

IBM United States

IBM Xstation 160

The new IBM Xstation 160 is a high performance, PowerPC[™] based, low cost, local area network (LAN) attached Xterminal. The 66-MHz PowerPC 603[™] processor provides industry leading performance in a new highly integrated, compact package.

Eight megabytes (MB) of system memory are standard. Two megabytes of video memory are standard, which provide support for high resolution displays (1600 x 1280). This standard memory configuration allows space for the enhanced function Xserver, local clients, and full 256 colors. The Xstation 160 offers a choice of either a Token-Ring or an Ethernet connection. Attachment support is also provided for a wide variety of printers, plotters, modems, and International Organization for Standardization (ISO) compliant displays. The Xstation 160 comes installed with an Xserver based on X Window System Version 11 Release 6 in rewritable, nonvolatile flash memory.

Optional available features include:

- A business audio sound system that enables microphone input, headphone or stereo speaker output, line in, and line out
- 2, 4, 10, and 20MB nonvolatile flash memory cards
- A 1.44MB, 3.5-inch floppy diskette drive
- A Peripheral Component Interconnect (PCI) slot for future network types

Purchase Price: \$2,995

Planned Availability Date: February 24, 1995

[™] Trademark of International Business Machines Corporation

- High performance, PowerPC RISC based color Xterminal performance of 200,000 Xstones and five Xmarks
- 8MB system memory, 2MB video memory standard
- System memory expansion to 96MB with the use of two 32MB dual inline memory modules (DIMMs) and a 32MB base system
- 2MB writable, nonvolatile flash memory for storage of the Xserver and diagnostics standard
- Support for ISO 9241 Part 3 compliant color displays
- Token-Ring or Ethernet LAN connection
- Enhanced Xserver support based on X Window System Version 11 Release 6, local clients, graphical local setup, generic boot capability, and simple network management protocol (SNMP) agent support
- Peripheral Component Interconnect (PCI) expansion slot for future additional network types
- Stereo in/out, headphone, and microphone capability business audio option
- 2, 4, 10, and 20MB nonvolatile flash memory card options
- 1.44MB, 3.5-inch floppy diskette drive option

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Description

The Xstation 160 is a low cost, high performance, PowerPC based Xterminal. It contains a 32-bit PowerPC 603 RISC processor with a Weitek 9100 graphics assist engine for industry leading performance.

The Xstation 160 provides a LAN attached X Window System that offers a lower cost alternative to an intelligent workstation on a LAN. The Xstation 160's quiet and compact packaging make it attractive for many environments, reducing the environmental impact of adding workstations to your enterprise.

Standard features for the Xstation 160 are:

- 66-MHz PowerPC 603 complementary metal-oxide semiconductor (CMOS) RISC processor
 - 32-bit superscalar architecture
 - Dual Issue superscalar control
 - IEEE-754 double precision floating point unit (FPU)
 - 8KB, 32-byte line, 2 way set associative instruction cache
 - 8KB, 32-byte line, 2 way set associative data cache
- Weitek Power 9100 graphics controller
 - Ultra-high-speed local-bus display controller
 - Sophisticated architecture, full-custom chip design
 - Interleaved video random-access memory (VRAM) controller that uses a phase locked loop (PLL) timing generator to extract 100% of VRAM bandwidth
 - Pipelined 32-bit internal architecture
- 8MB system memory
- 2MB video memory
- 2MB writable, nonvolatile flash memory
- Two 168-pin dual inline memory module sockets for system memory expansion
- One keyboard
- One 3-button mouse
- Standard device ports/connectors
 - Keyboard port
 - Mouse port
 - Parallel printer port
 - Two serial ports accessed via one 25-pin D-shell
 - connector
 - Video port

Xstation 160 Ethernet Machine Only Features:

• The Ethernet machine has physical plugs for "Thick" (IEEE 802.3 standard 10BASE5), "Thin" (IEEE 802.3 standard 10BASE2), and "Twisted Pair" (IEEE 802.3 standard 10BASET) cable attachments. The Xstation 160 automatically senses which type of connector is attached and initializes that connection. The Ethernet connection supports both the IEEE 802.3 and Ethernet Version 2 protocols.

Xstation 160 Token-Ring Machine Only Features:

• The Token-Ring machine has one physical connector for attachment to Token-Ring LAN environments.

Xstation 160 4MB VRAM Machine Features:

• The 4MB VRAM machine has double the standard amount of video RAM (VRAM). This additional VRAM can be used for 24-bit true color applications.

Product Positioning

Xstations are hybrid devices — a cross between high powered workstations and low cost terminals. Xstations typically attach directly to the LAN and provide access to the function and performance of a workstation, but at a much lower cost per user.

Xstations have traditionally been employed primarily as complements to, or substitutes for, technical workstations. But increasingly customers are utilizing Xstations in commercial environments too, because of their overwhelming cost advantages. Indeed, more and more customers are recognizing the Xstation's potential, and for many it has become the preferred desktop device, providing "universal" access to information and applications.

For example, with the appropriate emulation software on a server, Xstations can be an outstanding replacement for mainframe terminals (ASCII, 3270, 5250). Xstations give the mainframe user a graphical interface to multiple terminal windows from multiple hosts on a single display.

Emulation software is also available that allows an Xstation user anywhere in the network to access PC Windows applications and PC DOS applications. Thus, Xstations are perfect devices for users who primarily use mainframe or UNIX applications, but who also need to access PC applications some of the time. It is this ability to seamlessly access legacy mainframe applications as well as newer client-server applications that makes Xstations especially attractive to customers migrating to a distributed environment.

Xstation Advantages

Xstations employ an industry standard, graphics rendering protocol called the X Window System, which allows for the separation of computing functions performed at some host from user interaction and display functions performed at the Xstation.

This architectural separation of function results in many important advantages for X and Xstations:

- Better resource sharing Workstations, PCs, hard drives, peripherals, application software, and so on, can all be shared by many users, instead of being duplicated on *every* user's desktop where they can sit *idle* much of the time.
- Extending the life of existing assets Xstations offload the graphics rendering workload from the server(s), thus freeing up more horsepower for application workloads.
- More durable desktop investment Additional CPU, memory, or hard disk capacity can be added to the network as necessary, giving Xstation users the benefit of more or faster resources without having to upgrade the workstation or PC on everyone's desk.

More or better applications demand ever increasing horsepower, while the demands of the user interface are fairly stable. Therefore, the X Window System approach of running applications on a shared server and running only the user interface on the desktop can greatly prolong the life of the desktop device and save money. To see the wisdom in this, just ask how many people are still using a 286 PC?

In addition, the X protocol effectively insulates or buffers the desktop device from much of the change and uncertainty on the "back end." As long as the back-end host can function as an Xclient, it doesn't matter whether the host is Brand "A" or "B," or whether it uses operating system "C" or "D." This is one of the strengths of true open systems.

Centralized administration and management -Software configuration, upgrades, support, backup, troubleshooting, and so on can be handled centrally and consistently by the systems administrator. And, since programs and data are not distributed throughout the enterprise on every desktop, there are fewer copies and files to maintain.

> One recent study has shown very significant advantages (35-50%) for Xterminals versus workstations or PCs in the ongoing costs associated with network support. This is of paramount importance when assessing the true total cost of computing.

> Perhaps as important, Xstations eliminate the hidden cost of users spending their time trying to manage the operating system, applications, and hard disk on their desks.

- Improved security Since diskette drives are not required, Xstations offer an additional measure of protection against the intentional theft of data or the accidental introduction of viruses.
- Data integrity In many environments, data on the desktop doesn't get backed up. Or, if it does, backing up data is one of the more serious headaches to be dealt with. Xstations can eliminate this problem.
- Better environmentals Xstations have a smaller footprint, are quieter, and generate less heat than most workstations or PCs.
- Superior graphics performance and resolution -Xstations deliver outstanding graphics performance and resolution. With the increased usage of graphical user interfaces (GUIs) in most new application development, graphics performance and resolution are becoming important to all users.

Taken together, these advantages make Xstations a compelling desktop alternative in many environments.

Model Positioning

The Xstation Model 160 scores five Xmarks on the industry standard X11perf benchmark, easily surpassing every other Xterminal in the industry. Its price and performance position the Model 160 as the successor to the prior top of the line Model 150. The Model 140 will continue to be a very attractive option for customers desiring mid-range performance and value pricing.

The Model 160's superior performance and low cost make an unbeatable combination in many environments.

Publications

The following publications are shipped with the product. Additional copies will be available for a fee. To order, contact your IBM representative.

Title	Number
7010 Xstation Model 160 Setup, Operator, and Service Guide	SA23-2749
Xstation 160 Setup Procedures	SA23-2750
System Unit Safety Information	SA23-2652

Ordor

The System Library Subscription Service (SLSS) is available by order number only. Customers currently subscribing to SLSS will receive publication updates automatically.

Technical Information

Specified Operating Environment

Physical Specifications:

- Width: 304 mm (12.0 inches) .
- Depth: 304 mm (12.0 inches) Height: 70 mm (2.75 inches)
- .
- Weight: 4.5 kg (10 pounds)
- Power Supply: 65 watts output (peak) Voltage: 100 V to 125 V, 200 V to 240 V nominal auto • ranging; 50 Hz/60 Hz Thermal Output: 64 joules/second (217 Btu/hour)
- maximum
- Power Source Loading: 0.09 kVA

Noise Level:

- Sound Power Level
 - LwAd (Operating): 5.0 bels
 - LwAd (Idle): 4.8 bels
- Weighted Sound Pressure Level at Operator Position
 - LpAm (Operating): 37 dBa
 - LpAm (Idle): 37 dBa
- Weighted Sound Pressure Level at 1 Meter Position
 - LpAm (Operating): 41 dBa
 - LpAm (Idle): 41 dBa
- Impulsive Noise: No
- Prominent Discrete Tones: No

EMC Conformance Classification: This equipment is subject to FCC rules and it shall comply with the appropriate FCC rules before final delivery to the buyer or centers of distribution.

- U.S.A.: FCC Class A
- Germany: VDE Class A .
- Japan: VCCI-1

Operating Environment:

- Temperature: 16°C to 32°C (60°F to 90°F)
- Relative Humidity: 8% to 80%
- Wet Bulb: 23°C (73°F) maximum
- Environmental Impact Assessment Number: 617P-3

The Xstation 160 was developed and manufactured in compliance with Corporate Standard C-S 3-0527-002 (1991-06), Control of Chemicals in IBM Facilities, Requirements and Responsibilities.

The Xstation 160 was developed in compliance with Corporate Policy Letter 139 (Environmental Affairs).

Product Safety/Country Testing/Certification:

- U.S.A.: UL
- Canada: CSA
- Germany: GS Mark (Safety, TUV)

Telecom Environmental Testing (Safety and EMC): The RISC System/6000 family of products and applicable features meet the environmental testing requirements of the country Telecom. The testing and approval process are ongoing.

ISO 9000 Certification (IBM Manufacturing Locations):

- Austin, Texas (U.S.A.)
- Wangaratta, Australia
- Santa Palomba, Italy

Note: ISO, International Organization the for Standardization, has been addressing the ergonomic aspects of working with video display terminals (VDTs) for more than seven years. When completed, ISO Standard 9241 - Ergonomic Requirements For Office Work VDTs will represent international consensus on comprehensive list of topics addressing workplace comfort and safety.

The European Community Directive of May 29, 1990, on the minimum safety and health requirements for work with display screen equipment (90/270/EEC) directs employers to provide ergonomically satisfactory workplaces. It is the industry consensus that ISO 9241 is the appropriate technical standard for determining compliance with this directive.

In the United States, the American National Standards Institute (ANSI) policy is to harmonize their standards with ISO. IBM designs products with consideration to the existing ANSI HFS 100 (1988 edition) standard, which is currently in revision.

Hardware Requirements: An IBM Xstation 160 supported display and a host system, such as a RISC System/6000 system, are required.

Software Requirements:

- AIX® Version 3.2.5 for RISC System/6000 and Xstation Manager® 1.4.1 plus APAR # Ix48593 or
- IBM AIX Version 4 (the Xstation 160 should be configured using the local configuration menus on the Xstation 160; centralized configuration via the SMIT menus will be available in the next refresh of AIX Version 4.1) or
- Other systems that support X Window System Version 11 Release 5 and above

Limitations: None

Planning Information

Customer Responsibilities: The IBM 7010 Xstation 160 is designated for customer setup and requires a LAN (either Token-Ring or Ethernet) for operation. Customers are responsible for setting up the LAN environment.

Cable Orders: An Ethernet or Token-Ring cable is required and can be ordered separately.

Supported Devices

The following devices are supported by the IBM Xstation 160:

Displays

IBM Color Displays:

Display name	Inch	View Area	Resolution
IBM POWERdisplay 16	16	14.8	1280 x 1024, 77 Hz (Note 2)
IBM POWERdisplay 16S	16	14.8	1280 x 1024, 72 Hz (Note 3)
IBM POWERdisplay 17	17	16.1	1280 x 1024, 77 Hz (Note 2)
IBM POWERdisplay 19	19	17.3	1280 x 1024, 77 Hz (Note 2)
IBM POWERdisplay 20	20	19.1	1280 x 1024, 77 Hz (Note 2)
IBM POWERdisplay 20	20	19.1	1600 x 1280, 60 Hz (Note 2)
IBM 1091-051	16	14.8	1280 x 1024, 72 Hz (Note 1)
IBM 8517	17	14.7	1024 x 768, 70 Hz (Note 3)
IBM 6091-16	16	14.8	1280 x 1024, 77 Hz (Note 2)
IBM 5081-16	16	14.9	1280 x 1024, 60 Hz (Note 2)
IBM 6091-19	19	17.3	1280 x 1024, 67 Hz (Note 2)
IBM 6091-19i	19	17.3	1280 x 1024, 77 Hz (Note 2)
IBM 6091-023	23	21.4	1280 x 1024, 60 Hz (Note 2)
IBM 6314	14	12.0	1024 x 768, 70 Hz (Note 3)
IBM 6319	15	12.7	1024 x 768, 70 Hz (Note 3)
IBM 6317	17	14.7	1280 x 1024, 60 Hz (Note 3)
IBM 6317	17	14.7	1024 x 768, 75.8 Hz (Note 3)
IBM 6324	14	13.0	1024 x 768, 75.8 Hz (Note 3)
IBM 6324	14	13.0	1280 x 1024, 60 Hz (Note 3)
IBM 6325	15	13.7	1024 x 768, 75.8 Hz (Note 3)
IBM 6325	15	13.7	1280 x 1024, 60 Hz (Note 3)
IBM 6327	17	15.4	1024 x 768, 76 Hz (Note 3)
IBM 6327	17	15.4	1280 x 1024, 60 Hz (Note 3)
IBM 9521	21	19.1	1024 x 768, 76 Hz (Note 3)
IBM 9521	21	19.1	1280 x 1024, 77 Hz (Note 3)
IBM 9521	21	19.1	1600 x 1280, 60 Hz (Note 3)
IBM 9524	14	13.0	1024 x 768, 75.8 Hz (Note 3)
IBM 9524	14	13.0	1280 x 1024, 60 Hz (Note 3)
IBM 9525	15	13.7	1024 x 768, 75.8 Hz (Note 3)
IBM 9525	15	13.7	1280 x 1024, 60 Hz (Note 3)
IBM 9527	17	15.4	1024 x 768, 76 Hz (Note 3)
IBM 9527	17	15.4	1280 x 1024, 77 Hz (Note 3)

Display Notes:

- 1. The machine type 1091-051 feature code 9020 (15-Pin D-Shell Connector) is required for attachment to the Xstation 160.
- 2. The Xstation 160 feature code 4217 (15-Pin D-Shell Connector) is required for attachment of a 5081 display, 6091 display, POWERdisplay 17, POWERdisplay 19, or POWERdisplay 20.
- 3. A 15-Pin D-Shell Connector cable is provided with this display.
- 4. See monitor description for ISO-compliant modes.

Note: The Xstation 160 does not support displays in interlaced mode.

Other-Vendor Color Displays:

- Mitsubishi HL-6915SBK 1280 x 1024
- NANAO 9070 1024 x 768
- NEC 4D Multisync 1024 x 768
- NEC 5D Multisync 1280 x 1024
- IDEK MF-5117 1024 x 768
- Sony GDM-1606/1953 1280 x 1024
- Sony GDM-1605/1954 1024 x 768
- Mitsubishi HL/FL6615 1280 x 1024, 1024 x 768
- NEC 5FG/6FG 1280 x 1024, 1024 x 768
- Other 14-inch to 21-inch equivalent displays

Printers:

- IBM 3812-002 Page Printer (Note 1)
- IBM 3816-01S Page Printer (Note 2)
- IBM 3816-01D Page Printer (Note 2)
- IBM 4019-001 LaserPrinter (Note 3)
- IBM 4019-01E LaserPrinter E (Note 3)
 IBM 4022-004 Euse late (supported as
- IBM 4072-001 ExecJet® (supported as a 4208-002)
 IBM 4201-002 IBM Proprinter® II
- IBM 4201-002 IBM Proprinter
 IBM 4201-003 Proprinter III
- IBM 4201-003 Proprinter II
 IBM 4202-002 Proprinter II XL
- IBM 4202-002 Proprinter II XL
 IBM 4202-003 Proprinter III XL
- IBM 4202-003 Proprinter M X2
 IBM 4207-002 Proprinter X24E
- IBM 4208-002 Proprinter XL24E
- IBM 4212-001 Proprinter 24P (supported as a 4207-002)
- IBM 4224-3E3 Serial Printer
- IBM 4224-3C2 Serial Printer
- IBM 4224-302 Serial Printer
- IBM 4224-301 Serial Printer
- IBM 4234-013 Dot Band Printer
- IBM 5202-001 Quietwriter® III (Note 4)
- IBM 5204-001 Quickwriter®
- IBM 2380-001 Personal Printer II
- IBM 2380 Plus Printer, emulating the 2380 Personal Printer for PPDS (IBM ASCII) (Note 5)
- IBM 2381-001 Personal Printer II
- IBM 2381 Plus Printer, emulating the 2381 Personal Printer for PPDS (Note 5)
- IBM 2390-001 Personal Printer II
- IBM 2390 Plus Printer, emulating the 2390 Personal Printer for PPDS (Note 5)
- IBM 2391-001 Personal Printer II
- IBM 2391 Plus Printer, emulating the 2391 Personal Printer for PPDS (Note 5)
- IBM 4226-302 Printer
- IBM 4029-010 LaserPrinter 5E
- IBM 4029-020 LaserPrinter 6
- IBM 4029-022 LaserPrinter (Note 5)
- IBM 4029-030 LaserPrinter
- IBM 4029-042 LaserPrinter
- IBM 4029-040 LaserPrinter 10L
- IBM 4037 5E Page Printer, emulating the 4029 LaserPrinter for PCL emulation and for PPDS (IBM ASCII) (Note 5)
- IBM 4039-10R LaserPrinter 10R (Note 6)
- IBM 4039-10D LaserPrinter 10D (Note 6)
- IBM 4039-12L LaserPrinter 12L (Note 6)
- IBM 4039-12R LaserPrinter 12R (Note 6)
- IBM 4039-16L LaserPrinter 16L (Note 6)
- IBM 4070 IJ Printer Model 1
- IBM 4076 ExecJet II Printer
- IBM 4079-001 Color JetPrinter

Printer Notes:

- 1. Feature #3155 for the IBM 3812 printer is required for attachment to the IBM Xstation 160.
- 2. Feature #7652 for the IBM 3816 printer is required for attachment to the IBM Xstation 160.
- 3. When using the serial ports, the IBM 4019 requires the printer feature #9143 (system serial interface adapter) for attachment to the Xstation 160.
- 4. The IBM Xstation 160 supports code page 850. The code page 850 cartridge must be installed on the IBM 5202 printer to fully utilize the full character sets of the system. For details on available cartridges, refer to the IBM 5202 Sales Manual. Other IBM printers have code page 850 resident.
- For assistance with these printers and for the latest AIX virtual printer files (colon files), call Lexmark Customer Support. Virtual printer files (colon files) for the 4037 and 4076 printers are available from

Lexmark. Colon files for these printers are distributed via:

- Lexmark customer support line: 606-232-3000
- Dial-in bulletin board system: 606-232-5238
- VM request machine: DRIVERS at LEXCJN1 (for IBM personnel and customers)
- Lexmark Internet file server: ftp.lexmark.com
- Reader response card for the 4037 and 4076
- 6. AIX support software for the LaserPrinter Integrated Network Option is provided with the Network Option cards (features 5495, 5496, and 5497 on the IBM 4039 LaserPrinter).

OEM Printers: The following OEM printers are supported:

- HP LaserJet Series II**
- HP LaserJet III**
- HP LaserJet 4

Plotters:

- IBM 6180 M1 Color
- IBM 6182 Color
- IBM 6184 Color
- IBM 7372
- IBM 6185
- IBM 6185-002
- IBM 6186 Color Plotter

Lighted Program Function Keys:

• IBM 6094 Model 020 (requires 6094 Attachment Feature, #4020) (Note 1)

Lighted Program Function Key Notes:

1. This 6094 feature specifies the cable for attachment to the 25-pin serial port of the Xstation. Also included is the appropriate power supply (default by country code).

Tablets:

- IBM 6093 Model 011 (requires 6093 Attachment Feature, #4030) (Note 1)
- IBM 6093 Model 012 (requires 6093 Attachment Feature, #4030) (Note 1)

Tablet Notes:

1. This feature specifies the cable for attachment to the 25-pin serial port of the Xstation. The cable is 2.43 m in length. Also included is the appropriate power supply (default by country code).

Modems: Modem support is provided to allow communication through common carrier telephone networks using dial-up or leased lines with asynchronous protocols. Not all the features supported by the listed modems are supported by the AIX Version 3 for RISC System/6000 software.

Modems	Protocol	Standards
IBM 5841 1200bps	ASYNC	EIA-232D
IBM 5853 2400bps	ASYNC	EIA-232D
Hayes Smartmodem 1200**	ASYNC	EIA-232D
Hayes Smartmodem 2400**	ASYNC	EIA-232D
Hayes V-Series 9600**	ASYNC	EIA-232D

Note: These modems are supported and tested for a U.S.A. environment. Users in other countries are responsible for obtaining the necessary approval from

their Post Telephone and Telegraph Administration (PTT), if required.

Security, Auditability, and Control

Physical security is provided to the Xstation 160 by a key lock that helps prevent cover removal. This product also uses the security and auditability features of host hardware, host software, and/or application software.

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and Conditions

This product is available for purchase under the terms of the IBM Customer Agreement.

Volume Orders: For information regarding volume orders, contact your IBM representative.

IBM Credit Corporation Financing: Term leases and installment payment plans are available for commercial and state and local government customers.

Warranty Period: One year

Warranty Service: IBM On-Site Repair (IOR)

Maintenance Service: IOR

IBM Hourly Service Rate Classification: Two. IBM warranty service, maintenance service, or hourly service may be obtained by calling 800-IBM-SERV (426-7378). IBM hourly service is available at the applicable rate and terms, including element exchange price if applicable.

Mid-Range System Option: This product is an eligible machine for the Mid-Range System Option of the IBM Customer Agreement. A revised exhibit will be available at a later date.

Eligible	Discount			
Туре	Three-Year	Five-Year		

IBM Xstation 160 12% 17%

Corporate Service Option: This product is an eligible machine for the Corporate Service Option of the IBM Customer Agreement. A revised exhibit will be available at a later date.

	Disc	Discount		
	Three-Year	Five-Year		
Network	15%	20%		
System	12%	17%		

Extended Maintenance Option: This product is an eligible machine under the Extended Maintenance Option of the IBM Customer Agreement.

Product Availability Status: New product available

Field-Installable Features: Yes

Model Conversions: No

Customer Setup: Yes

Graduated Charges: Not applicable

Licensed Internal Code: No

Educational Allowance: A 20% education allowance is available to qualifying institutions in accordance with the Attachment for Educational Allowance. The educational allowance may not be added to any other discount or allowance.

Charges					
Description	Mach. Type	Model Number	Feat. Number	Purch. Price	Annual Min. Maint. Charge
Xstation 160	7010	160		\$2,995	\$360
32MB Base Memory (Select Option) 4MB Video RAM Designator Business Audio Adapter Card 1.44MB Diskette Drive PCMCIA Flash Attachment Connector PCI Bus Connector (Riser Card) 8MB Dual Inline Memory Module (DIMM) 32MB Dual Inline Memory Module		160 160 160 160 160 160 160	4031 4203 6303* 2612 4955* 4205 4004	2,205 390 295 260 140 75 750	
(DIMM) 10MB PCMCIA Flash Memory Card		160 160, 140,	4019	2,900	
20MB PCMCIA Flash Memory Card		150 160, 140,	4954	1,395	
Keyboard —102 Keys (Greek)		150 160, 140, 150	4956	2,540	
Keyboard — 102 Keys (Greek)		150 160, 140, 150	6026 9026	360 0	
Token-Ring Designator		160	4233	350	

* Availability date: April 28, 1995

The following features have been previously announced on machine type 7010 and are also available on the Xstation 160.

These features are available for plant or field installation.

Description	Machine Type	Model Number	Feature Number
IBM Xstation 160	7010	160	
Asynchronous Cable EIA-232/V.24 Printer/Terminal Interposer — EIA-232 PC Parallel Printer Cable Serial Port Converter Cable POWERdisplay 17 POWERdisplay 20 Service Publications and Wrap Plugs Kit 6091 Attachment Cable Token-Ring PC Adapter Cable Ethernet Designator 2MB PCMCIA Flash Memory Card 4MB PCMCIA Flash Memory Card 3-Button Mouse			2936 2937 3100 3107 3607 3608 3750 4217 4218 4226 4950 4952 6041
The following keyboards can be ordered for plant or field ins	tallation and are ava	ilable for a charge.	
Keyboard —U.S. English Soft Touch Keyboard —U.S. 101 Keys			1110 6010
The following keyboards can be ordered on the initial plant of	order only.		
Keyboard —U.S. English Soft Touch Select Keyboard —U.S. 101 Keys The following language group can be ordered on the initial p	lant order only		1010 9010
Language Group $-U.S.$ English	lant order only.		9300
The following power cords can be ordered on the initial plan	t order only.		3000
Power Cord — United States/Canada (125 V, 15 A) Power Cord — Chicago (125 V, 15 A) 1.8 m (6 ft) ® Registered trademark of International Business Machines Corpo	ration		9800 9986
 Registered trademark of international business machines Corpo ** Draduct or compositive page is a trademark or registered trademark 			

** Product or company name is a trademark or registered trademark of its respective holder.