HP 700/RX Family of X Stations

Technical Data, February 1993

Boost your competitive edge with HP's RISC-based X stations

In today's competitive business environment, companies are looking for desktop solutions with long term value and low cost of ownership. That's exactly what you get from the HP 700/RX.

HP 700/RX stations bring the power of network computing to every desktop. You can simultaneously access and display applications from any host to maximize your productivity. HP's unsurpassed usability and connectivity lets you integrate HP X stations into your computing environment effortlessly.

HP gives you the most flexible and easy to use X station software available today. And you know you can always count on great performance from the HP 700/RX.

It's no wonder that HP is the worldwide leading supplier of color X terminals for the third consecutive year.

SunWorld BEST PRODUCT 1992

HP 700/RX Features and Benefits

Software

Local HP VUE	• HP VUE/RX adds workspaces and a control panel to the Motif Window Manager. With the power of multiple workspaces, it's like having several X stations on your desk at once. And HP VUE/RX runs locally on the X station, so it can run in multivendor host environments. • If you're using HP VUE 3.0 or HP VUE Lite, FrontEnd HP VUE off-loads the window manager from the host
Other local clients	• The standard Motif Window Manager (mwm) is now available as a local client • If you require a memory efficient window manager, twm is provided as a contributed local client • Local terminal emulators provided are hpterm and xterm (with serial output or LAN output capabilities)
X11 R5 support	• Can use PCF fonts and Font Server scalable fonts • Enhanced XLSD allows server to scale any bitmap font • XDM support now allows use of the indirect XDMCP request so the user can choose which host to connect to
HP SharedX support	• Initiate and share application windows with one or several users simultaneously. HP SharedX allows HP 700/RX users to share or receive X11 windows and interactively communicate by using that window. It eases communications while training and consulting over distances.
SNMP support	• Simple Network Management Protocol for control and monitoring of the net work from a host computer • Easy system administration of large networks
Multivendor boot support	• Allows HP 700/RX to boot directly from a variety of host systems: • HP 9000 Series 300, 400, 700, 800 • Sun SPARC-based systems • HP Vectra 386/486 PCs running SCO/ODT • IBM RS/6000 systems running AIX • Easy installation scripts tailored for each host supported • Font utilities compiled for each host supported • HP 700/RX administration script (xtadm) tailored for each host supported
TFTP/NFS support	• Allows you to download X server, fonts and configuration files to the HP 700/RX
TELNET support	• You can open a TELNET session from a configuration screen or through a local terminal emulator
Downloadable extensions	• Users can selectively download extensions to the HP 700/RX base X server software to optimize X station performance with specialized applications
Backing store/ save unders	• Saves obscured windows in local memory for faster performance
Alternative host booting	• If your primary host is unavailable, you can boot from an alternative host
Flash ROM card	• Enables you to use SLIP or CSLIP without being connected to a LAN • Makes it unnecessary for you to download the X server fonts from the network

Architecture

Intel i960	• Common architecture on all models
RISC processor	• Industry-leading performance
Memory expansion up to 18MB	• User installed • Supports complex applications

HP 700/RX Features and Benefits

User Communications

PS/2 keyboard (HIL option) PS/2 3-button mouse (HIL option) PS/2 barcode device support	• You can tailor your HP 700/RX station to an HP or non-HP environment

Network Communication

SLIP/CSLIP support	• Serial Line Internet Protocol • Allows communications with computers connected by serial line (direct connect or modem)
Thin/Thick LAN ports	• Both LAN BNC and AUI connectors (supports ethertwist MAU or 10 BaseT MAU)
8-bit TELNET support	• Supports NLS character set

Easy Installation

Bootp/remote configuration	• Makes it possible to configure the HP 700/RX remotely over the LAN • Reduces installation time
Built-in configuration screens/XTADM	• Used to set the X station configuration locally • X Terminal Administrative Scripts set up the HP 700/RX station in the host system files • Makes it easy to configure the print spooler to work with a printer connected to your HP 700/RX station

Investment Protection

Upgrade path	• With TradeUp '93 HP offers a trade-in program that accepts the broadest range of workstations, PCs, and terminals toward the purchase of new HP workstations and X stations

No hidden costs

HP VUE licence	• Licence to use HP VUE included at no extra charge
X Server Software	• No per user license fee

Ergonomic Design

|	
Compact design	• Uses minimal desk space • Desktop, deskside, floor-mount
Display	• Brightness and contrast controls on all models • Tilt and swivel monitor base
Keyboards	Adjustable tilt
Variable speed fan	• Quiet fan automatically cools only as required

Demanding Environments

Ruggedized models	• For industrial applications in harsh environments, ruggedized versions of the HP 700/RX stations are available from HP Channel Partners

Security

Secure models	• A TEMPEST version of the HP 700/RX Model Ca is available from Hughes Data Systems. This modification prevents unauthorized personnel from tapping into computer equipment through use of electronic-eavesdropping devices
Client authorization	• Only authorized applications run on your X station
Access control	• Prevents unwanted hosts from communicating with the HP 700/RX
Password secure setup	• Password control on configuration screen

HP 700/RX Stations
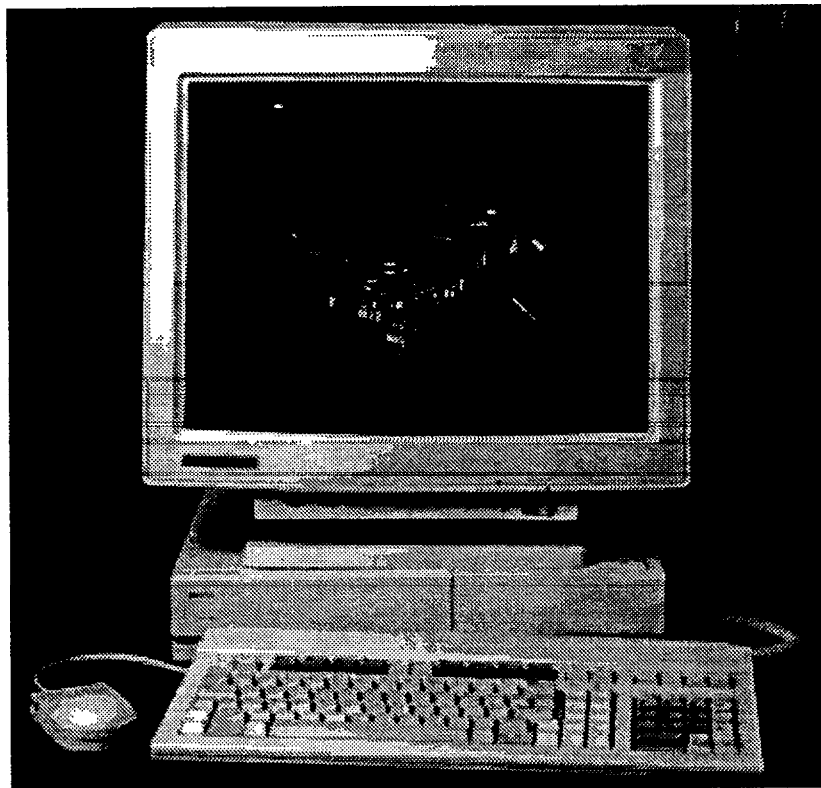
Model 19Cs
High-performance
high-resolution
color X station

Sony color monitor
19-inch screen
1280 x 1024 resolution
Intel i960 RISC processor

Typical applications include:
CAD/CAM/CAE/CASE; color
imaging; high-end desktop pub-
lishing; customer service; and
geographic information systems.
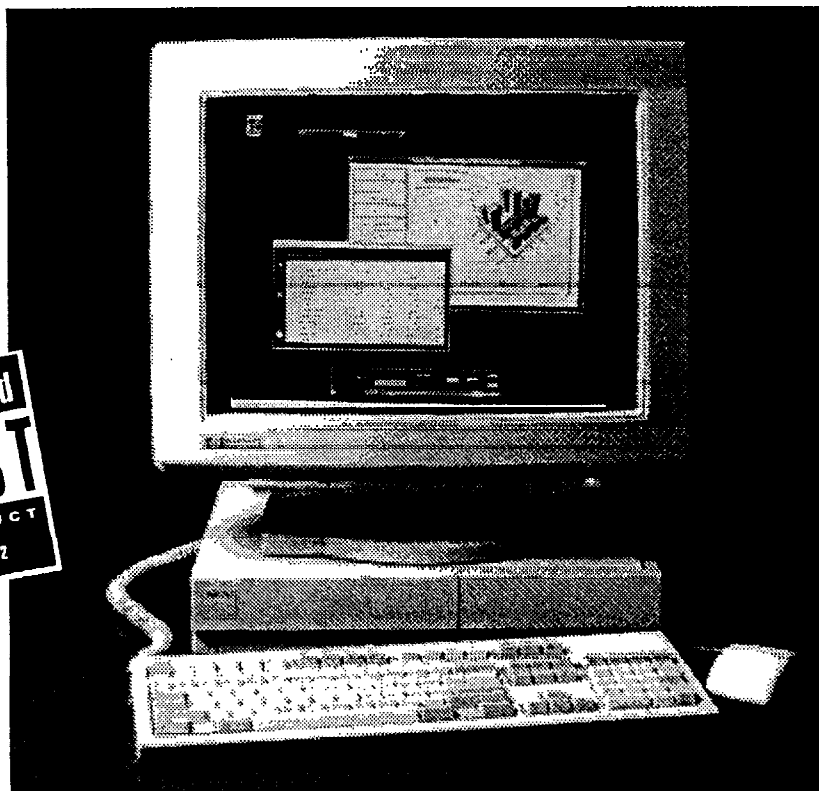
Model 19Ca
High-performance
high-resolution
color X station

Color monitor
19-inch screen
1280 x 1024 resolution
Intel i960 RISC processor

Typical applications include:
CAD/CAM/CAE/CASE; color
imaging; high-end desktop pub-
lishing; customer service; and
geographic information systems.

**Model 17Cs
High-resolution
high-performance
color X station**

Sony color monitor
17-inch screen
1280 x 1024 resolution
Intel i960 RISC processor

Typical applications include:
CAD/CAM/CAE/CASE; color
imaging; financial analysis and
trading; high-end desktop
publishing.
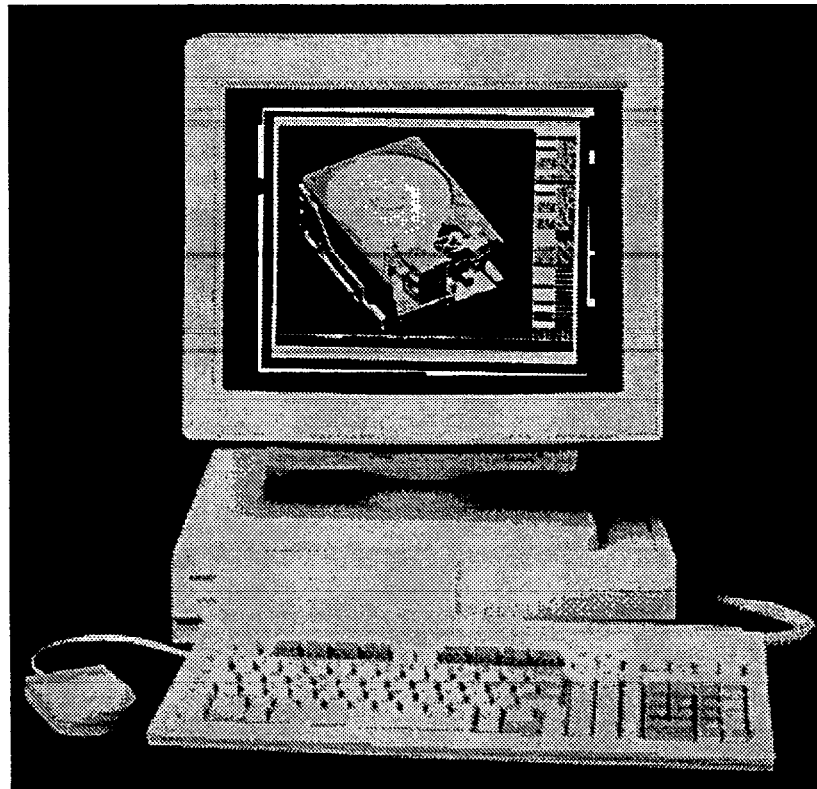
**Model 17Ci and 17Ca
Medium-resolution
color X station**

Sony color monitor
17-inch screen
1024 x 768 resolution
Intel i960 RISC processor

Typical applications include:
Customer service; financial applica-
tions; desktop publishing.

HP 700/RX Stations

Model 15Ci
Medium-resolution
compact color X station

Color monitor
15-inch screen
1024 x 768 resolution
Intel i960 RISC processor

Typical applications include:
word processing; presentation
graphics; inventory management;
patient monitoring; general
business applications.
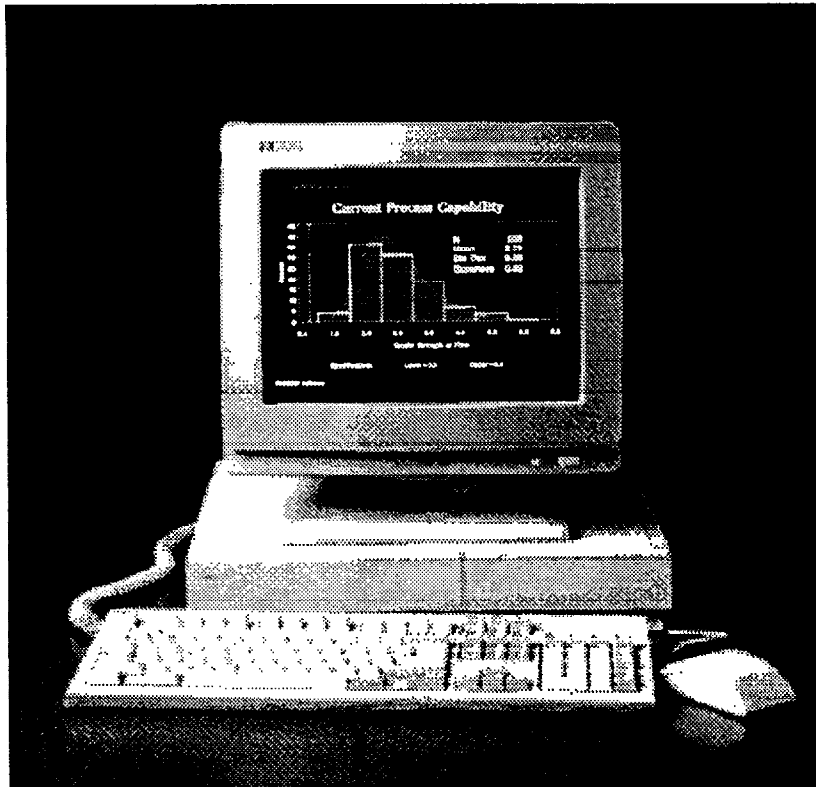
Model 14Ci
Medium-resolution
compact color X station

Color monitor
14-inch screen
Resolutions: 1024 x 768
800 x 600, 640 x 480
Intel i960 RISC processor

Typical applications include:
word processing; presentation
graphics; inventory management;
patient monitoring; general
business applications.

**Model 19Ga
High-performance
high-resolution
grayscale X station**

Grayscale monitor
19-inch screen
1280 x 1024 resolution
Intel i960 RISC processor

Typical applications include:
Medical and photographic imag-
ing; desktop publishing; document
imaging.
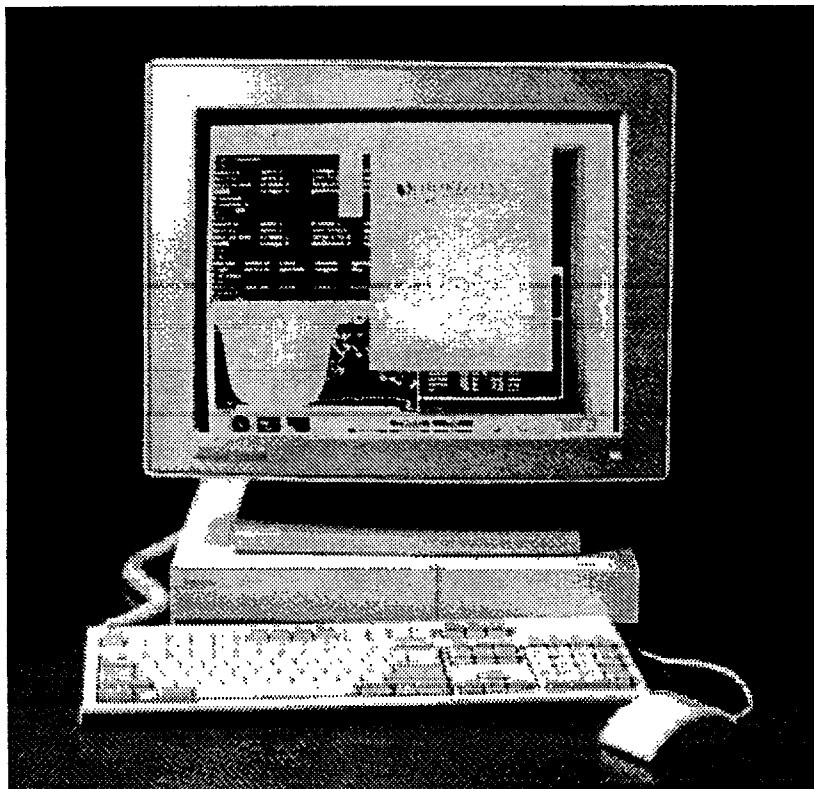
**Model 19Mi
High-performance
high-resolution
monochrome X station**

Monochrome monitor
19-inch screen
1280 x 1024 resolution
Intel i960 RISC processor

Typical applications include:
CASE; desktop publishing;
document imaging; software
development

HP 700/RX Family Comparison Chart

	HP 700/RX Stations (with Monitors)					
	Model 19Cs High Resolution Color X Station	Model 19Ca High Resolution Color X Station	Model 17Cs High Resolution Color X Station	Model 17Ca Medium Resolution Color X Station	Model 17Ci Medium Resolution Color X Station	Model 15Ci Medium Resolution Color X Station
Architecture						
Processor	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC
Standard User Memory	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)
Video Memory	2MB	2MB	1MB	1MB	1MB	1MB
Graphics						
Monitor	19" Color Sony Trinitron	19" Color	17" Color Sony Trinitron	17" Color Sony Trinitron	17" Color Sony Trinitron	15" Color
Colors	256 from a palette of 16.7 M	256 from a palette of 16.7 M	256 from a palette of 16.7 M	256 from a palette of 16.7 M	256 from a palette of 16.7 M	256 from a palette of 16.7 M
Color Planes	8	8	8	8	8	8
Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1024 x 768	1024 x 768	1024 x 768
Refresh Rate	72 Hz	72 Hz	72 Hz	75 Hz	75 Hz	70 Hz
Physical Dimensions						
Monitor						
Height *	19.0" (482mm)	18.5" (471 mm)	16.5" (419mm)	16.7" (425 mm)	16.7" (425 mm)	14.3" (364mm)
Width	19.0" (485mm)	19.7" (500 mm)	16.2" (411mm)	16.3" (413 mm)	16.3" (413 mm)	13.9" (354mm)
Depth	20.0" (510mm)	19.9" (505 mm)	18.1" (459mm)	17.1" (435 mm)	17.1" (435 mm)	15.7" (400mm)
Weight	71.5 lbs (32.5kg)	63.9 lbs (29 kg)	52.8 lbs (24kg)	40.7 lbs (18.5 kg)	40.7 lbs (18.5 kg)	35.1 lbs (13kg)
Base						
Height	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)
Width	16.6" (422 mm)	16.6" (422 mm)	16.6" (422 mm)	16.6" (422 mm)	16.6" (422 mm)	16.6" (422 mm)
Depth	14.7" (375 mm)	14.7" (375 mm)	14.7" (375 mm)	14.7" (375 mm)	14.7" (375 mm)	14.7" (375 mm)
Weight	17.1 lbs (7.76 kg)	17.1 lbs (7.76 kg)	17.1 lbs (7.76 kg)	17.1 lbs (7.76 kg)	17.1 lbs (7.76 kg)	17.1 lbs (7.76 kg)
Power Consumption						
Monitor	170 W (max)	175 W (max)	143 W (max)	115 W (max)	115 W (max)	65 W (max)
Base	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)
Input Voltage	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz

* includes tilt/swivel base

Model 14Ci Medium Resolution Color X Station	Model 19Ga High Resolution Grayscale X Station	Model 19Mi High Resolution Monochrome X Station	HP 700/RX Station Base Units (without Monitors)		
			Model Ca High Resolution Color/Grayscale Base	Model Ci Medium Resolution Color Base	Model Mi High Resolution Monochrome Base
Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC	Intel i960 RISC
4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)	4MB (18MB max.)
1MB	2MB	0.25MB	2MB	1MB	0.25MB
14" color	19" Grayscale	19" Monochrome	Order separately	Order separately	Order separately
256 from a palette of 16.7 M	256 levels of grayscale	one (monochrome)	256 from a palette of 16.7 M	256 from a palette of 16.7 M	one (monochrome)
8	8	1	8	8	1
1024 x 768 800 x 600 640 x 480	1280 x 1024	1280 x 1024	—	—	—
60 Hz @ 1024 x 768 60 Hz @ 640 x 480 72 Hz @ 800 x 600	72 Hz	72 Hz	—	—	—
15.4" (391 mm) 13.9" (354 mm) 15.3" (389 mm) 29.7 lbs (13.5 kg)	17.8" (451 mm) 18.8" (478 mm) 16.9" (430 mm) 46.3 lbs (21 kg)	17.8" (451 mm) 18.8" (478 mm) 16.9" (430 mm) 46.3 lbs (21 kg)	—	—	—
3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)	3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)	3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)	3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)	3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)	3" (76 mm) 16.6" (422 mm) 14.7" (375 mm) 17.1 lbs (7.76 kg)
70 W (max)	156 W (max)	156 W (max)	—	—	—
50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)	50 W (typical) 80 W (max)
100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz	100 120/220-240 VAC, 2.71/1.5A 50/60 Hz

General Specifications for all HP 700/RX Models

User Communications	**Keyboard Ports**	PS/2 and HP-HIL
	Mouse Ports	PS/2 and HP-HIL
	Standard Keyboard	PS/2 keyboard, PC-101 layout
	Standard Keyboard Cable	PS/2 cable
	Standard Mouse	PS/2 mouse, 3-button
	Standard Monitor Cable	3-conductor
Serial Port Communications	**Protocols**	SLIP/CSLIP
	Connect Type	RS-232-C
	Speed	Up to 38.4 Kbps
	Flow Control	XON/XOFF, RTS/CTS, none
	Device Support	Local system printer, plotter, bidirectional serial device
Parallel Port Communications	**Connection Type**	8-bit parallel
	Flow Control	Output only
	Device Support	Local system printer or plotter
Network Communications	**Network Type**	Ethernet
	Speed	10 Mbits/sec
	Protocols	TCP/ IP, UDP, TELNET, SNMP
	Connectors	BNC and AUI
Software	**Window System**	X11 R5
	Name Server	Domain
	Font/File Access	TFTP, NFS, TCP (for font server)
	Network Configuration	Bootp, Manual
	Download	Network, ROM-based server (optional)
	Login Options	XDM, TELNET, VUE login
Supported Host Systems	*System*	*Series*
	HP 9000	300,400,700,800; HP-UX 7.0, 8.0, 9.0
	Sun	SPARCstation (OS 4.1)
	HP Vectra	386/486 (SCO/ODT 1.10n with update G)
	IBM	RS/6000 (AIX 3.2)
Safety Standards	**Canada**	CSA 22.2 No. 950
	U.S.A.	UL 1950 listed
	Germany	TUV/GS-EN 60950
	International	IEC 950 compliant
Emissions Standards	**Canada**	DOC CRC c.1374 EMI
	U.S.A.	FCC Part 15, Subpart J, Class A
	Germany	VDE 0871/6.78 Level B
	International	EN 55022, (CISPR 22) Class B
Ergonomics Standards	**International**	ZH1/618 10:80 ; MPR2 1990:8; 1990-12-01
Environmental	**Temperature**	0°C to 55° C
	Humidity	15% to 95% RH
	Altitude	Up to 4600m
Warranty	**Standard**	One year onsite

HP 700/RX Ordering Information

The HP 700/RX family of X stations can be tailored to meet your needs.
Use the following charts to help you order.

Step 1

Choose the model you need, with or without a bundled monitor.
You must order one part number.

HP 700/RX Family Description				
Display	Performance	Monitor	Model	Order
Color	High	19" (A2094A/B)	19Cs	P/N C3226A
		19" (A1097C/D)	19Ca	P/N C2711A
		17" (C2745A)	17Cs	P/N C3228A
		17" (A2287A/B)	17Ca	P/N C2710B
		No Monitor	Ca Base*	P/N C2709A
	Medium	17" (A2287A/B)	17Ci	P/N C2706B
		15" (D1196A/B)	15Ci	P/N C3227A
		14" (D1195A/B)	14Ci	P/N C2705A
		No Monitor	Ci Base*	P/N C2704A
Grayscale	High	19" (98774A/B)	19 Ga	P/N C2749A
		No Monitor	Ca Base*	P/N C2709A
Monochrome	High	19" (98774A/B)	19Mi	P/N C2702B
		No Monitor	Mi Base*	P/N C2701B

All models come standard with a PS/2 keyboard (PC 101 Layout, P/N C1405/B), a PS/2 3-button mouse (P/N 1150-1835), and a 3-conductor monitor cable (P/N C2300-60005), two power cords, and documentation.

* If you choose an HP 700/RX base model, you have the option of using one of the following supported monitors.

Monitors from other vendors should work if they support the same resolutions and refresh rates indicated on the opposite table. Monitors not supporting sync-on-green will require separate ordering of a 5-conduct or monitor cable (order part number D1191A). All of the monitors listed on the right support sync-on-green.

Monitor Characteristics			Supported on HP 700/RX Models			
Size	Resolution	Refresh Rate	Ca	Ci	Mi	Part Number
20" color	1280 x 1024	multi-sync	S	—	—	P/N D1187A
19" color	1280 x 1024	60 Hz	S	—	—	P/N 98754A
19" color	1280 x 1024	72 Hz	S	—	—	P/N A1097C/D
19" color	1280 x 1024	72 Hz	S	—	—	P/N A1097A/B
19" color Sony	1280 x 1024	72 Hz	S	—	—	P/N A2094A/B
19" color	1024 x 768	60 Hz	S	S	—	P/N 98753A
19" grayscale	1024 x 768	60 Hz	S	S	S	P/N 98778A/X
19" grayscale	1280 x 1024	72Hz	S	—	S	P/N 98774A/B
19" monochrome	1024 x 768	60 Hz	S	S	S	P/N 98778A/X
19" monochrome	1280 x 1024	72 Hz	S	—	S	P/N 98774A/B
17" color Sony	1024 x 768	75 Hz	S	S	—	P/N A2287A/B
17" color Sony	1280 x 1024	72 Hz	S			P/N C2745A
16" color	1024 x 768	60 Hz	S	S	—	P/N 98785A
16" color	1024 x 768	75 Hz	S	S	—	P/N A1497A/B
16" color	1280 x 1024	60 Hz	S	—	—	P/N 98789A
16" color	1024 x 768	multi-sync	S	S	—	P/N D1188A
15" color	1024 x 768	70 Hz	—	S	—	P/N D1196AB
14" color	640 x 480	60 Hz	—	S	—	P/N D1182A/B
14" color	1024 x 768	60 Hz	S	S	—	P/N D1195A/B
	640 x 480	60 Hz	—	S	—	P/N D1195A/B

S — Supported
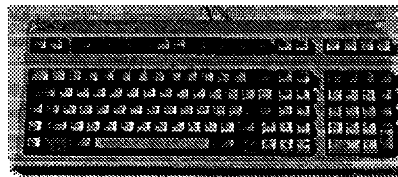
HP 700/RX Ordering Information

Step 2

Choose the keyboard language and power cord you need. For each HP 700/RX you order, you must specify the country code option you desire (for example option ABA). Select the option you require from the opposite list.

PS/2 (PC-101/102 layout)

HP 700/RX Localization Options		
Keyboard Language	Power Cord	Order
N. American English (C1405A/B #ABA)	N. American (8120-1378)	Option ABA
	European (8120-1689)	Option ABB
	Australian (8120-1369)	Option ABG
	Singapore/Hong Kong (8120-1351)	Option AB4
	U.K. (8120-1351)	Option ACC
	Swiss (8120-2104)	Option ACD
	Danish (8120-3997)	Option ACE
Belgian/Flemish (C1405A/B #ABW)	European (8120-1689)	Option ABW
French (C1405A #ABF)		Option ABF
German (C1405A/B #ABD)		Option ABD
Italian (C1405A/B #ABZ)		Option ABZ
Norwegian (C1405A/B #ABN)		Option ABN
European Spanish (C1405A/B #ABE)		Option ABE
Swedish/Finnish (C1405A/B #ABS)		Option ABS
Danish (C1405A/B #ABY)	Danish (8120-3997)	Option ABY
French Canadian (C1405A/B #ABC)	N. American (8120-1378)	Option ABC
Swiss German/French (C1405A/B #ABP)	Swiss (8120-2104)	Option ABP
U.K. English (C1405A/B #ABU)	U.K. (8120-1351)	Option ABU
N. American English (46021A)	Japanese (8120-4753)	Option ACF
Hangul (46021W-ZAB)	Korean (8120-1378)	Option AB1
Japanese (46021W-ZAL)	Japanese (8120-4753)	Option ABJ
Traditional Chinese (46021W-ZAA)	Taiwan (8120-1378)	Option AB0

Keyboards with the P/N C1405A/B are PS/2 style. Keyboards with the P/N 46021 are HP-HIL style. The HP 700/RX comes standard with a PS/2 3-button mouse and documentation.

You have the option of deleting the keyboard (option 1A2) and separately ordering the appropriate HP-UX localization kit with an HP-HIL keyboard. Just order part number A1099B and the country code option you desire from the

HP-HIL (ITF layout)

HP-UX Localization Kits with HP-HIL Keyboard	Order P/N A1099B
North American Series 700 Localization Kit	Option ABA
Canadian-French Series 700 Localization Kit	Option ABC
German Series 700 Localization Kit	Option ABD
European Spanish Series 700 Localization Kit	Option ABE
French Series 700 Localization Kit	Option ABF
Dutch Series 700 Localization Kit	Option ABH
Katakana Series 700 Localization Kit	Option ABJ
Latin Spanish Series 700 Localization Kit	Option ABM
Norwegian Series 700 Localization Kit	Option ABN
Swiss German Series 700 Localization Kit	Option ABP
Swiss French Series 700 Localization Kit	Option ABQ
Swedish Series 700 Localization Kit	Option ABS
United Kingdom Series 700 Localization Kit	Option ABU
Belgian-Dutch Series 700 Localization Kit	Option ABW
Finnish Series 700 Localization Kit	Option ABX
Danish Series 700 Localization Kit	Option ABY
Italian Series 700 Localization Kit	Option ABZ
ICON Series 700 Localization Kit	Option ABK
Taiwanese Series 700 Localization Kit	Option AB0
Korean Series 700 Localization Kit	Option AB1
Kanji Series 700 Localization Kit	Option AR0

These kits include HP-HIL cable, power cables, keyboard, mouse, and documentation.

Step 3

Choose the media you need for your host system server software. You must specify one host system part number and one media option when ordering.

Alternatively, you can order ROM-based X server software instead of the host resident X server software. One Flash ROM card must be ordered per HP 700/RX station.

Host X Server Software		Media Options Available				
Host System	Order	1/4" Cartridge	DDS Cartridge	CD ROM	8mm Tape	Floppy Disk*
HP 9000 Series 300/400	P/N C2715A	Opt. AA0 (HP format)	Opt. AAH	Opt. AAF	—	—
HP 9000 Series 700	P/N C2716A	—	Opt. AAH	Opt. AAF	—	—
HP 9000 Series 800	P/N C2724A	Opt. AA0 (HP format) Opt. AA4 (QIC-525)	Opt. AAH	Opt. AAF	—	—
Sun SPARCstation (OS/4)	P/N C2718A	Opt. AA4 (QIC-24)	—	Opt. AAF	—	—
HP Vectra 386/486 PCs SCO ODT†	P/N C2720A	Opt. AA4 (QIC-24)	—	—	—	Opt. AAD
IBM (AIX)	P/N C2723A	Opt. AA4 (QIC-150)	—	—	Opt. 008	—
HP 9000 Series 300/400 Kanji	P/N C2721A	Opt. AA0 (HP format)	Opt. AAH	Opt. AAF	—	—
HP 9000 Series 700 Kanji	P/N C2722A	—	Opt. AAH	Opt. AAF	—	—
HP 9000 Series 800 Kanji	P/N C2742A	Opt. AA0 (HP format) Opt. AA4 (QIC-525)	Opt. AAH	Opt. AAF	—	—
Sun SPARCstation (OS/4) Kanji	P/N C2719A	Opt. AA4 (QIC-24)	—	Opt. AAF	—	—

* 5 1/4" (1.2 MB) and 3 1/2" (1.44 MB) floppy disks included. †Santa Cruz Operation Open Desktop

ROM-based X11 Server Software	Order
4 MB Flash ROM cards for all models **	P/N C2725B

**Includes local clients such as mwm, hpterm and xterm, plus downloadable extensions, X server software and fonts.

If you want to receive regular updates to the X11 server software products listed above, you have the option of ordering **extended software support** services.

Host System	HP 700/RX Support Services	Ordering Information
HP Host X Server Software***	HP Support Line calls	Covered under existing HP-UX Response Line support contract
	HP Software Update Materials (includes software and manual updates)	Order H2014A+S00 and the appropriate media option (from the top table: for example Opt. AAF)
Non-HP Host X Server Software†††	HP Application Software Support for Non-HP Systems includes: – telephone access to the – HP Response Centre – access to HP Support Line – critical on-site assistance – the right to use the software updates	Order H2084A+H00 once, and order H2084A+H00-100 for each non-HP system that is running the HP 700/RX server software
	HP Software Update Materials for Non-HP Systems(includes software and manual updates)	For each non-HP system running the HP 700/RX server software, order:H2085A+S00, H2085A+S00-100, H2085A+S00—(fill in media option)

*** C2715A, C2716A, C2724A, C2721A. C2722A, C2742A   ††† C2718A, C2719A, C2720A, C2723A

HP 700/RX Ordering Information

If you want to receive regular updates to the X11 server software products listed above, you have the option of ordering **extended software support** services.

Clients	Minimum Memory Required
X server and host clients	4 MB (standard)
Memory intensive clients on color models	add 2 MB of memory
Local window manager	add 2 MB of memory
Local terminal emulators	add 2 MB of memory

Consult performance briefs for host memory requirements.

Total Memory Required	Method	Order
4 MB	All models come standard with 4 MB of memory: — 2 MB factory-installed — 2 MB SIMM user-installed (P/N C2321A)	(standard)
6 MB	Delete standard 2 MB SIMM and add one 4 MB SIMM	Option AN7 P/N C2322A
10 MB	Method 1: — delete standard 2 MB SIMM and — add one 8 MB SIMM	Option AN7 P/N C2323A
	Method 2: — delete standard 2 MB SIMM and — add a pair of 4 MB SIMMs	Option AN7 2 x P/N C2322A
18 MB	Delete standard 2 MB SIMM and add a pair of 8 MB SIMMs	Option AN7 2 x P/N C2323A

2 SIMM slots are available. Both slots must contain the same memory size.

Step 4

Determine your memory requirements for the HP 700/RX station.

If necessary, change the standard memory quantity by adding user-installed memory modules.

User Installable Memory	Order
2MB SIMM	P/N C2321A
4MB SIMM	P/N C2322A
8MB SIMM	P/N C2323A

Input Devices	Description	Order
Optional Mouse	HP-HIL 3-button	P/N 46060B
Optional Trackball	HP-HIL 3-button	P/N M1309A
Optional Tablet	HP-HIL A/B size	P/N 46087C/46088C
Optional Knob Box	HP-HIL 9-button	P/N 46085A
Optional Button Box	HP-HIL 32-button	P/N 46086A
Optional Barcode Devices	Wedge reader	LL390-100AA*
	Magstripe reader	MS-70*
	Laser scanner	LS2000*

*Tested to operate. Order directly from Symbol Technologies. Phone (516) 563-2400.

Recommended Cables	Order
Parallel Port cable	P/N 24542D
Serial Port cable	P/N 24542G
5-conductor monitor cable	P/N D1191A
Modem cable	P/N 24542M
AUI cable	P/N 92254E

Network Communications	Description	Order
Media Access Unit (MAU)	ThickLAN MAU	P/N 30241A
	EtherTwist MAU	P/N 28685B

Modems Tested	Description	Recommendation
V.32 bis V.42 bis	Tested SLIP under compression at the 38.4 kbps interface rate	For best performance, choose a modem that supports CCITT V.42

Step 5

Other Options
You have the option of ordering optional input devices, cables and Media Access Units (MAUs).

Other Products
HP's trade up programs assure that your investment is secure. Trade in an HP 700/X for the latest HP 700/RX station. With HP's trade up program, you can also receive a cash credit towards purchasing an HP 9000 workstation. Now, with TradeUP '93, HP offers a trade-in program that accepts the broadest range of workstations, PCs, and X terminals toward the purchase of new HP workstations and X stations.

HP Shared X Support
If you want to initiate and run HP SharedX from an HP 700/RX station, the HP SharedX software must be installed on a host computer. See the table to order the software and licenses you require.

HP 700/X		HP 700/RX Trade Up Products Available*		
700/X Monitor	700/X Part Number	Monochrome High-Performance (Model Mi XPU)	Color Mid-Range (Model Ci XPU)	Color/Grayscale High-Performance (Model Ca XPU)
17" Grayscale (98786A)	P/N C2302A	P/N C2712A (monochrome)	—	P/N C2714A (grayscale)
19" Grayscale (98788X/A)	P/N C2305A/B	P/N C2712A (monochrome)	—	P/N C2714A (grayscale)
14" Color (VGA) (D1182A/B)	P/N C2303A/B	—	P/N C2713A (color)	—
16" Color (med-res) (98785A)	P/N C2304A/B	—	P/N C2713A (color)	P/N C2714A (color)
19" Color (med-res) (98753A)	P/N C2307B	—	P/N C2713A (color)	P/N C2714A (color)

* You can reuse your existing keyboard, mouse, monitor and SIMM. This upgrade includes 2MB of factory-installed memory; a minimum of 2MB SIMM must be added for operation. Host X server software or ROM-based X server software must be re-ordered.
Note: The HP Trade Up Program allows you to trade in an HP 700/RX for a cash credit towards the purchase of an HP 9000 workstation. Ask your local HP rep for details.

	Order		
Description	HP-UX Series 300/400	HP-UX Series 700	HP-UX Series 800
HP SharedX for HP-UX			
License-to-use SharedX on any platform	P/N B2305L		
Single node licence	Option UA0		
License for up to 8 nodes	Option UA3		
License for up to 24 nodes	Option UA6		
License for up to 48 nodes	Option UA8		
License for up to 96 nodes	Option UAA		

Ask your local HP representative for details on HP SharedX.

Description	Order
PowerShade 3D graphics for rendering capabilities; e.g., lighting and shading	B2156A (HP-UX 8.07) B2156C (HP-UX 9.01)

United States:
Hewlett-Packard Company
4 Choke Cherry Road
Rockville, MD 20850
(301) 670-4300

Hewlett-Packard Company
5201 Tollview Drive
Rolling Meadows, IL 60008
(312) 255-9800

Hewlett-Packard Company
2015 South Park Place
Atlanta, GA 30339
(404) 955-1500

Hewlett-Packard Company
5161 Lankershim Blvd.
N. Hollywood, CA 91601
(818) 505-5600

Canada:
Hewlett-Packard (Canada) Ltd.
6877 Goreway Drive
Mississauga Ontario L4V 1M8
(416) 678-9430

Europe/Africa/Middle East:
Hewlett-Packard S.A.
Central Mailing Department
P.O. Box 529, 1180 AM Amstelveen
The Netherlands
(31) 20/547 9999

Australia/New Zealand:
Hewlett-Packard (Australia) Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia
(03) 895-2895

Japan:
Yokogawa-Hewlett-Packard Ltd.
29-21 Takaido-Higashi, 3-chome
Suginami-ku, Tokyo 168
(03) 331-6111

Far East:
Hewlett-Packard (Asia) Ltd.
Bond Centre, 22nd Floor
West Tower Queensway, Central
Hong Kong
(5) 848-7777

Latin America:
Hewlett-Packard de Mexico
Sp.A. de C.V. Monte Pelvoux No. 111
Lomas de Chapultepec
11000 Mexico, D.F. Mexico
(905) 596-7933

Other HP 700/RX Literature:
For more information on the HP 700/RX,
ask your local sales rep for the
following literature:

- HP 700/RX Family of X-Stations
  Brochure (5091-7057E)
- HP 700/RX X Window Solutions
  Catalogue (5952-2156)
- HP 700/RX Application Performance
  Briefs (ask your HP sales rep)

The information contained in this docu-
ment is subject to change without notice.

**For more information, contact any
of our worldwide sales offices or
HP Channel Partners (In the U.S.,
call 1-800-637-7740; in Canada,
call 1-800-387-3867).**