAL, a general-purpose procedure-oriented language that is used mainly in military command and control applications.

PL/1: The 1100 Series PL/1 compiler is UNIVAC's implementation of the multipurpose programming language which has been proposed for standardization by ANSI and the European Computer Manufacturers Association (ECMA). Compilations can be performed with or without optimization. An extensive library of re-entrant run-time support routines complements the re-entrant code generated by the compiler with arithmetic computations, service subroutines such as input/output functions, dynamic program and storage management, and error and interrupt processing. Advanced facilities such as teleprocessing are scheduled for future release.

RPG: The 1100-Series RPG is upward-compatible with UNIVAC Series 70 RPG. It supports sequential, indexed sequential, and table files and provides common report-writing features such as input data selection, editing, calculation, multiple report files, summarizing, control

UNIVAC 1100 Series

breaks, and file updating. During program generation, storage areas are automatically assigned, constant factors are included, and linkages are produced to routines for input/output operations and calculations. Indexed sequential files are processed through an interface with the Index Sequential File Management System (ISFMS).

ASSEMBLER: The 1100 Series Meta-Assembler (MASM) is capable of generating code for any binary machine, but is tailored to be especially efficient for the 1100 Series instruction set. MASM provides all the conventional features of an assembler: code and data generation, symbol definition, space definition, and external communication with separately constructed elements. As an assembler, MASM is highly compatible with (and a replacement for) the 1100 Series Assembler (ASM).

UTILITY ROUTINES: Both a Sort/Merge Processor and a user subroutine are available. The processor is a completely self-contained parameter-driven program which is capable of ordering and/or merging data sets having a wide variety of keys and characteristics. The subroutine, which is an integral part of the processor, uses a replacement selection technique for internal sorting, writes strings on either magnetic tape or drum, and permits insertion of the user's own coding. Either fixed or variable-length items can be handled. Multiple sort keys and user-defined collating sequences can be used.

The 1100 Operating System includes an ample complement of utility routines to perform common functions such as I/O control, data transcription, file maintenance, editing, snapshots, and dumps.

MATH-PACK and STAT-PACK are large collections of FORTRAN-coded subroutines that can be integrated into users' FORTRAN V programs to handle a broad range of mathematical and statistical functions.

UNIVAC also offers a variety of conversion routines designed to facilitate the conversion to 1100 Series formats of programs and data files written for the UNIVAC Series 70, IBM System/360 and 370, and several other computer families.

APPLICATION PROGRAMS: The 1100 Series application packages currently available from UNIVAC include:

APT (Automatically Programmed Tools)
ASET (Author System for Education and Training)
FMPS (Functional Mathematical Programming System)
GPSS 1100 (General Purpose System Simulator)
OPTIMA (Project Management System)
PERT/Time and PERT/Cost
SIMULA (Simulation Language)
SIMSCRIPT I.5 (Simulation Programming Language)
UNIS (UNIVAC Industrial Systems); includes Bill of Materials Processor, Inventory Control, and Planning and Scheduling.

PRICING

EQUIPMENT: The following systems illustrate the wide range of configurations that are possible within the UNIVAC 1100 Series. All can use the 1100 Operating System. All necessary control units and adapters are included in the indicated prices.

SMALL 1100/10 SYSTEM: Consists of one 1100/10 Processor with 131K words of MOS main memory and four I/O channels, system console, real-time maintenance communications interface, two multi-subsystem adapters, two 8425 Disk Drives, four 9-track Uniservo 14 Magnetic Tape Units (96KB), one 1000-cpm Card Reader, and one 760-lpm Printer. Purchase price is $827,388.

LARGE 1100/10 SYSTEM: Consists of two 1100/10 Processors with 262K words of MOS main memory and 16 I/O channels, two system consoles, four 8434 Disk Drives, two 8405 Fixed-Head Disk Drives, eight 9-track Uniservo 16 (192KB) Tape Units, Communications/Symbiont Processor with 98K bytes of memory, 1000-cpm Card Reader, 250-cpm Card Punch, 1400-lpm Printer, and eight communications lines. Purchase price is $2,373,376.

SMALL UNIVAC 1100/20 SYSTEM: Consists of one 1100/20 Processor with 131K words of MOS main memory and four I/O channels, Display Console, two 8430 Disk Drives and unbuffered 5039 Controller (200 million bytes), four 7-track Uniservo 12 Magnetic Tape Units (34KC), 1000-cpm Card Reader, 250-cpm Card Punch, and 900-lpm Printer. Purchase price is $1,045,045.

LARGE 1100/20 SYSTEM: Consists of one 1100/20 Processor with 262K words of MOS main memory and eight I/O channels, Display Console, three FH-432 Drums (4.7 million characters), three 8433 Disk Drives and buffered 5039 Controller (600 million bytes), six 7-track Uniservo 16 Magnetic Tape Units (96KB), and Communications/Symbiont Processor (with 98K bytes of storage, 1000-cpm Card Reader, 800-lpm Printer, 250-cpm Card Punch, General Purpose Communication Channel, and four synchronous and four asynchronous communications lines). Purchase price is $1,797,445.

SMALL 1100/40 1 x 1 SYSTEM: Consists of one CAU, one IOAU and eight channels, 32K words of Primary Storage, 131K words of Extended Storage, System Console, three 8433 Disk Drives (600 million bytes) and buffered 5039 Controller, six 9-track Uniservo 16 Magnetic Tape Units (192KB), and Communications/Symbiont Processor (with 98K bytes of storage, 1000-cpm Card Reader, 800-lpm Printer, 250-cpm Card Punch, General Purpose Communications Channel, and four asynchronous and four synchronous communications lines). Purchase price is $840,934.

MEDIUM 1100/40 2 x 1 SYSTEM: Consists of two CAU's, one IOAU and eight channels, 131K words of Primary Storage, 524K words of Extended Storage, System Console, one FH-432/1782 Drum Subsystem (2.4 million words), three 8433 Disk Drives (600 million bytes) and buffered control, six 9-track Uniservo 16 Magnetic Tape Drives (192KB), and Communications/Symbiont Processor (with 98K bytes of storage, 1000-cpm Card Reader, 250-cpm Card Punch, 800-lpm Printer, General-Purpose Communication channel, and four synchronous and four asynchronous communication lines). Purchase price is $1,859,934.

LARGE 1100/40 4 x 2 SYSTEM: Consists of four CAU's and two IOAU's with eight channels each, 131K words of Main Storage and 1,048K words of Extended Storage, three System Consoles, System Partitioning Unit, two FH-432/1782 Drum Subsystems and dual-channel controllers, six 8433 Disk Drives (1.2 billion bytes) and buffered control, twelve 9-track Uniservo 16 (192KB) Magnetic Tape Units and dual-access control, and two Communications/Symbiont Processors (each with 98K bytes of storage, 1000-cpm Card Reader, 250-cpm Card Punch, 800-lpm Printer, General Purpose Communication Channel, and four synchronous and four asynchronous communication lines). Purchase price is $6,626,234.

SMALL 1100/80 SYSTEM: Consists of one 1100/80 Processor with I/O unit, 4K words of buffer storage, 524K words of backing store, system console, one word channel module with ESI/ISI capability, eight 8434 Disk Drives, two 9-track Uniservo 30 Tape Units, four Uniservo 32 Tape Units, 1000-cpm Card Reader, 250-cpm Card Punch, 1400-lpm printer, and four dial-up asynchronous communications lines. Purchase price is $2,132,685.

UNIVAC 1100 Series

LARGE 1100/80 SYSTEM: Consists of two 1100/80 Processors, two IOU's, two word channel modules, two system consoles, 16K words of buffer storage, 1024K words of backing store, twelve 8434 Disk Drives, two 8433 Disk Drives, two 8405 Disk Drives, four 9-track Uniservo 30 Tape Units, four Uniservo 34 Tape Units, four Uniservo 36 Tape Units, 2000-lpm printer, one Communications/Symbiont Processor with 98K bytes of memory, 1000-cpm Card Reader, 250-cpm Card Punch, 1400-lpm Printer, and eight communications lines. Purchase price is approximately $4,802,370.

TERMS, SOFTWARE, and SUPPORT: The 1100 Series is available for purchase or lease. All software except the operating system is unbundled. On-site service for operating system support can be obtained for a flat monthly fee of $500 or by an hourly rate. Support for unbundled software is included in the license fee.

TRACE: Sperry Univac has initiated a new remote hardware maintenance concept through its facility in Roseville, Minnesota. The Total Remote Assistance Center (TRACE) is available to the 1110, 1100/40, 1100/80, and, to a limited extent, 1100/10 and 1100/20 System customers via a dedicated WATS line number 24 hours per day, 7 days per week. Via TRACE, a user's system may be monitored and controlled using on-site and remote library testing programs. TRACE also provides support for a wide range of Sperry Univac terminals connected to dial-up lines. Various data files in Roseville contain information on approved hardware changes, references to solutions for problems encountered with diagnostic test software in field use, and operating system enhancements and problems. Other files contain a history of how the system should operate. These files can be utilized for comparison purposes during diagnostic testing.

CONTRACT TERMS: The standard UNIVAC use and service agreements allow unlimited use of the equipment (exclusive of the time required for remedial and preventive maintenance). There are no extra-use charges. The basic maintenance charge covers maintenance of the equipment for nine consecutive hours a day between the hours of 7 a.m. and 6 p.m., Monday through Friday. Extended periods of maintenance are available at premium rates. The premiums for additional coverage are a percentage of the base maintenance rate and are as follows:

	Hours of Coverage								
	4	8	9	10	12	16	18	20	24
Monday through Friday	—	—	0	10	20	25	35	40	45
Saturday	5	8	9	—	11	12	—	14	15
Sunday and Holidays	7	10	12	—	14	16	—	18	20

Maintenance service performed outside the contracted maintenance period is subject to the following rates:

	Monday through Saturday	Sunday and Holidays
Min. charge per call	$108	$128
Each add'l. hour	54	64
Max. charge per call	270	320

For users who elect not to contract for maintenance with Univac, the following per-call rates apply:

	Monday through Friday	Overtime and Saturday	Sunday and Holidays
Min. charge	$100	$112	$132
Each add'l. hour	50	56	66

On-call maintenance is also subject to travel time and expense charges.

UNIVAC offers reduced maintenance rates for multiple-processor installations. The percent premiums listed below apply to installations containing two or more processors or systems of the same type and located at the same address.

	Two-Processor Installation Hours of Coverage		
	9	16	24
Monday through Friday	0	15	27.5
Saturday	6	8	10
Sunday and Holidays	7.5	10	12.5

	Three or More Processors Hours of Coverage		
	9	16	24
Monday through Friday	0	12	22
Saturday	5	6.5	8
Sunday and Holidays	6	8	10

LONG-TERM LEASES: In addition to the basic 1-year agreement, UNIVAC offers an extended-term 5-year lease at significantly lower monthly rates. Under the 5-year "level-payment" agreement, the monthly equipment charge is approximately 75 percent of the 1-year rental rate shown in the accompanying price list.

UNIVAC also offers a 7-year lease to state and local governments and to educational institutions. Educational institutions are eligible for an additional 10 percent discount. The discount does not apply to maintenance service charges.■

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1106 PROCESSORS AND MAIN STORAGE				
3011-20	1106 Processor with 128-word control memory, double-precision floating point, four I/O channels (12 through 15), and power distribution center; requires 4009-99 display console and card reader	$ 348,816	$ 1,950	$ 7,267
F0680-99	I/O Channel Expansion; four additional channels, maximum three expansions per 1106 processor	25,200	90	525
F1053-98	Multiprocessor Capability for 1106 processor; one required per processor	10,368	—	216
Unitized Storage; 1.5-microsecond cycle time:				
7013-04	Unitized Storage, 131,072 words, 1.5-microsecond cycle time, expandable to 524,288 words	220,512	844	5,290
7013-79	Unitized Storage Expansion; expands main storage from 131,072 to 262,144 words	220,512	844	5,290

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1106 PROCESSORS AND MAIN STORAGE (Continued)				
7013-78	Unitized Storage Expansion; expands main storage from 262,144 to 393,216 words; requires F2252-00 addressing expansion feature	96,000	844	2,300
7013-77	Unitized Storage Expansion; expands main storage from 393,216 to 524,288 words	96,000	844	2,300
F2252-00	Addressing Expansion Feature; required on 1106 processors with more than 262K words of Unitized Storage	9,600	13	200
Storage II (Multi-Modular); 1.0-microsecond cycle time:				
7005-42	131,072 words; two 64K modules	534,144	1,343	11,128
7005-41	196,608 words; three 64K modules	803,376	1,942	16,737
7005-40	262,144 words; four 64K modules	1,072,896	2,535	22,352
4009-99	Display Console; includes control console, entry keyboard, CRT display, and page printer; one required with each 1106 processor	42,240	458	880
F0774-00	Auxiliary Console; required when CTMC's are used	8,784	18	183
1106 MULTIPROCESSOR SYSTEM COMPONENTS				
Minimum multiprocessor configuration with unitized storage consists of two 1106 processors, two F1053-98 capability features, two display consoles, two 128K modules of unitized storage, two unitized MMA's, and one availability control unit. Minimum multiprocessor configuration with Storage II consists of two 1106 processors, two F1053-98 capability features, two display consoles, 128K words of 7005 Storage II, two Storage II MMA's, and one availability control unit.				
2506-00	Availability Control Unit for up to 2 processors, 4 MMA's, and 6 SPI's; expandable to a maximum of 24 SPI's	62,256	144	1,315
F0874-00	ACU Expansion for up to six additional SPI's	3,552	14	74
0955-04	Shared Peripheral Interface; permits two processors to share a peripheral subsystem	24,528	33	511
0955-05	Shared Peripheral Interface; same functional characteristics and shares a cabinet with 0995-04 SPI	21,840	26	460
F1384-98	Unitized MMA; allows two processors to access a 128K module of unitized storage	45,312	104	944
0954-99	Storage II MMA; allows two processors to access a 64K module of 1.0-microsecond Multi-Modular Storage	67,488	68	1,406
1100/10 PROCESSORS AND MAIN STORAGE				
3051-99	1100/10 Processor with 128K-word control memory; double-precision floating point, four I/O channels, power distribution center, control console with CRT display and entry keyboard, hard-copy printer, real-time maintenance communication (RTMCS) interface, and 131K words of main storage; requires card reader	320,540	2,341	7,349
3051-97	1100/10 Processor; same as 3051-99 processor, but includes 196K words of main storage, 5046-99 disk control, and 8434 disk drive	343,110	3,100	10,509
3051-95	1100/10 Processor; same as 3051-97 processor, but includes 262K words of main storage	407,630	3,310	12,239
3051-93	1100/10 Processor; same as 3051-95 processor; but includes two main storage units with 262K words of main storage	428,560	3,446	12,778
3051-91	1100/10 Processor; same as 3051-93 processor, but includes two main storage units with 524K words of main storage	690,000	4,406	20,768
F2882-00	Processor Performance Enhancement; provides 10 to 20 percent greater performance for 1100/10 processor	27,380	171	740
3011-79	Processor Expansion; provides a processor and system console for expansion of an 1100/10 system to a multiprocessor; prerequisite is an 1100/10 processor with 128K storage expansion (7036-99); also requires two F1053-98 multiprocessor capability features plus two F2249-00 MMA's	256,752	1,785	5,349
3051-89	1100/10 Processor; same as 3051-99 processor, but includes fast 196K words of main storage, 5046-99 disk control, and 8434 disk drive	366,285	3,253	11,135
3051-87	1100/10 Processor; same as 3051-89 processor, but includes 262K words of main storage	434,000	3,478	12,950
3051-85	1100/10 Processor; same as 3051-89 processor, but includes two main storage units with 262K words of main storage	455,940	3,617	13,515
3051-83	1100/10 Processor; same as 3051-89 processor, but include two main storage units with 524K words of main storage	730,500	4,628	21,905
3011-55	1100/12 Multiprocessor; two 1100/10 processors with F1053-98	1,127,890	6,260	33,141
F0680-99	I/O Channel Expansion; four additional I/O channels; maximum of three expansions per 110/10 processor	25,200	90	525
F1053-98	Multiprocessor Capability for 1100/10 processor; one required per processor	10,368	—	216
0769-10	Console Printer; 132-column, 30-cps free-standing printer for use as an additional hard-copy device on the 1100/10 processor console; up to five printers permitted per 1100/10 processor	16,800	59	350
7036-99	Storage Expansion, 128K; provides cabinet with 131,072 words of storage and space for one additional 128K expansion module via feature F2248-99; maximum of three type 7036-99 storage units per system	170,000	556	4,615
F2248-99	Storage Expansion, 128K; provides 131,072 words of additional storage from 1100/10 processor (3011-81) or 7036-99 storage unit; maximum of two F2248-99 storage expansions is allowed	134,000	419	3,460
F2249-00	Multi-Module Access (MMA) for multiprocessor applications only; allows a maximum of two 1100/10 processors to access a 7036 storage unit	45.312	82	944
1100/20 PROCESSORS AND MAIN STORAGE				
3051-81	1100/20 Processor with 128K-word control memory, double-precision floating point, four I/O channels, power distribution center, control console with CRT display and entry keyboard, hard-copy printer, real-time maintenance communication (RTMCS) interface; requires 128K words of main storage and card reader	324,685	1,874	7,430
F0680-99	I/O Channel Expansion; provides four additional I/O channels; maximum three expansions per 1100/20 processor	25,200	90	525

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1100/20 PROCESSORS AND MAIN STORAGE (Continued)				
F1053-98	Multiprocessor Capability for each 3011-83 processor in a multiprocessor system	10,368	—	216
0769-10	Incremental Printer; provides a 132-column, 30-cps, free-standing printer for use as an additional hard-copy device on the 1100/20 processor console; up to five printers permitted per processor	16,800	59	350
7033-97	Storage, 65,536 words; includes a cabinet with space with an additional 64K words via F2079-00 expansion; maximum four 8033-97 storage units per processor	162,240	441	3,900
F2079-99	Storage Expansion, 65,536 words	87,360	236	2,100
F2080-97	Multi-Module Access (MMA) for multiprocessor application only; allows a maximum of two 1100/20 processors to access a 7033 storage unit	45,312	82	944
1100/20 MULTIPROCESSOR SYSTEM COMPONENTS				
2506-04	Availability Control Unit (ACU); required for multiprocessor applications	62,256	144	1,315
F0874-00	ACU Expansion; expands the SPI Access capability of the ACU by six SPI's; maximum of three expansions may be added	3,552	14	74
0961-99	Multi-Subsystem Adapter (MSA); includes cabinet, I/O interface, one MSA module to adapt from one to eight byte-oriented subsystems, and space for one D1321-02 MSA module	26,976	71	562
MSA Features for 1106, 1100/20, 1110, 1100/40:				
F1321-99	MSA Expansion; provides second MSA module with power supply to expand 0961-99 MSA; includes one I/O interface	21,504	54	448
F1324-02	Shared Peripheral Interface (SPI); provides one I/O interface for 0961-99 MSA or F1321 MSA expansion	6,600	34	136
F1323-00	Function Buffer Expansion; adds six function registers to an MSA Function Buffer for expanding command chaining capability; required for disk operation	2,208	11	46
F1325-00	ASCII Translator; translates Fieldata code to and from a 64-character subset of ASCII; maximum two per MSA module	2,064	12	43
F1325-01	EBCDIC Translator; same as F1325-00 except translates Fieldata to and from a 64-character subset of EBCDIC	2,064	12	43
F1322-00	Search Identifier Register (SIR); provides storage for up to 12 bytes of parameter (search) data required for disk operations	2,208	11	46
0955-99/-04	SPI; provides control of a peripheral subsystem as a multi-access subsystem	24,528	33	511
0955-98/-05	SPI; although functionally independent, shares cabinet with and has the same characteristics as 0955-99 SPI	21,840	26	460
F1095-99	1100/9000 Inter-Computer Control Unit (ICCU); permits a 9300 Series system to communicate on-site in 36-bit word format	11,184	60	233
1110 PROCESSORS AND I/O CONTROL**				
3023-95	1110 Processor (CAU); includes eight I/O channels and interfaces for up to 262,144 words of main storage and 1,048,576 words of extended storage; requires 32K words main storage, 128K words of extended storage, card reader, and system console; maximum three CAU expansions and three IOAU expansions	617,856	3,071	14,850
3023-00	CAU Expansion; provides one additional CAU; requires 64K words of main storage, 256K words of extended storage, and system console (use of a second CAU expansion requires 96K words main storage, 256K words of extended storage; system partitioning unit, IOAU expansion, and two system consoles; use of a third CAU expansion has same prerequisites, except requires 128K words of main storage with 12 MMA interfaces)	355,968	851	8,550
3025-00	I/O Access Unit Expansion; provides control and 8 I/O channels, interface for up to 256K words of main storage; interface for up to 1,048K words of extended storage, and 2 control channels to interface to 2 CAU's; expandable to 24 I/O channels (the number of IOAU expansions cannot exceed the number of CAU expansions)	191,520	944	4,600
F1387-00	I/O Channel Expansion; Channels 8-15	20,160	52	485
F1387-01	I/O Channel Expansion; Channels 16-23; requires F1387-00 channel expansion	20,160	52	485
4013-99	System Console; includes CRT display with entry keyboard, hard-copy printer; and real-time maintenance communication (RTMCS) interface; requires one I/O channel; up to five additional 0769-01 printers may be added	79,824	355	1,663
0769-10	Console Printer; 132 columns, 30-cps; maximum five per 4013-99 console	16,800	59	350
For 1110 and 1100/40:				
2516-00	System Partitioning Unit; includes interfaces for two CAU's, two IOAU's, two MSU's, four MAI's, and six MAS's; required when two or more CAU expansions are present	60,720	165	1,460
F1448-00	CAU Interface Expansion for third and fourth CAU's	6,240	12	150
F1449-00/01	IOAU Interface Expansion for third and fourth IOAU's	6,240	12	150
F1450-00/01	MSU Interface Expansion for third and fourth main storage unit	4,080	12	98
F1451-00 to 03	MAI Interface Expansion for fifth through eighth MAI, respectively	3,552	12	85
F1441-00 to 06	MAS Interface Expansion; each accommodates six additional Multi-Access Subsystems, for up to 48 total	3,024	5	72
0789-99	SPI Expansion; adds third interface	4,176	5	87
0789-98	SPI Expansion; adds fourth interface	2,880	5	60
F1095-99	1100/9000 Inter-Computer Control Unit for on-line connection of a Univac 9000 Series computer	11,184	60	233
1100 MAIN STORAGE (PLATED WIRE)				
7015-00	Primary Storage Subsystem; includes basic MMA, eight interfaces, and cabinet	338,592	495	7,054
F1331-00	64K Storage Expansion Module (expands total main storage from 32,768 to 65,536 words)	288,624	338	6,013
7015-99	Storage Expansion Subsystem; 32,768 words (expands total main storage from 65,536 to 98,304 words)	338,592	495	7,054
F1331-99	128K Storage Expansion Module (expands total main sotrage from 98,304 to 131,072 words)	288,624	338	6,013

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1100 MAIN STORAGE (PLATED WIRE) (Continued)				
7015-93	Storage Expansion Subsystem; 65,536 words (expands total main storage from 131,072 to 196,608 words)	125,000	834	4,500
7015-92	Storage Expansion Subsystem; 65,536 words (expands total main storage from 196,608 to 262,144 words)	125,000	834	4,000
F1330-00 to -03	MMA Expansion; adds four interfaces to 32K storage module; all storage expansion modules require equal MMA expansions	8,592	11	179
F1330-99/98	MMA Expansion; adds four interfaces to 65K storage module; all storage expansion modules require equal MMA expansions	8,592	11	179
1110 EXTENDED STORAGE (CORE)				
7013-81	Unitized Storage; 131,072 words, 1.5-microsecond cycle time (requires one MAI or one MAI expansion)	220,512	844	5,290
7013-73	Unitized Storage; 131,072 words for between 524K and 1048K words; requires one MAI or one MAI expansion	96,000	844	2,300
7033-99	131,072 words of storage; requires one 0963-00 MAI or one F1394-00 MAI expansion	249,600	678	6,000
0963-00	Multiple Access Interface; provides four interfaces and control for one 7013-81 (can be used with 1108 Storage, Type 7005, if F1397-00 is also used)	52,416	158	1,260
F1394-00	MAI Expansion; adds a second MAI to an 0963-00	23,808	100	570
F1393-00	MAI Interface Expansion; adds three more interfaces to an 0963-00	14,064	26	340
F1393-01	MAI Interface Expansion; adds second set of three additional interfaces to an 0963-00	14,064	26	340
F1397-00	1108 Storage Interface; permits use of one 65K module of 1108 Storage, Type 7005, as Extended Storage	10,608	19	255
F1384-99	MMA Expansion; provides two additional interfaces for 7013-81 storage unit	3,936	12	95
F2080-99	MMA Expansion; provides one additional interface for 7033-99 storage unit	3,936	12	95
1100/40 PROCESSORS AND I/O CONTROL				
3023-89	1100/40 Processor (1x1); includes one CAU and one IOAU with eight channels; requires 196K words of main storage, card reader, and console	457,790	3,071	12,350
3023-91	Command/Arithmetic Unit Expansion for 3023-89 processor; maximum three per system	355,968	851	8,550
3025-99	IOAU Expansion for 3023-89; includes control, 8 I/O channels, and 2 control channels to interface to 2 CAU's; expandable to 24 channels (number of IOAU expansions may not exceed the number of CAU expansions)	191,520	944	4,600
F1387-00	I/O Channel Expansion; Channels 8-15	20,160	52	485
F1387-01	I/O Channel Expansion; Channels 16-23	20,160	52	485
4013-99	System Console; includes CRT display with entry keyboard, hard-copy printer, and real-time maintenance communication (RTMCS) interface; requires one I/O channel; up to five additional free-standing hard-copy printers may be added	79,824	355	1,663
0769-10	Console Printer for use as an additional hard-copy device on the 1100/40 processor console; 132 columns, 30-cps; up to five printers permitted per console	16,800	59	350
1100/40 MAIN STORAGE				
7030-93	192K Words Main Storage for 3023-89 processor; includes basic MMA with eight interfaces; expandable to 524K words	984,000	2,501	31,635
2407-98	Storage Expansion for 7030-03 storage; 64K words	328,000	834	10,545
7030-98	Storage Expansion; 64K words; requires 2407-98 expansion	282,000	676	9,000
2407-97	Storage Expansion; 64K words; requires 7030-98 expansion	282,000	676	9,000
7030-97	Storage Expansion; 64K words; requires 2407-97 expansion	282,000	676	9,000
2407-96	Storage Expansion; 64K words; requires 7030-97 expansion	282,000	676	9,000
F1953-00	MMA Expansion for 7030 storage units from 8 to 12 interfaces	8,592	11	210
F1953-01	MMA Expansion for 2407 storage units from 8 to 12 interfaces	8,592	11	210
F1953-02	MMA Expansion for 7030 storage units from 12 to 16 interfaces	8,592	11	210
F1953-99	MMA Expansion for 2407 storage units from 12 to 16 interfaces	8,592	11	210
1100/40 EXTENDED STORAGE				
7033-99	Extended Storage, 131,072 words; requires one 0963-00 MAI or one F1394-00 MAI expansion and 524K words of 7030 storage	249,600	678	6,000
0963-00	Multiple Access Interface; provides four access interfaces and control modules for 128K words of 7033-99 extended storage	52,416	158	1,260
F1394-00	MAI Expansion; adds a second MAI control module to 0963-00 MAI to provide access to a 7033-99 extended storage	23,808	100	570
F1393-00	MAI Interface Expansion; provides three access interfaces to 0963-00 MAI	14-064	26	340
F1393-01	MAI Interface Expansion; provides second set of three access interfaces to 0963-00 MAI; requires F1393-00 expansion	14,064	26	340
F1397-00	1108 Storage Interface; required for use of 7005-08, 64K words, as extended storage	10,608	19	255
F2080-99	MMA Expansion; provides one additional interface for 7033-99 extended storage	3,936	12	95
1100/80 PROCESSORS AND I/O CONTROL				
3032-67	1100/80 Processor; includes full 1100 floating-point and byte instruction set, one I/O processing unit (IOU) with one byte and one block multiplexer channel, 4K words of buffer storage in one buffer module, 524K words of backing store in one cabinet, system maintenance unit, transition unit, system console, and motor/alternator; expandable to 1048K words of backing store; any further expansion requires addition of F2335-99 performance enhancement, or must be expanded as a standard 1100/81 processor; requires card reader	1,323,455	2,589	31,985
3032-65	1100/81 Processor; includes same equipment as 3032-67 except provides space for an additional channel module and 8K words of buffer storage in one module; expandable to four processors, four IOU's, 32K words of buffer storage, and 4,194K words of backing store	1,480,530	2,755	35,790
3032-63	1100/82 Multiprocessor; includes two 1100/80 processors in a tightly coupled configuration with 8K words of buffer storage and 1,048K words of backing store in two cabinets, one IOU, a system maintenance unit, a transition unit, a system console, and a motor alternator	2,299,500	4,045	54,280

*Rental prices do not include equipment maintenance.

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1100/80 PROCESSORS AND I/O CONTROL (Continued)				
3032-61	Same as 3032-63 but backing store is in one cabinet	2,184,510	3,845	51,567
3032-29	1100/82 Dual Cluster Multiprocessor; includes two 100/80 processors each with 12K words of buffer storage, a system maintenance unit, motor alternator, IOU, and system console. Each IOU contains one byte multiplexer, one block multiplexer, and one word channel module; includes 1,572K words of backing store in three cabinets	3,467,375	6,025	81,800
3032-27	1100/83 Cluster Multiprocessor; same as 3032-29 but three 1100/80 processors	4,040,830	6,995	95,336
3032-25	1100/84 Cluster Multiprocessor; same as 3032-29 but four 1100/80 processors in two clusters; each cluster has 16K words of buffer storage; includes 2,096K words of backing store in four cabinets	5,157,020	8,775	121,680
3032-89	Expansion Cluster for 3032-91 processor; includes one CPU, 8K words of buffer storage, one system maintenance unit (SMU); and one motor/alternator	806,710	1,370	19,015
3032-00	Expansion Processor; provides an additional CPU for either a 3032-91 processor or 3032-89 expansion cluster, maximum three per system	610,720	1,038	14,420
F2335-99	Upgrades 3032-65 processor; includes 4K words of buffer storage	174,020	166	4,105
3033-98	IOU Expansion; provides an additional IOU for either a 3032-65 processor or 3032-89 expansion cluster	350,825	733	8,080
F2883-00	Scientific Accelerator Module for the 1100/80	124,235	187	2,935
F1653-00	Emulator for 494; requires 494 word channel module and/or 494 block multiplexer channel; mutually exclusive with F2883-00	178,500	300	4,215
1923-00	I/O Channel Expansion; includes housing for four channel modules	10,540	16	250
F1656-00	Byte Multiplexer Channel Module; transfer rate up to 200 KBS	46,725	80	1,110
F1657-00	494 Block Multiplexer Channel Module; transfer rate up to one megabyte/second	46,725	80	1,110
F1658-00	494 Word Channel Module; transfer rate up to 500K bytes per second			
5309-99	1100 to 494 Intercomputer Coupler	30,240	89	630
F1638-01	1100 Word Channel Module; four independent word channels	54,075	91	1,275
F1654-00	1100 Word Channel Definition; provides word channel capability to accept 36-bit ESI communications	1,050	5	25
F2141-00	1100 Block Multiplexer Channel Module	54,075	91	1,275
4013-97	System Console	79,824	355	1,663
0769-10	Console Printer	16,800	59	350
8508-08	Motor Alternator	22,000	54	623
F3137	Remote Control Panel	1,020	3	25
2525	System Availability Unit	79,360	134	2,060
F2824-00	24 Additional MAS Interfaces	10,240	16	260
	Two additional IOU word channel interfaces to SAU	12,800	21	330
F2826-00	Remote CTS Interface	3,070	5	80
F2826-01	Second Remote CTS Interface	3,070	5	80
2521-00	Channel Transfer Switch for block multiplexer channels; free standing cabinet contains operator controls for manual switching of four subsystem strings, a primary module with a 2 x 1 switch, and power and space for 4 x 8 switching	18,750	62	442
2521-02	For remote operation	18,750	62	442
F2600-00	Primary Module Expansion; adds a switch for one subsystem string; maximum of three per 2521, F2601-00, or F2601-02; maximum of one per F2601-01 or F2601-03	18,750	62	442
F2601-00	Additional Primary Module; adds a second 2 x 1 primary module and operator control for switching up to four subsystem strings	9,930	34	234
F2601-02	For remote operation	9,930	34	234
F2601-01	Secondary Module; for applications requiring independent 2 by switching capability when up to four switchable strings can be configured among independent 2 by switches	9,930	34	234
F2601-03	For remote operation	9,930	34	234
F2602-00	Secondary Module; expands primary module from 2 x 1 to 4 x 1	6,755	26	159
F2602-01	For remote operation	6,755	26	159
F2603-00	Secondary Module; expands F2600-00 to 4 by capability	555	—	13
F2604-00	DC Power Redundancy; adds back up DC supplies for hot standby dynamic power redundancy	2,540	11	60
1100/80 MEMORY				
F2336-00	Storage Interface Unit (SIU) Expansion; provides 4K words of buffer storage to expand SIU's from 8K to 12K words	208,150	353	5,660
F2335-00	SIU Expansion; provides 4K words of buffer storage to expand SIU's from 12K to 16K words	98,055	166	2,670
7037-99	Main Storage Unit; includes storage cabinet with 524K words in two banks and power supplies	315,000	535	8,575
F2350-99	Backing Storage Expansion; expands 7037-99 main storage unit to 1048K words or 3032-87 processor to 1048K words of backing storage; maximum four per system	200,000	321	5,440
MASS STORAGE				
5031-00	Unitized Channel Storage Control for up to 1,048,576 words of UCS storage (1106 processor only)	43,680	219	910
7013-97	Unitized Channel Storage; 256K words	289,392	926	6,029
7013-95	Unitized Channel Storage; 512K words	578,784	1,850	12,058
7013-93	Unitized Channel Storage; 768K words	868,176	2,775	18,087
7013-91	Unitized Channel Storage; 1024K words	1,157,616	3,699	24,117
F1375-00	Shared Peripheral Interface; provides one additional I/O interface for 5031-00 control; maximum one per control	23,136	37	482
5012-99	FH-432/FH-1782 Drum Control; controls one to eight 6016-00 or 6015-00 drums in any combination	102,720	406	2,140
F0929-00	Write Lockout Feature for 5012-00/99 drum control	1,392	5	30
F0930-00	Shared Peripheral Interface for 5012-00/99 drum control; multiprocessor application only	22,608	40	471
6016-00	FH-432 Drum; 262K words	52,848	166	1,210
6015-00	FH-1782 Drum; 2048K words	146,064	467	3,345
F0786-01	Dual Channel Feature for 6016-00 drum	3,024	24	69
F0767-00	Dual Channel Feature for 6015-00 drum	3,024	27	69

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
MASS STORAGE (Continued)				
5024-99	8424/8425 Disk Control; requires 0961 MSA or F1321 MSA expansion (8424 and 8425 disks may not be intermixed on the same control)	57,072	469	1,189
F1043-00	Dual Channel Feature; provides non-simultaneous access to 5024-99 disk control from two MSA modules	4,416	24	92
F2001-00	Dual Access and simultaneous read/write, write/read, read/read, or write/write operations on two 8425 disk drives; required for each 8425 disk drive	2,304	5	48
8425-00	8425 Disk Storage; 312K bps	21,216	129	442
F1214-01	Disk Pack for 8425 disk drive	433	—	21
5039-99	8433/8430 Control for up to eight and/or 8430 disk drives; includes one I/O interface and 1024 words of buffer storage; minimum two disk drives per subsystem	101,760	556	2,445
5039-91	8433/8430 Control; same as 5039-99 control (1100/80 only)	72,000	315	1,730
F2047-00	16-Drive Expansion; provides the capability to attach up to 16 8433 and/or 8430 disk drives to a 5039-99/91 control; excludes use of F2076-00 expansion	7,680	43	185
F2041-00	Shared Peripheral Interface; provides an additional I/O interface for the 5039-99 control	6,600	31	136
F2042-02	EBCDIC Translator; translates Fieldata code to and from a 64-character subset of EBCDIC; may be connected to up to four I/O interfaces (5039-99 control only)	2,064	11	43
F2042-01	ASCII Translator; translates Fieldata code to and from a 64-character subset of ASCII; may be connected to up to four I/O interfaces (5039-99 control only)	2,064	11	43
5039-95	8433/8430 Control; same characteristics as 5039-99 except without I/O channel interface; requires 5039-99 control; maximum one per control	57,600	315	1,385
F2076-00	8405 Capability; adds the capability for control of up to eight 8405 disk drives to the control; excludes use of F2047-00 16-drive expansion	2,160	5	52
8430-99	8430 Disk Storage; provides a single 8430 disk drive; minimum two required	24,960	137	600
F2342-00	Disk Drive Upgrade; converts an 8430-99 to an 8433-00	11,520	63	275
8433-00	Disk Storage; provides a single 8433 disk drive; minimum two required	36,480	199	875
F2021-00	8433/8430 Dual Access; provides simultaneous read/read, read/write, write/read, write/write operation on any two 8433-00 or 8430-99 disk drives; required in each 8433-00 and 8430-99 disk drive in the subsystem; requires two 5039 controls	2,160	5	52
F1230-00	Disk Pack; provides up to 100 million bytes or 17 million 36-bit words of removable storage	750	—	46
F1223-00	Disk Pack; provides up to 200 million bytes of 34 million 36-bit words of removable storage	1,150	—	58
8405-00	8405 Fixed-Head Disk; provides a single 8405 disk with a storage capacity of 6,193,152 bytes or 1,376,256 36-bit words; requires F2076-00 capability	76,800	467	1,845
8405-04	8405 Fixed-Head Disk; provides a single 8405 disk with a storage capacity of 3,096,576 bytes or 688,128 36-bit words; requires F2076-00 capability	46,080	280	1,110
F1664-00	8405 Dual Access; provides simultaneous read/read, read/write, write/read, and write/write operation on any two 8405 fixed-head disk drives; prerequisite for each 8405 fixed-head disk in subsystem; requires two 5039 controls	2,160	5	52
F2076-00	8405 Capability; provides capability to attach up to eight 8405-00/04 fixed-head disk drives to the control; excludes the use of F2047-00 16-drive expansion	2,160	5	52
5046-99	8430/8433/8434 Control; controls up to sixteen 8430, 8433, and/or 8434 disk drives; maximum 866 megabytes of storage; requires minimum of two disk drives	102,000	428	2,770
5046-97	8430/8433/8434 Dual Control; for dual-access subsystem operation; requires two channels	176,448	749	5,015
8434-99	8434 Disk Storage; provides two single-spindle disk drives with non-removable pack	66,600	242	2,140
F2561-00	32-Device Capability; allows up to 32 8430, 8433, or 8434 disk drives to be intermixed on one 5046-99 control; two required for 5046-97 dual control	7,680	43	185
F2558-00	8405 Fixed-Head Disk Capability; allows up to eight 8405 fixed-head disk drives to be attached to 5046-99 control, two required for 5046-97 control (precludes use of F2561-00 32-device capability)	2,160	5	52
F2021-99	8434 Dual Access; provides simultaneous read/write, read/read, write/read, and write/write on any two 8434 disk drives; requires 5046-97 dual control or two 5046-99 controls	2,688	14	56
F2021-98	8434 Dual Access; two required for 8434-99 disk storage on 1100/10 systems only	1,344	7	28
F2555-00	Shared Peripheral Interface; provides an additional I/O interface for the 5046-99/97 controls	6,600	29	138
5046-95	8430/8433/8450 Control; controls up to 16 8450 disk drives and power for up to four sets of four drives of any type (i.e., 8430/8433 or 8450); requires minimum of two 8450 disk drives	102,000	428	2,700
5046-93	8430/8433/8450 Dual Control; two control units, each with the same characteristics and restrictions as the 5046-95/94 control; requires two D2838-00 8450 capability expansions or two F2720-00 8430/8433 capability expansions	176,448	749	5,015
F2838-00	8450 Capability Expansion, allows 5046-95/94 control to handle up to 32 8450 disk drives, requires 2837-00 power control expansion (excludes use of F2720-00 8430/8433 capability)	6,000	48	150
F2720-00	8430/8433 Capability Expansion; allows 5046-95/94 control to handle up to 16 8430 and/or 8433 disk drives (excludes use of F2838-00 8450 capability)	2,400	11	60
F2837-00	Power Control Expansion, required when total number of disk drives exceeds 16; two required for 5046-93/92 dual control	7,680	43	185
F2555-00	Shared Peripheral Interface, multiprocessor; allows 5046-95/94 to connect to two separate 1100 Series processors; two required for 5046-93/92 control	6,600	31	138
8450-99	8450 Disk Storage; provides two 8450 disk drives using non-interchangeable data module included as part of each drive	66,600	242	2,140
8450-97	8450 Disk Storage; provides two 8450 disk drives using non-interchangeable data modules with fixed and movable heads	74,600	268	2,390
F2717-99	8450 Fixed-Head Conversion; converts 8450-99/98 disk storage unit to an 8450-97/96 disk storage unit	13,600	26	250
F2718-99	8450 Dual Access Feature; provides dual access and simultaneous read/write, read/read, write/read, and write/write on any two 8450 disk drives; requires two 5046 controls	2,688	15	56
INPUT/OUTPUT UNITS				
5017-00	Uniservo 12/16 Magnetic Tape Control; up to sixteen 9-track, 1600-bpi nonsimultaneous Uniservo 12 and/or Uniservo 16 Tape Units	28,560	163	655
F1131-99	Uniservo 16 Capability for 5017-99 control	2,112	13	44
F1131-98	Dual Access Capability and Uniservo 16 Capability for 0899-00 simultaneous operation feature; requires F1131-99 Uniservo 16 capability	2,064	13	43

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	
INPUT/OUTPUT UNITS (Continued)				
F0899-99	Simultaneous Operation for 5017-00 control	21,312	110	490
F0823-99	7-Track NRZI Capability for 5017-00 or 5017-99 control	5,760	26	120
F0826-00	9-Track NRZI Capability for 5017-00 or 5017-99 control	5,760	26	120
5045-99	Uniservo 14 Control; consists of a control and cabinet with space for two Uniservo 14 tape units. Controls up to eight 9-track phase-encoded tape units. Additional Uniservo 14 tape units are housed in the 5045-02 auxiliary cabinet. Up to three auxiliary units may be attached to the 5045-99 allowing the total of eight tape units. Must be connected via one Multi-Subsystem Adapter module 0961-99 or F1321-99	21,168	128	441
5045-02	Uniservo Auxiliary Cabinet; consists of a Uniservo control cabinet with power distribution and space to mount one or two Uniservo 14 Tape Units	1,296	5	27
F0823-97	7-Track NRZI	5,544	24	113
F0826-00	9-Track NRZI	5,760	26	120
F1028-96	9-Track Addition; adds 9-track NRZI to F0823-97 tape unit	4,176	16	87
F1028-95	7-Track Addition; adds 7-track NRZI plus data conversion to F0826-00 tape unit	4,176	16	87
0870-03	Uniservo 14; 9-track phase-encoded tape unit; 96 KB per second at 1600 bpi	14,880	93	310
0870-04	Uniservo 14; 9-track phase-encoded and NRZI tape unit; 96 KB per second at 1600 bpi and 48 KB at 800 bpi	16,080	101	335
0870-05	Uniservo 14; 7-track NRZI tape unit; 48/33 4/12 KB per second at 800/556/200 bpi	14,880	93	310
F2194-00	U14 Dual Density; adds 9-track NRZI to a Uniservo 14 phase-encoded tape unit Type 0870-03	1,200	6	25
F2194-02	U14 7 to 9 Conversion; converts a Type 0870-05 Uniservo 14 7-track NRZI tape unit into a 9-track phase-encoded unit	—	—	—
F2194-03	U14 7 to 9 Dual Density; converts a Type 0870-05 Uniservo 14 7-track NRZI tape unit into a 9-track phase-encoded and NRZI unit; requires F0826-00 or equivalent in the control	1,200	6	25
0862-04	Uniservo 16 Tape Unit; 9-track, 1600 bpi	22,032	170	505
0862-06	Uniservo 16 Tape Unit; 7-track, 200/556/800 bpi	22,032	170	505
F0937-01	Dual Density Feature for 0862-04 tape unit	2,448	—	51
F1319-00	Dual Access Feature	2,448	14	51
5034-99	Uniservo 20 Control Unit	52,416	189	1,200
F0823-98	7-Track Capability; permits addition of 7-track Uniservo 12 and/or 16 tape units	5,554	24	113
F0826-99	9-Track NRZI; permits addition of 9-track Uniservo 12 and/or 16 tape units at 800 bpi	6,552	32	133
F1028-98	9-Track Addition; adds 9-Track NRZI capability to F0823-98 7-track capability	5,544	24	113
F1324-02	Shared Peripheral Interface; provides an additional I/O interface for the 5034-99 Control	6,600	34	136
F1325-00	ASCII Translator for 5034-99 control unit	2,064	12	43
F1325-01	EBCDIC Translator for 5034-99 control unit	2,064	12	43
0864-00	Uniservo 20 Tape Unit; 9-track; 1600 bpi	27,696	199	635
F1510-00	Dual Access Feature for 0864-00 tape unit; permits simultaneous 2-channel access when used with two 5034-99 Controls	2,448	14	51
5034-02	Uniservo 20 Control Unit	45,888	166	1,050
F2627-00	9-track Translation	2,064	12	47
5042-00	Uniservo 30 Control	55,392	308	1,170
F2131-00	Uniservo 30 9-track NRZI feature	3,648	20	76
F2585-00	Uniservo 30 9-track translation feature	2,064	12	43
F2584-99	Uniservo 30 7-track NRZI code translation feature	1,824	11	38
0872-00	Uniservo 30 9-Track Tape Unit	34,800	194	780
0872-02	Uniservo 30 7-Track Tape Unit	34,800	194	780
F2123-00	Uniservo 30 7- to 9-Track Conversion	3,774	—	79
0873-00	Uniservo 32 GCR/PE Tape Unit	31,584	175	725
0873-02	Uniservo 34 GCR/PE Tape Unit	36,192	201	830
0874-00	Uniservo 36 GCR/PE Tape Unit	38,880	216	890
0770-00	Printer, 800 lines per minute	56,304	287	1,173
0770-02	Printer, 1400 lines per minute	64,896	376	1,352
0770-04	Printer, 2000 lines per minute	86,686	478	2,220
0776-00	Printer, 760 lines per minute	41,400	219	865
0776-02	Printer and Control; 900 lines per minute	46,680	262	975
F1533-00	160 Print Positions for 0770 series printers	4,416	20	92
F1534-00	Expanded Character Set Control; required for other than 1536-00 or -01 Print Cartridges	2,880	5	60
	Print Cartridges for 0770 series printers:			
F1536-00	48-character alphanumeric Business	462	—	22
F1536-01	48-character alphanumeric Scientific	462	—	22
F1537-00	94-character ASCII	462	—	22
F1537-03	64-character universal ISO OCR-B	462	—	22
F1537-04	64-character universal OCR H-14	462	—	22
F1537-05	58-character COBOL-FORTRAN-Business	462	—	22
F1537-06	177-character International	462	—	22
F1537-09	24-character Numeric	462	—	22
F1537-11	68-character universal OCR-A	462	—	22
F1537-12	68-character universal OCR-B	462	—	22
F1537-13	68-character universal 77L	462	—	22
F0597-97	1004 Control for on-line connection of a UNIVAC 1004 Card Processor	12,480	46	260
F1095-10	1106/9000 Inter-Computer Control Unit for on-line connection of a UNIVAC 9200/9300 system	11,184	63	233

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
INPUT/OUTPUT UNITS (Continued)				
0716-02	Card Reader and Control; 1000 cpm (connects to C/SP or on-line 9000 Series computer or MSA)	15,504	129	323
0768-02	Printer and Control; 900/100 lpm (connects to C/SP or on-line 9000 Series computer or MSA)	50,928	565	1,061
0604-99	Card Punch and Control; 250 cpm (connects to C/SP, on-line 9000 Series Computer, or MSA)	26,640	182	555
COMMUNICATIONS/SYMBIONT SUBSYSTEM				
3021-99	Communications/Symbiont Processor; includes arithmetic/control unit, 16 general-purpose registers, and interval timer; requires card reader, F1276 channel adapter, 8542-00 general-purpose communications channel, and 32K words of storage	22,176	78	449
F1276-99/02	1100 Channel Adapter	5,544	26	113
F1418-00	Special Device Channel for addition of 0708-27 card reader	1,512	5	31
F1273-00	Selector Channel; requires F1577-00 I/O expansion and console; maximum 1 per 3021-99 processor	6,500	26	133
F1274-00	Multiplexer Channel; requires 49K words storage and F1577-00 I/O expansion	6,300	26	128
F1577-00	I/O Expansion; provides two additional I/O features	1,764	—	36
8541-88	C/SP Console; provides keyboard input and printer output console capability for the C/SP; required with use of F1273-00 selector channel	5,440	30	136
Storage for C/SP:				
7026-99	Storage; 32,768 bytes	42,840	164	867
7026-98	Storage; 49,152 bytes	64,260	247	1,301
7026-97	Storage; 65,536 bytes	85,680	319	1,735
7026-96	Storage; 98,304 bytes	128,520	449	2,602
7026-95	Storage; 131,072 bytes	171,360	579	3,469
F1775-94	Storage Expansion; 16,384 bytes; expands 32K storage to 49K	21,420	83	434
F1775-93	Storage Expansion; 16,384 bytes; expands 49K storage to 65K	21,420	71	434
F1784-98	Storage Expansion; 32,768 bytes; expands 65K storage to 98K	42,840	131	867
F1775-92	Storage Expansion; 32,768 bytes; expands 98K storage to 131K	42,840	129	867
0708-27	80-Column Card Reader with control; requires F1418-00 special device channel	2,268	22	46
8542-00	General-Purpose Communications Channel (GPCC); includes data transfer control, processor interface logic, multiplexer with 8 positions (4 communications line terminals), and one asynchronous timing source; accommodates 64 positions or 32 communications line terminals; maximum two GPCC's per Communications/Symbiont Processor	11,592	40	235
F1367-00	Multiplexer Expansion; adds 8 positions to 8542-00 GPCC; maximum 7 per GPCC	1,008	5	21
F1286-00	CLT Expansion Module	3,528	19	72
F1287-00	Active Line Indicators for lines 1 to 16 (32 indicators and 16 lines)	504	—	10
F1287-01	Line Indicator Expansion for lines 1 to 32 (64 indicators and 32 lines)	504	—	10
F1287-08	Active Line Indicators for lines 1 to 32 (64 indicators and 32 lines)	1,008	—	21
F1287-09	Active Line Indicators for lines 1 to 48 (96 indicators and 48 lines)	1,512	—	31
F1287-10	Active Line Indicators for lines 1 to 64 (128 indicators and 64 lines)	2,016	—	41
F1287-11	Active Line Indicators for lines 1 to 80 (160 indicators and 80 lines)	2,520	—	51
F1287-12	Active Line Indicators for lines 1 to 96 (192 indicators and 96 lines)	3,024	—	62
F1287-13	Active Line Indicators for lines 1 to 112 (224 indicators and 112 lines)	3,528	—	72
F1287-14	Active Line Indicators for lines 1 to 128 (256 indicators and 128 lines)	4,032	—	82
F1365-99	Asynchronous Timing Assembly (ATA); provides up to 3 timing sources for asynchronous communications line terminals; maximum two per GPCC	768	5	16
F1290-00	Asynchronous CLT; EIA RS-232B	352	5	7
F1290-01	Asynchronous CLT; Mil. Std. 188B	352	5	7
F1290-02	Asynchronous CLT; CCITT	352	5	7
F1290-03	Asynchronous CLT; Telegraph I	352	5	7
F1290-04	Asynchronous CLT; Telegraph II	352	5	7
F1291-00	Synchronous CLT; EIA RS-232B	1,764	12	36
F1291-01	Synchronous CLT; Mil. Std. 188B	1,764	12	36
F1291-02	Synchronous CLT; CCITT	1,764	12	36
F1291-04	Synchronous CLT; Telpak	2,268	12	46
F1292-00	Dialing Adapter, Single	768	5	16
F1292-01	Dialing Adapter, Double	1,512	5	31
DATA COMMUNICATIONS				
8583-00	General Communications Subsystem (GCS); houses maximum of 32 communications terminals with interfaces and/or communication terminal dialers	19,344	62	403
F1971-00	Expansion Power Supply; required when 24 or more terminals are included in the GCS configuration	2,160	5	45
F1972-00	Spare CTC for controlling up to 32 lines in ESI mode on an I/O channel	9,408	37	196
F1973-00	Communication Terminal Asynchronous; up to 2400 bps, asynchronous bit serial transmission	1,632	9	34
F1973-01	Communications Terminal Asynchronous; same as F1973-02, but with external interrupt capability	3,840	15	80
F1973-02	Communication Terminal Asynchronous—VII; provides for block parity generation and checking	3,456	15	72
F1974-00	Communication Terminal Synchronous—Standard; up to 50,000 bps, synchronous bit serial transmission	2,400	12	50
F1974-01	Communications Terminal Synchronous; same as F1974-02, but with external interrupt capability	4,560	18	95
F1974-02	Communication Terminal Synchronous VII; provides for block parity and checking	4,080	18	85
F1975-00	Communications Terminal Synchronous; up to 56,000 bps, bit serial transmission	4,320	17	90

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
DATA COMMUNICATIONS (Continued)				
F1976-00	High-Level Communications Terminal; provides capability to handle bit-oriented Data Link Control, up to 56,000 bps	4,800	19	100
F1977-99	Communication Terminal Dialer	672	3	14
F1978-00	Communication Interface—Telegraph	240	1	5
F1979-00	Communication Interface—Modem	432	2	9
F1979-01	Identical to CI—modem (1979-00) except permits use of a modem not having a receive clock	672	3	14
F1980-00	Communication Interface—High-Speed (allows connection of a CTS—Std. or CTS—VII to the CCITT V.35 interface)	864	4	18
F1980-01	Communication Interface (allows connection of a CTS—Std. or CTS—VII to the ATT 303 modem or equivalent)	864	4	18
F1983-00	Spare Basic Clock	240	1	5
F1984-00	Expansion Clock (provides asynchronous timing rates not included in the basic clock)	240	1	5
F2072-00	Allows connections to a CTS—Std. to a MIL 188C synchronous interface	672	3	14
F2074-00	Communications Interface—automatic inbound bit rate detection	1,440	3	30
DISTRIBUTED COMMUNICATIONS PROCESSOR				
8579-83	Distributed Communications Processor (DCP); free-standing unit including processor, real-time clock, power-protect, storage parity, breakpoint, unary shift, power supplies, control, and 32K bytes of storage; requires either an F2223-00 single port or an F2223-01 multi-port feature, an 8406 flexible diskette or an 8408 cartridge disk subsystem, and an F1811-99 Type I Scanner on a 1928-03 Type II Scanner	40,668	200	1,017
F2224-00	I/C Storage Expansion for DCP; provides 16K bytes of additional storage to expand capacity from 32K to 48K bytes, 64K to 80K bytes, and 96K to 112K bytes	3,600	25	90
F2224-01	I/C Storage Expansion for DCP; provides 16K bytes of additional storage to expand capacity from 48K to 64K, 80K to 96K, and 112K to 128K bytes	1,800	25	45
F2268-00	I/O Controller; provides a programmable interface between DCP and parallel I/O channel and Type I scanner	3,200	15	80
F1795-01	Parallel I/O Channel; supports four channels; requires F2268-00 I/O controller	2,400	11	60
F2691-00	Remote I/O Controller; provides a programmable controller with 16 parallel I/O channels; requires F2223-01 multi-port storage	18,000	80	450
F1791-99	Host Channel Interface, Single; provides connection of a DCP to an 1100/80 byte multiplexer channel	3,136	14	78
F1800-99	Host Channel Interface, Dual; provides connection to switch between two byte/multiplexer channels of a single 1100/80 or two separate 1100/80's	4,832	21	120
F2223-00	Single-Port Storage; provides a single-access port to I/C storage; required when only a Type I scanner is used	3,460	14	86
F2223-01	Multi-Port Storage; provides four access ports to I/C storage; required whenever an F2262-01 Type I scanner, a 1928-03 Type II scanner, or an F2691-00 remote I/O controller is used	4,040	27	101
8406-99	Diskette Drive; 256K bytes	5,000	21	125
F2338-00	Drive Expansion; provides for an additional disk drive for DCP; 256K bytes	1,440	10	40
8408-02	Cartridge Disk Control; provides cabinet, control, and housing for up to two F2380-04/05 disk drives; requires either an F1795-01 parallel I/O channel or an F2691-00 remote I/O controller	5,564	25	139
F2380-04	Disk Drive, 10 million bytes; requires 8408-02 control	17,750	96	418
F2187-00	Cartridge Disk, Dual; provides a second I/O interface for dual DCP configurations; requires 8408-02 control	1,568	7	39
5045-95	Uniservo 10 Control; includes cabinet, control, and housing for up to two dual-density U-10's; requires either an F2691-00 remote I/O controller or an F1795-01 parallel I/O channel	15,280	64	382
0870-27	Uniservo 10 9-track, dual-density tape unit; requires 5045-95 cabinet	12,576	67	262
8590-99	Remote Control Module	6,148	38	154
3536-86	DCP Console	7,000	44	175
8541-76	DCP Output Printer; 30 cps	2,596	27	67
0774-97	Terminal Printer; 300 cps	2,320	21	61
1928-03	Type II Scanner; provides the capability to control data between the 8596-98 and up to 128 half duplex or 64 full duplex communications lines	23,000	61	575
F2263-00	Line Adapter Chassis; expands the number of line adapter positions by 32; 32 to 64 or 96 to 128; up to two per 1928-03 allowed; requires F1801-01	2,360	10	59
F2263-02	Expansion; for line adapter positions 96 to 128	1,120	4	28
F1801-01	Line Base II; provides the interface and control for up to 16 ports in 1928-03; maximum of eight per scanner	600	3	15
F1801-02	With speed scan option for data rates up to 230.4 bps; operates on ports 0 and 4 as a full duplex pair; one per 1928-03	600	3	15
F2381-00	Allows operation of up to 128 1928-03 line adapter positions with bit oriented line control procedures such as UDLC, SDLC, etc.	1,720	7	43
F1869-01	Auto Line Speed Detection; provides 1928-03 with the capability to automatically determine operation characters such as character length; one per 1928-03	452	3	11
F1825-02	Line indicator Type II; provides a visual display of line activity on up to 16 half duplex or 8 full duplex communications lines on 1928-03; maximum of eight per 1928-03	440	2	11
F1826-00	Synchronous Line Adapter for 1928-03; provides full duplex interface to data sets conforming to RS-232C and CCITT V.24 and V.28	760	7	19
F1826-01	With supervisory channel up to 150 bps asynchronous; requires two line adapter positions	1,160	9	29
F1827-00	With modem interface conforming to MIL-STD-188C and MIL STD-188C and MIL STD-188-100 low level	760	7	19
F1828-00	Asynchronous Line Adapter for 1928-03; provides full duplex interface to data sets conforming to RS-232C and CCITT V.24 and V.28	600	6	15
F1828-01	With reverse channel up to five bps for Bell 202 type modems	760	7	19
F1828-02	With a supervisory channel up to 150 bps asynchronous; requires two line adapter positions	920	9	23
F1829-00	With interface conforming to MIL-STD 188C and MIL-STD-188-100 low level	600	6	15
F1830-00	Wideband Line Adapter for 1928-03; provides capability to connect one synchronous full duplex line for operation at 19.2, 40.8, 50 or 230k-bps; for use with AT&T 300 Series Data Set	920	9	23

*Rental prices do not include equipment maintenance.

UNIVAC 1100 Series

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
DISTRIBUTED COMMUNICATIONS PROCESSOR (Continued)				
F1831-00	Dial Adapter for 1928-03; provides interface for attachment to one Bell 801 Automatic Calling Unit; requires F1928, F1926 or F1835	600	6	15
F1832-00	Asynchronous Relay Line Adapter for 1928-03; full duplex interface optionally compatible with either 20 to 75 ma neutral or 10 to 40 ma polar telegraph lines	600	6	15
F1834-00	Wideband Line Adapter; similar to F1830-00	920	9	23
F1835-00	TWX Line Adapter for 1928-03; interfaces the US TWX Network	600	6	15
F1836-00	Telex Line Adapter for 1928-03; interfaces the Western Union Telex in the US			
F2519-00	Full Duplex Interface to Asynchronous Data Sets for 1928-03; conforms to RS-232C and CCITT V.24 and V.28; contains clocking logic that can be strapped for 300, 600, 1200, 1800 bps and 7 or 8 level code on ports 0 to 63 or 300, 600, or 1200 bps on ports 64-127	760	7	19
F2521-00	Interface for 1928-03; provides input of parallel data from touch tone telephone sets via Bell 407A/B Data Station	1,000	10	25
TERMINALS**				
3536-89	Uniscope 100 Display Terminal; 960 or 1024 characters; 64 character set	3,175	51	77
F1241-04	Expands Uniscope 100 character set to 96 characters	680	16	11
3542-99	Uniscope 200 Display Terminal; 1536 or 1920 characters; 64 character set	4,252	51	106
F2044-01	Expands Uniscope 200 character set to 96 characters	701	—	16
3542-98	Uniscope 200 with international 64 character set	4,252	51	106
F2044-03	Expands Uniscope 200 international character set to 96 characters for Uniscope 100 and 200	701	—	16
F1844-00	Uniscope 100 Numeric Keyboard	270	2	7
F1844-01	Uniscope 100 Upper Case Alpha Keyboard	300	2	12
F1844-02	Uniscope 100 Upper/Lower Case Alpha Keyboard	300	2	12
F1844-03	Uniscope 100 Upper Case Alpha Typewriter and numeric Keyboard	490	2	19
F1844-04	Uniscope 100 Upper/Lower Case Alpha Typewriter and Numeric Keyboard	490	2	19
F1844-05	Same as F1844-01 but with protected format keys	300	2	12
F1844-06	Same as F1844-02 but with protected format keys	300	2	12
F1844-07	Same as F1844-03 but with protected format keys	490	2	19
F1844-08	Same as F1844-04 but with protected format keys	490	2	19
F1466-00	Special Function keyset for automatic disconnect	108	1	3
F1245-00	Direct Interface; 2400, 4800, or 9600 bps	470	5	11
F1245-01	Synchronous Interface to a modem or terminal multiplexer	470	5	11
F1245-02	Asynchronous Interface to a modem or terminal multiplexer; 300, 600, 1200, 1600, 1800, or 2400 bps	470	5	11
F1245-13	Synchronous Interface to an IBM 2701 and SDAII or 2703 and synchronous base z via modem or terminal multiplexer	470	5	11
F1245-14	Asynchronous Interface to an IBM 2701 and Terminal Adapter III; 300, 600, 1200, 1600, 1800, or 2400 bps	470	5	11
F1247	Auxiliary Peripheral Interface	310	—	10
8538-99	Terminal Multiplexer; for up to eight terminals	1,781	6	50
F1264-00	Multiplexer Expansion; expands number of terminals to 16	356	—	12
8538-97	Same as 8538-99 but for modems F 1970-00 and F 1970-01	1,680	6	48
F1266-00	Synchronous/Asynchronous Interface to a modem terminal multiplexer	356	—	12
F1266-02	Direct Interface with clock for connection to a CTMC or DCS without modem; 2400, 4800, 9600 bps	320	—	11
0786-00	Unidirectional Matrix printer; 200 cps	4,540	32	120
0786-02	Bidirectional Matrix Printer; 200 cps	6,250	64	160
F2656-01	Printer Interface to Uniscope	400	—	10
F2696-00	Converts 0786-00 to 0786-02	1,710	21	40
F2648-00	Document Parking Bar; for removal of single forms	114	1	3
F2646-00	Option for 6 or 8 lines per inch	151	1	4
F2647-00	Vertical Form Unit; 6 lines per inch	228	1	6
F2647-02	Vertical Form Unit; 8 lines per inch	228	1	6
8541-06	Printwheel Printer; 30 cps	2,596	33	74
F1780-00	Variable Forms Length Feature	195	1	6
0774-96	300 cps terminal printer	2,320	24	61
0866-97	Dual Drive Magnetic Tape Cassette; 700K bytes each	1,947	32	62
F2142-00	Tape Cassette Option; read after writing, writing enhanced protect format, off-line cassette to cassette copying and off-line cassette to printer transfer	577	—	15
F2142-01	Adds search by identifier, writing of ASCII record separators and copy to address	906	—	26

*Rental prices do not include maintenance.
**For pricing on the UTS 400 see Report 70D-877-06.

UNIVAC 1100 Series

SOFTWARE PRICES

		Monthly Lease Charge
6107-11	Optima 1100 Project Management System	$300
6503-00	Aset-1100 Author System for Education and Training	
6510-00	Unis-1100 ASCII Master Data Processor (MDP)	150*
6510-01	Unis-1100 ASCII Inventory Management (IM)	300*
6510-02	Unis-1100 ASCII Planning and Scheduling/Work Order Management (PSWOM)	300*
6510-97	Unis-1100 MOP/IM Combination	450*
6510-98	Unis-1100 IM/PSWOM Combination	600*
6510-99	Unis-1100 MDP/IM/PSWOM Combination	750*
6523-00	Unidas Information Storage and Retrieval System	600
6547-00	Sperry Univac Financial Integrated Control System (SUFICS) 1100	700
6547-01	SUFICS 1100 Risk Analysis	60
6547-02	SUFICS 1100 Hierarchical Consolidate	100
6547-03	SUFICS 1100 Symbolic Editor and Renumbering Routine	180
6162-00	Checkpoint/Restart	100
6133-00	Data Processor	50
6175-00	Integrated Recovery Utility	300
6161-00	Performance Analysis Routines	200
6158-00	Quota Input Processor	150
6167-00	Sentry	500
6166-00	Simulation Library	50
6135-00	Sort/Merge	100
6163-00	Terminal Security System	150
6148-00	Communications Management System (CMS)	350
6169-01	CMS 1100 General Communications System	350
6169-00	CMS 1100 DCP	500
6170-00	Conversational Time Sharing System	250
6177-00	Define File Processor	50
6155-00	Data Management System (DMS) 1100	750
6176-00	Data Dictionary	300
6188-00	M/S (Mathpack/Statpack)	200
6174-00	Functional Mathematical Programming System (FMPS)	500
6174-01	FMPS—Gamma	200
6147-00	High Volume Time Sharing	500
6168-00	Comprehensive Mathematical and Statistical Library	200
6159-00	Processor Common Communications System	100
6152-00	Processor Common Input/Output System	50
6157-00	Query Language Processor (QLP) 1100	300
6157-01	QLP 1100 with PCIOS Interface	350
6157-00	Remote Processing System	200
6179-00	Universal Terminal System 400	100
6143-00	Univac Automatic Document System	400
6143-01	IIGOMP-80 Device Handler (Information International Comp 80 Micro-File Recording System)	50
6143-02	APS 4 Device Handler (Autologic Inc. APS4 CRT Phototype Setting System)	50
6172-00	APL 1100	400
6134-00	APT 1100	275
6134-01	APT 1100 with lathe capabilities	350
6171-00	UBASIC	100
6178-00	Syntax Analyzer for UBASIC	50
6153-00	COBOL, ASCII character recognition	200
6149-00	Sytax Analyzer for ASCII COBOL and DMS 1100	100
6130-02	COBOL, UTS 400	95
6154-00	FORTRAN, ASCII character recognition	300
6150-00	Syntax Analyzer for ASCII FORTRAN	100
6165-00	General Syntax Analyzer	85
6160-00	Macro	100
6151-00	PL/1	200
6164-00	RPG 1100	100
6144-00	DCP/40 MCC Emulate Operating System	75
6136-00	DCP/40 DCP Emulate Operating System	90
6136-01	DCP/40 Operating System	115
6136-99	DCP-40 MCC Operating System	150
6136-98	DCP/40-DCP Operating System	150

*This charge applies to rented, leased, or purchased equipment in existing installations.