IBM System/3

Reo 11 71

▶ EDUCATION: Two-day introductory courses are offered at no charge. Various other System/3 courses are available at separate charges.

EQUIPMENT: The following typical purchase and rental prices include controllers and adapters.

System/3 Model 6

MINIMUM SYSTEM: Consists of 8K 5406 Processing Unit, 5213 Model 1 Printer, and 5444 Model 1 Disk Storage Drive (2.45 million bytes). Monthly rental, $1,273. Purchase price, $40,780.

System/3 Model 8

MINIMUM SYSTEM: Consists of 16K 5408 Processing Unit, 5444 Model A1 Disk Storage Drive, 5203-1 Printer, and 5471 Printer-Keyboard. Monthly rental, $1,533. Purchase price, $53,590.

MINIMUM DATA STATION SYSTEM: Consists of 16K 5408 Processing Unit, 5444 Model A1 Disk Storage Drive, 5203-2 Printer, and a directly attached 3741 Data Station. Monthly rental, $1,872. Purchase price, $65,660.

System/3 Model 12

MINIMUM SYSTEM: Consists of 32K 5412 Processing Unit, 5424 Model A2 MFCU, 5203 Model 1 Printer, and 3340 Model C2 DASF. Monthly rental, $3,155. Purchase price, $103,531.

EXPANDED SYSTEM: Consists of 65K 5412 Processing Unit, 1403 Model 2 Printer, a directly attached 3741 Model 1 Data Station, and 3340 Model C2 DASF. Monthly rental, $4,109. Purchase price, $136,395.

System/3 Model 15

MINIMUM SYSTEM: The basic configuration required to utilize the Model 15 processing support consists of a 5415 Model A17 Processing Unit (49K bytes), 3277 Model 1 Display Station, 1403 Model 5 Printer, 5424 Model A1 MFCU, and one 5444 Model A2 Disk Storage Drive, plus all necessary attachments and control units. Monthly rental $3,644. Purchase price, $124,456.

EXPANDED SYSTEM: A typical large Model 15 disk system consists of a 5415 Model A20 Processing Unit (131K bytes), 3277 Model 1 Display Station, 1403 Model N1 Printer, 2560 Model A1 MFCM, 2501 Model A2 Card Reader, one 5444 Model A2 Disk Storage Drive, and four 5445 Disk Storage Drives, plus all necessary attachments and control units. Monthly rental $7,719. Purchase price, $256,130. ■

EQUIPMENT PRICES

PROCESSORS AND MAIN STORAGE

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
5404	Processing Unit (for Model 4 systems):			
	Model A18; 65,536 bytes	$19,150	145.00	600
5406	Processing Unit (for Model 6 systems):			
	Model B2; 8,192 bytes	22,430	137.00	674
	Model B3; 12,288 bytes	26,940	143.00	807
	Model B4; 16,384 bytes	27,480	143.00	938
1550	Command Keys (9-16)	765	0.50	21
5408	Processing Unit (for Model 8 systems):			
	Model A14; 16,384 bytes	27,130	115.00	675
	Model A16; 32,768 bytes	29,830	120.00	779
	Model A17; 49,152 bytes	32,530	150.00	882
	Model A18; 65,536 bytes	35,230	155.00	987
5410	Processing Unit (for Model 10 non-disk systems):			
	Model A2; 8,192 bytes	12,560	42.00	375
	Model A3; 12,288 bytes	16,620	46.00	495
	Model A4; 16,384 bytes	17,150	46.00	634
	Model A5; 24,576 bytes	30,610	61.50	915
	Model A6; 32,768 bytes	31,150	61.50	1,185
	Model A7; 49,152 bytes	45,150	85.50	1,545
5410	Processing Unit (for Model 10 disk systems):			
	Model A12; 8,192 bytes	17,610	92.00	527
	Model A13; 12,288 bytes	21,660	96.00	646
	Model A14; 16,384 bytes	22,280	96.00	783
	Model A15; 24,576 bytes	35,660	112.00	1,065
	Model A16; 32,768 bytes	36,200	112.00	1,335
	Model A17; 49,152 bytes	50,190	136.00	1,690
5412	Processing Unit (for Model 12 systems):			
	Model B16; 32,768 bytes	50,465	215.00	1,328
	Model B17; 49,152 bytes	53,165	220.00	1,428
	Model B18; 65,536 bytes	55,865	225.00	1,528
5415	Processing Unit (for Model 15 systems without 3340):			
	Model A17; 49,152 bytes	65,510	227.00	1,691
	Model A18; 65,536 bytes	68,210	232.00	1,806
	Model A19; 98,304 bytes	76,730	238.00	2,084
	Model A20; 131,072 bytes	82,130	248.00	2,310
5415	Processing Unit (for Model 15 systems with 3340):			
	Model B17; 49,152 bytes	95,670	235.00	2,399
	Model B18; 65,536 bytes	98,370	240.00	2,499
	Model B19; 98,304 bytes	106,890	245.00	2,762
	Model B20; 131,072 bytes	112,290	255.00	2,962
	Model C21; 163,840 bytes	120,300	260.00	3,229
	Model C22; 196,608 bytes	125,700	265.00	3,439
	Model C23; 229,376 bytes	131,100	270.00	3,644
	Model C24; 262,144 bytes	136,500	280.00	3,854

*Rental prices include equipment maintenance.

IBM System/3

EQUIPMENT PRICES

PROCESSORS AND MAIN STORAGE (Continued)	Purchase Price	Monthly Maint.	Rental (1-year lease)*
Model D21; 163,840 bytes	127,740	280.00	3,429
Model D22; 196,608 bytes	133,140	285.00	3,639
Model D23; 229,376 bytes	138,540	290.00	3,844
Model D24; 262,144 bytes	143,940	300.00	4,054
3500 Dual Program Feature (for 5408, 5410, or 5412)	4,465	1.00	131
5501 Power Supply Expansion (provides additional 6-volt power for 5410, 5412, or 5415; required for certain RPQ's such as multi-line communications adapter)	1,755	1.00	56
5502 Power Supply Expansion (provides required additional 24-volt power for 5412 if 5424 MFCU not included)	831	1.00	20
5732 Processing Unit Expansion: For 3406 (required for any combination of #7081 SIOC, #2074 BSCA, #4765 LCA, or #8220 3741 attachment) For 3408 (required for #7081 SIOC or #2074 BSCA) For 3410 (required for RPQ1442, 5445, 3411, or #8220 3741 attachment) For 3412 (required for 3411, #8220 3741 attachment and card reader, or #7801 SIOC)	1,425	3.00	41
5733 Processing Unit Expansion (for 5410, 5412, and 5415; requires 5732 except on 5415)	626	0.50	21
5734 Processing Unit Expansion (for 5410, 5412, and 5415; requires 5733)	1,720	1.00	61
5735 Processing Unit Expansion (for 5410, 5412, and 5415; requires 5734) Note: Typically, communications features, alone and in combination with other peripherals, will require various stages of expansion; the above units provide additional CPU power and connections.	626	1.00	21

CONSOLE

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
3277	Display Station, Model 1 (required in Model 15 systems)	2,940	9.00	84
4632	78-key Operator Console Keyboard (required on 3277)	1,205	14.00	38
3277	CRT display (for 5404):			
	Model 1; 480-character display	2,940	9.00	84
	Model 2; 1920-character display	3,810	19.50	123
	Keyboard for either model	520	3.50	16

MASS STORAGE

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
3340	Direct Access Storage Facility:			
	Model A-2 (2-drives plus control)	36,000	92.00	1,100
	Model B-1 (additional drive)	19,800	49.00	615
	Model B-2 (2 additional drives)	25,200	79.00	776
	Model C-2 (2 drives plus control)	27,580	82.50	850
3348	Data Module (for 3340 drives): Model 70; 41.04 million bytes plus 9.83 million bytes exclusively for program support	2,200	Time & Mat'l	82
5444	Disk Storage Drive:			
	Model A1; 2.46 million bytes	6,595	71.50	228
	Model A2; 4.92 million bytes	7,810	71.50	342
	Model A3; 2.46 million bytes	6,595	71.50	228
	Model 1; 2.46 million bytes	6,335	51.50	187
	Model 2; 4.92 million bytes	7,515	51.50	308
	Model 3; 2.46 million bytes	6,335	51.50	187
5540	Disk Cartridge (for 5444 drives)	175	Time & Mat'l	Purch. only
5422	Disk Enclosure (required for attachment of 5444 Disk Storage Drives when 5424 MFCU is not used)	4,240	13.00	114
6378	Second Disk Attachment (required on 5406 for a 5444 Mod. 3 or a second 5444 Mod. 2)	1,965	5.00	49
6378	Second Disk Attachment (required on 5408 for 5444 Mod. A3 or a second 5444 Mod. A2)	2,730	6.00	72
6378	Second Disk Attachment (required on 5410 for a 5444 Mod. 3 or A3 or a second 5444 Mod. 2 or A2)	1,965	5.00	51
4501	Higher-Performance Second Disk Attachment (required on 5410 for a 5444 Mod. A1 or A2)	765	1.00	21
4502	Higher-Performance Second Disk Attachment (required on 5410 for a 5444 Mod. A3 or a 2nd 5444 Mod. A2; 6378 is a prerequisite)	765	1.00	21
6378	Second Disk Attachment (required on 5415 for a 5444 Mod. A3 or a 2nd 5444 Mod. A2)	2,730	6.00	72
5445	Disk Storage Drive:			
	Model 1; first 5445 on 5415; 20.48 million bytes	11,570	93.00	401
	Model 2; second 5445 on 5410 or 5415; 20.48 million bytes	11,070	87.50	382
	Model 3; dual-pack 5445, 40.76 million bytes	22,700	181.00	783
3901	First 5445 Disk Attachment (for 5410; required for Model 1 and 3)	15,620	36.00	561
3902	Second 5445 Disk Attachment (for 5410; required for Model 2 and 3)	469	1.00	16
3901	First 5445 Attachment (required on 5415 for first pair of 5445 drives)	15,620	35.50	561
3903	Second 5445 Attachment (required on 5415 for second pair of 5445 drives)	3,000	1.00	84
5447 A1	5-megabyte disk drive (for 5404)	10,720	81.00	405
5447 A2	10-megabyte disk drive (for 5404)	14,190	125.00	560
5448	9.8-megabyte disk drive (for 5408 and 5410)	7,845	—	310
—	5448 Attachment (for 5408)	3,600	—	120
—	5448 Attachment (for 5410)	4,040	—	120

* Rental prices include equipment maintenance.

IBM System/3

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
MAGNETIC TAPE EQUIPMENT				
3410	Magnetic Tape Unit:			
	Model 1; 20 KB	7,065	61.50	206 (1)
	Model 2; 40/20 KB	9,450	68.00	274 (1)
	Model 3; 80/40 KB	11,700	75.00	342 (1)
3411	Magnetic Tape Unit and Control:			
	Model 1; 20 KB	15,570	95.00	454 (1)
	Model 2; 40/20 KB	19,710	102.00	578 (1)
	Model 3; 80/40 KB	24,030	109.00	701 (1)
3211	Single Density Feature (for 3410 & 3411, Models 2 & 3 only)	2,295	9.50	60 (1)
3221	Dual Density Feature (for 3410 & 3411, Models 2 & 3 only)	3,305	36.50	88 (1)
7003	System/3 Attachment (required on 3411)	2,890	3.50	83 (1)
7951	3411 Magnetic Tape Attachment (required on 5408, 5410, or 5415)	4,155	10.50	179
7960	3411 Magnetic Tape Attachment (required on 5412; requires #4701)	3,805	7.50	137
4701	Basic Attachment Feature	1,530	3.00	54
3741	Data Station:			
	Model 1	6,235	42.00	174
	Model 2	7,535	54.00	213
3741	Programmable Work Station:			
	Model 3	8,940	63.50	277
	Model 4	10,240	70.00	317
8220	Attachment (on 5406, 5408, 5410, 5412, or 5415)	6,970	17.00	212
	I/O Adapter (on 3741)	2,750	8.00	73
PUNCHED CARD EQUIPMENT				
5424	Multi-Function Card Unit:			
	Model A1; reads 250 cpm, punches and prints 60 cpm	7,810	153.00	326
	Model A2; reads 500 cpm, punches and prints 120 cpm	10,340	220.00	490
4100	MFCU Attachment (required on 5410 for 5424 Mod. A1)	3,470	15.00	93
4100	MFCU Attachment (required on 5412 for 5424 Mod. A1)	3,470	15.00	93
4100	MFCU Attachment (required on 5415 for 5424 Mod. A1)	3,470	15.00	93
4101	MFCU Attachment (required on 5410 for 5424 Mod. A2; requires #4100)	4,405	15.00	111
4101	MFCU Attachment (required on 5412 for 5424 Mod. A2; requires #4100)	703	2.00	18
4101	MFCU Attachment (required on 5415 for 5424 Mod. A2; requires #4100)	703	2.00	17
1442	Card Read Punch:			
	Model 6; reads 300 cpm, punches 80 cols/sec.	11,110	65.50	297
	Model 7; reads 400 cpm, punches 160 cols/sec.	11,970	77.50	432
3950	5410/5415 Coupling (required on 1442)	1,160	1.00	33
4130	1442 Attachment (required on 5410 or 5412)	6,790	16.50	212
4130	1442 Attachment (required on 5415)	6,790	16.00	212
2501	Card Reader (for Model 15 only):			
	Model A1; 600 cpm	21,230	41.00	218
	Model A2; 1,000 cpm	15,590	58.00	286
3630	1501 Coupling (required on 2501)	168	NC	5
8090	2501 Attachment (required on 5415)	6,965	8.00	168
2560	Multi-Function Card Machine (for Model 15 only):			
	Model A1; reads 500 cpm, punches 160 col/sec.	30,310	115.00	691
	Model A2; reads 310 cpm, punches 120 col/sec.	22,260	115.00	538
8100	2560 MFCM Attachment (required on 5415)	6,545	17.00	168
1580	Card Print Control (for 5415)	1,295	3.00	28
Card Print Feature for 2560 Model A1:				
1575	First Two Lines (requires 1580 on 5415)	6,600	16.00	150
1576	Second Two Lines	6,600	16.00	150
1577	Third Two Lines	6,600	16.00	150
5486	Card Sorter:			
	Model 1; 1000 cpm	3,665	42.00	101
	Model 2; 1500 cpm	4,190	63.50	138
5496	Data Recorder (96-column)	5,935	59.50	177
3210	Data Recorder Attachment (required on 5406)	1,525	2.00	44
7501	System/3 Attachment (required on 5496)	1,720	11.50	49
129	Card Data Recorder (80-column):			
	Model 1; Punch-Verifier (non-print)	6,485	42.00	140
	Model 2; Printing Punch (non-verifier)	7,265	46.00	156
	Model 3; Printing Punch Verifier	7,785	47.00	168
7503	Card I/O Attachment (required on 129)	2,770	11.50	84
3610	Expansion Feature (required on 129)	518	NC	10
3210	Data Recorder Attachment (required on 5406)	1,525	2.00	44
2265	Display Station	4,700	40.00	183
7960	Display Station Attachment (required on 5406)	2,865	1.50	85
5471	Printer-Keyboard	3,885	35.00	121
4110	Printer-Keyboard Attachment (required on 5408, 5410, or 5412)	2,315	5.00	60
5475	Data Entry Keyboard	1,855	7.50	46
4120	Data Entry Keyboard Attachment (required on 5410 in place of #4110)	2,075	1.00	51

*Rental prices include equipment maintenance.

IBM System/3

EQUIPMENT PRICES

PRINTERS		Purchase Price	Monthly Maint.	Rental (1-year lease)*
3284	Matrix printer; 40 cps (for 5404):			
	Model 1; 480-character buffer	5,065	37.50	168
	Model 2; 1920-character buffer	5,685	37.50	179
3286	Matrix printer; 66 cps (for 5404):			
	Model 1; 480-character buffer	6,775	37.50	201
	Model 2; 1920-character buffer	7,505	37.50	213
3288	Line Printer; 120 lpm (for 5404)	12,500	87.00	427
5213	Printer (for Model 6 only):			
	Model 1; pin-feed platen	4,840	60.00	179
	Model 2; vertical forms control	6,245	82.00	224
	Model 3; vertical forms control, bidirectional printing	6,400	94.00	280
3901	Printer Attachment (required on 5406 for 5213 Mod. 1)	2,675	20.50	78
3902	Printer Attachment (required on 5406 for 5213 Mod. 2)	2,675	20.50	78
3903	Printer Attachment (required on 5406 for 5213 Mod. 3)	2,675	20.50	78
3960	Enhanced Print Rate Attachment (required on 5406 for printing at 115 cps with 5312 Mod. 3; replaces 3903 Attachment)	3,745	23.00	157
2222	Printer (with ledger card device; for Model 6 only):			
	Model 1; unidirectional printing	12,860	125.00	392
	Model 2; bidirectional printing	13,020	137.00	432
7951	Printer Attachment (required on 5406 for 2222 Mod. 1)	2,675	20.50	78
7952	Printer Attachment (required on 5406 for 2222 Mod. 2)	2,675	20.50	78
5203	Printer (for Model 8, Model 10, and Model 12 only):			
	Model 1; 100 lpm, 96 positions	8,240	80.00	272
	Model 2; 200 lpm, 96 positions	9,185	90.00	331
	Model 3; 300 lpm, 96 positions	12,800	151.00	488
3475	Dual-Feed Carriage (for 5203)	2,865	23.00	88
4730	Additional Chain Cartridge (for 5203 Mod. 1 & 2)	2,865	1.00	88
4740	Additional Chain Cartridge (for 5203 Mod. 3)	2,145	39.00	123
5558	24 Additional Print Positions (for 5203)	1,180	2.00	59
5560	36 Additional Print Positions (for 5203)	1,750	2.00	88
8639	Universal Character Set Attachment (for 5203)	236	1.00	10
3960	5203 Printer Base Attachment (required on 5408 or 5412 for any model 5203)	1,788	7.50	45
3970	5203 Model 1 or 2 Printer Attachment (required on 5408 or 5412; requires #3960)	767	3.00	19
3970	5203 Model 1 Printer Attachment (required on 5410)	2,555	10.50	64
3971	5203 Model 2 Printer Attachment (required on 5410)	2,555	10.50	64
3972	5203 Model 3 Printer Attachment (required on 5408 or 5412; requires #3960)	1,942	6.50	62
3972	5203 Model 3 Printer Attachment (required on 5410)	3,730	14.00	107
3480	Dual Feed Carriage Control (required on 5408, 5410, or 5412 for #3475 on 5203)	1,010	1.00	29
8642	Universal Character Set Control (required on 5408, 5410, or 5412 for #6639 on 5203)	373	1.00	16
1403	Printer (requires 5421);			
	Model 2; 600 lpm, 132 positions	22,000	234.00	841(1)
	Model 5; 465 lpm, 132 positions	21,070	169.00	650(1)
	Model N1; 1100 lpm, 132 positions	38,140	270.00	983(1)
1416	Interchangeable Train Cartridge (for 1403 Mod. N1)	2,665	Time & Mat'l.	101(1)
1376	Auxiliary Ribbon Feeding (for 1403 Mod. 2 or 5)	2,000	21.00	80(1)
4740	Interchangeable Chain Cartridge Adapter (for 1403 Mod. 2 or 5)	2,030	NC	80(1)
8640	Universal Character Set Feature (for 1403 Mod. N1)	426	2.00	10(1)
8641	Universal Character Set Feature (for 1403 Mod. 2)	299	2.00	10(1)
5421	Printer Control Unit (required for 1403 Mod. 2, 5, or N1)	10,970	28.50	297
4135	1403 Model 5 Printer Attachment (for 5412 or 5415; requires #4160)	221	1.50	7
4140	1403 Model 2 Printer Attachment (for 5410)	4,025	23.00	134
4140	1403 Model 2 Printer Attachment (for 5412 or 5415; requires #4160)	575	1.50	18
4150	1403 Model N1 Printer Attachment (for 5410)	4,410	23.00	195
4150	1403 Model N1 Printer Attachment (for 5412 or 5415; requires #4160)	960	1.50	79
4160	1403 Printer Base Attachment (for 5412 or 5415)	3,450	21.00	116

MICR/OCR EQUIPMENT

		Purchase Price	Monthly Maint.	Rental (1-year lease)*
1255	Magnetic Character Reader (requires #7081):			
	Model 1; 500 dpm, 6 stackers	35,460	251.00	904
	Model 2; 750 dpm, 6 stackers	40,590	400.00	1,100
	Model 3; 750 dpm, 12 stackers	55,260	527.00	1,450
3215	Dash Symbol Transmission (for 1255)	35	NC	56 (1)
4380	51-column Card Sorting (for 1255)	734	NC	16
4520	High-Order Zero & Blank Selection (for 1255 Mod. 3 only)	1,315	5.00	33
6303	System/3 Adapter (required on 1255)	5,335	4.00	135
7060	Self-Checking Numbers for 1255)	2,135	2.50	54
3881	Optical Mark Reader (requires #7081):			
	Model 1; for on-line use	51,390	138.00	1,504 (2)
	Model 2; for off-line use	46,800	109.00	1,369 (2)
1471	BCD Read (for 3881)	2,150	1.50	61 (2)
3450	Document Counters (for 3881)	948	2.00	23 (2)
3550	Dual Density (for 3881 Model 2 only)	5,410	0.50	156 (2)
3801	Expanded Storage (for 3881)	2,150	0.50	61 (2)
6451	Serial Numbering (for 3881)	6,325	25.00	183 (2)
7081	Serial I/O Channel (required on 5406 for 1255)	6,080	5.00	171
7081	Serial I/O Channel (required on 5408, 5410, or 5412 for 1255 or 3881)	6,080	5.00	177
7081	Serial I/O Channel (required on 5415 for 1255 or 3881)	6,080	6.50	177

* Rental prices include equipment maintenance.
(1) A discount of 8% or 16% from these rental prices is available under a 12-month or 24-month Fixed-Term Lease, respectively.
(2) A discount of approximately 15% is available on an Extended-Term Lease with a basic contract period of 24 months.

IBM System/3

New Product Announcement

MODEL 4: The IBM System/3 Model 4, announced on January 14, 1976, represents a major departure from IBM's previous approaches. For the first time, IBM is supporting the multi-user, multi-task approach to small business data processing.

A System/3 Model 4 consists of: a 5404 processor with 64K bytes of MOSFET main memory, non-expandable; 5 or 10 megabytes of fixed/removable disk storage using 5440 disk cartridges in new 5447 disk units; a 115-cps 5213 matrix printer; a 3277 Model 1 CRT display for logging operating system messages; one to five local workstations, which may be 480- or 1920-character CRT/keyboard displays or 40-cps, 66-cps, or 120-lpm printers; and one optional Bisync adapter that can accommodate remote workstations or permit communications with a host computer.

The 5404 keyboard console is identical with that of the System/3 Model 6 (5406). The basic processor includes provisions for attaching up to two local workstations; the Display Increment feature is required to attach additional workstations. The Enhanced Print Rate Attachment feature is required to attach the 5213 printer. If 1920-character 3277 Model 2 display workstations are desired, a 3270 Model 2 Attachment feature is required. In addition, a Serial I/O Channel is available for the Model 4, just as with other System/3 models, for attachment of low-speed, non-IBM peripherals.

Two models of the new 5447 Disk Storage units are available. Model A1 can store up to 2.5 megabytes of information on each of two 5440 cartridges for a total capacity of 5.0 megabytes. The arrangement is familiar—one fixed and one removable cartridge mounted on the same spindle with a common access mechanism. Model A2 adds a completely independent module of two fixed cartridges in the same enclosure for a total storage capacity of 10.0 megabytes. Formats are completely compatible with those of other System/3 models. Minimum head positioning time is 28 milliseconds, average is 126 milliseconds, and maximum is 255 milliseconds; average rotational delay is 20 milliseconds; and data transfer rate is 199K bytes per second. These are the same performance parameters as those of the 5444 Models A2 and A3.

Local workstations can be located up to 2000 feet from the Model 4 processor. The 3277 Model 1 provides 480 display positions arranged in 12 lines of 40 characters. The 3277 Model 2 provides 1920 display positions arranged in 24 lines of 80 characters. A separately priced, separable keyboard is available for each. The 3284 and 3286 matrix printers are both available as a Model 1 that includes a 480-character buffer or as a Model 2 that includes a 1920-character buffer. The 3284 operates at 40 characters per second; the 3286, at 66 characters per second. Characters are formed by a 4-by-7 dot matrix. The 3288 Model 2 operates at a nominal speed of 120 lines per minute and has a 1920-character buffer. The print mechanism uses an engraved metal belt. All displays and printers use a 64-character set. Each display or printer counts as one of the five possible local workstations.

The disk enclosure, which houses either an A1 or A2 model, provides space on top for the 5213 printer, operator keyboard console, and 3277 system display.

Software support for the System/3 Model 4 consists of a new Communications Control Program (CCP) that is functionally equivalent to CCP for the System/3 Model 10 and a subset of the software support for the System/3 Model 6. The only programming language supported is RPG II.

CCP provides control of the multi-user environment. Previously compiled RPG II programs are initiated from a workstation. Up to four tasks can be active simultaneously, and multiple workstations can be operating under the same task. One of the tasks can involve a remote workstation connected through the Bisync adapter. The basic supervisor occupies 3.25K bytes of memory. Two pre-generated versions of CCP are available. The minimum version occupies 25K bytes and supports only 3270-family display and printer remote workstations. The maximum version occupies 31.5K bytes and supports the full array of remote workstation types. All active tasks are co-resident in main memory. If insufficient memory space is available, a task cannot be initiated; i.e., no swapping facility is implemented. The workspace allocated to a task, however, need not be as large as the complete task itself. If the task is larger than the workspace available, the task will be automatically segmented. A new disk sort routine ($15 per month), requiring 12K bytes, can be run as a task CCP. User tasks need not require user interaction on the CRT display or other peripheral devices; such "batch" tasks on multi-user systems are frequently referred to by other vendors as "phantom tasks." Access to the system is controlled via a password arrangement.

Instead of running under CCP, the user can operate the System/3 as a Model 6 with the following support: RPG II compilation, RPG II execution including the Auto Report and

IBM System/3

New Product Announcement

Telecommunications features, Conversational Utilities (Keyboard Source Entry and Keyboard Data Entry), Overlay Linkage Editor, Disk Sort Program, and Multileaving Remote Job Entry Workstation (MRJE/WS). See the main report for descriptions of these software packages. Running under Model 6 software, only the 3.25K-byte resident supervisor detracts from user memory space. The Model 6 SCP must be Release 13 or later. Model 6 software not supported on the Model 4 includes FORTRAN, BASIC, and the 1255 MICR reader utility.

The Bisync adapter is capable of supporting communications at up to 50,000 bits per second over appropriate facilities. The minimum version of CCP can support as a remote workstation one point-to-point or multipoint line with 3270-family devices including clustered 3277 displays, stand-alone 3275 displays, and 3280 series printers.

The full version of CCP adds remote workstation support for point-to-point or multipoint connection over one line with a 3741 Data Station Model 2, 3741 Programmable Work Station Model 4, or 3735 Programmable Buffered Terminal Model 1. In addition, Bisync communication is supported between the System/3 Model 4 and another System/3, System/7, System/32, System/360, or System/370. The System/3 Model 4, however, cannot simultaneously communicate with a remote workstation and function as an RJE terminal. Typically, remote workstations will operate in half-duplex mode at 2400, 4800, or 7200 bps. Using IBM modems, transmission at up to 4800 bps over the switched telephone network and at up to 7200 bps over a leased voice-grade line is supported. Higher transmission speeds require a wide-band facility.

5448 DISK STORAGE: On May 24, 1976, IBM expanded the disk capacity for System/3 Models 8 and 10 by introducing the 9.8-megabyte 5448 Disk Storage Drive. The new drive utilizes 4 fixed disks with a total of 8 recording surfaces, 400 data cylinders, and 1600 tracks. Average head movement time is 126 milliseconds, and the data transfer rate is 199K bytes per second. For pricing details, see the price list starting on page M11-491-523.

MODEL 15D: In June 1976, IBM strengthened the upper end of its small-systems product line by announcing the System/3 Model 15D. Processors are available with 160K, 192K, 224K, and 256K bytes of MOSFET (metal oxide semiconductor field effect transistor) main storage. Memory is identical with the memory used in other System/3's, except that the cycle time (1.52 microseconds for a 1-byte fetch) has been speeded up for certain non-I/O instructions. The reason for the faster cycle time is to take advantage of software enhancements.

A principal software enhancement is a new System Control Program (SCP) that allows a third program partition in main memory. Previous System/3 SCP's provided only two partitions. Therefore, the user can now add another batch system, program test/compilation, or communications job in addition to the two he may already have functioning. SCP has also been enhanced to allow sharing of more disk files and to allow programs in different partitions to update the same file. Additional improvements allow the user to define up to 192 active disk files per partition (40 on other System/3's), and spooled input from a 3741 Programmable Work Station can be variable in length, from 1 to 128 bytes as opposed to a fixed length of 96 bytes.

Disk capacity for the 15D has more than tripled over previous models. Other System/3's can go as high as 164 million bytes, but the 15D can be configured with as much as 506 million bytes. This additional on-line capacity is provided by the 3344 Direct Access Storage Unit. The 3344 utilizes nonremovable storage media and offers an average access time of 25 milliseconds and a data transfer rate of 885K bytes per second.

For detailed pricing information on the System/3 Model 15D, see the price list starting on page 70C-491-21y. The 3344 Direct Access Storage Unit is described in Report 70C-491-04. □

IBM System/3

EQUIPMENT PRICES

COMMUNICATIONS EQUIPMENT		Purchase Price	Monthly Maint.	Rental (1-year lease)*
2074	Binary Synchronous Communications Adapter	9,570	71.50	314
1315	Auto Call Feature	1,620	1.00	46
3601	EIA Local Attachment	781	1.00	28
4703	Internal Clock Feature	1,020	1.00	29
4781	1200 bps Integrated Modem (requires #4703 and #5201)	483	3.50	16
5201	Modem Base (for mounting #4781)	937	2.50	33
7477	Station Selection Feature	805	1.00	22
7850	Text Transparency Feature	805	1.00	22
2084	Binary Synchronous Communications Adapter, Second (#2074 is a prerequisite)	9,570	71.50	314
1325	Auto Call Feature	1,620	1.00	46
3602	EIA Local Attachment	781	1.00	28
4723	Internal Clock	1,020	1.00	29
4782	1200 bps Integrated Modem (requires #4723 and #5202)	644	5.50	21
5202	Modem Base (for mounting #4782)	937	2.50	33
7487	Station Selection Feature	805	1.00	22
7851	Text Transparency Feature	805	1.00	22
4645	Integrated Communications Adapter (for 5408 or 5412)	6,130	18.00	145
4801	8000 bps Local Interface (for local attachment of an IBM binary synchronous 3275 Display; modems not required)	1,055	1.00	25
4802	2400 bps Local Interface (for local attachment of an IBM binary synchronous terminal; modems not required)	1,055	1.00	25
6202	Synchronous Line, Medium Speed (up to 7200 bps)	3,190	3.00	77
7851	Text Transparency (for EBCDIC)	805	1.00	22
4702	Local Display Adapter (for 5408, 5412, or 5415; for local attachment of up to three 3277-1 displays and/or 3284/3286-1 printers)	6,240	24.50	163
4701	Basic Attachment Feature	1,530	3.00	54
4704	Display Increment (for three additional displays and/or printers)	1,455	1.00	38
4705	Model 2 Attachment (for Model 2 displays or printers)	831	3.50	21
4765	Local Communications Adapter (for 5406, 5410, or 5415; for local attachment of a 3741 Model 2, a 3271 Control Unit, or a 3275 Display)	5,075	30.00	168

*Rental prices include equipment maintenance.

SOFTWARE PRICES

SYSTEM/3 MODEL 6

Program Products—Systems

	Monthly License Fee
BASIC	$127
Disk FORTRAN IV	115
RPG II	38
Auto Report Feature (for RPG II)	16
Telecommunications Feature (for RPG II)	38
Conversational Utilities	16
Disk Sort	10
1255 Magnetic Character Reader Utility	87

Program Products—Applications

	Monthly License Fee
Business Analysis/BASIC	57
Health, Welfare, & Pension Fund	201
Inventory and Requirements Planning	86
MATH/BASIC	50
Shop Loading and Control	136
STAT/BASIC	38

Application Customizer Service (Without Customized Source Code

	Single-Use Charge
Order Writing and Invoicing	$768
Inventory Accounting and Management	768
Accounts Receivable	768
Sales Analysis	768
Additional charge for Customized Source Code; each application	116
Above programs tailored for Lumber and Building Supply Dealers or Electrical Distributors; each program	867

Application Programming Service

		Single-Use Charge
Order Writing and Invoicing	Any one application:	1,550
Inventory Accounting and Management	Any two applications:	3,000
Accounts Receivable	Any three applications:	4,220
Sales Analysis	Any four applications:	5,315

SYSTEM/3 MODEL 8

Systems and applications program product support is equivalent to that for System/3 Model 10 disk systems.

SYSTEM/3 MODEL 10

Program Products—Systems

	Monthly License Fee
ANS COBOL Subset Compiler	86
Card RPG II	37
Magnetic Tape Feature	30

IBM System/3

SOFTWARE PRICES

SYSTEM/3 MODEL 10 (Continued)

Program Products—Systems (Continued)

	Monthly License Fee
Telecommunications Feature	37
Card System Utilities	10
Card Magnetic Tape Sort Programs	76
Disk FORTRAN IV	110
Disk RPG II	50
Telecommunications Feature	38
5445 Disk Storage Drive Features	33
Auto Report Feature	16
Magnetic Tape Feature	33
Disk Sort	10
5445 Disk Storage Drive Feature	55
Disk Magnetic Tape Sort Programs	76
Disk-Resident Card Utilities	10
1255 Magnetic Character Reader Utility	69
Basic Assembler	86

Program Products—Applications

	Monthly License Fee
Apparel Business Control (card)	82
Appropriation Accounting System (card)	132
Bill of Material Processor (disk)	57
Card Bill of Material and Requirements Planning	71
Citation Processing System (card)	132
Data/3	136
EPIC Educational Administration—	
SOCRATES	192
FAST	104
Budget/Finance	121
Student	87
Health, Welfare, and Pension Fund (disk)	198
Inventory and Requirements Planning (disk)	86
Job Analysis System (disk)	79
Law Enforcement System (card)	87
Optimum Blending (card)	98
Order Point Technique for Inventory Management (card)	55
Shop Loading and Control (disk)	136
System for TV and Radio (disk)	433
Unit Inventory Techniques (card)	82
Utility Billing System (card)	87

Application Customizer Service—Card Systems

	Single-Use Charge
Order Writing and Invoicing	405
Inventory Accounting	374
Accounts Receivable	374
Sales Analysis	352
Payroll	473
General Ledger	323
Accounts Payable	427
Labor Distribution	427

Application Customizer Service—Disk Systems

	Single-Use Charge
Order Writing and Invoicing	815
Inventory Accounting and Management	785
Accounts Receivable	757
Sales Analysis	727
Additional for Customized Source Code, each application	116

SYSTEM/3 MODEL 12

Program Products—Systems

	Monthly License Fee
Basic Assembler	$81
Card Utilities	16
COBOL	81
DATA/3	130
Disk Sort	43
FORTRAN IV	108
RPG II	81
Tape Sort	75
1255 Utility	66

Program Products—Applications

Programs that run on a System/3 Model 6, 8, or 10 can be compiled to run on the Model 12 without changing any source code. A simulation of the 5444 disk area is made on the 3340 DASF.

SYSTEM/3 MODEL 15

Program Products—Systems

	Monthly License Fee
ANS COBOL Subset Compiler	85
Basic Assembler	85
Card Utilities	16
Disk Sort	45
FORTRAN IV	113
Magnetic Tape Sort	78
RPG II	85

Program Products—Applications

	Monthly License Fee
DATA/3	136

Note: Model 15 systems can also run System/3 Model 10 applications programs.