

Video Solutions That Enhance Your View

**HP Video
Products**

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**Printed in U.S.A. M0692
P/N 5091-3911EUS**



Expand Your Range of Vision

With today's demanding graphics applications—and today's concerns for ergonomics—selecting PC video products is just as important as selecting your PC. From entry-level office applications to graphics-intensive environments such as Windows and CAD, Hewlett-Packard can help you complete your computing solution with video monitors and accessory boards. All at competitive prices, because high-quality video is no longer a luxury; it's a necessity.

See the Difference

Together, HP Vectra PCs, monitors, and video accessory boards create a high-quality solution that enhances your work. They offer you fast video processing, the ability to fit more information on the screen, crystal-clear displays, and colors that make reading easy.

Plus HP answers your concerns about creating a more comfortable computing environment. By reducing low-frequency emissions, alleviating eyestrain with flicker-free operation, and offering tilt and swivel bases for viewing comfort.

Depend on HP

One of the most important qualities of all the HP video solutions isn't written in the specifications. It's HP quality and reliability—and it's built into every product we make, so you can depend on every part of an HP computing solution.

With video products tuned to your applications, plus the latest ergonomic features, HP video products help bring clarity and comfort to your personal computing environment.

Text Intensive



HP D1192A
(14-inch)



HP D1194A
(14-inch)



HP D1195A
(14-inch)



HP 1193A
(17-inch)



HP D1187A
(20-inch)

▼ New!

Graphics Intensive

Choose your level of video performance

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

HP Monochrome Display

Industry-standard VGA for text and LAN server applications

Graphics
Intensive

HP D1192A

The HP Monochrome VGA Display offers industry-standard VGA resolution on an easy-to-read, page-white display. It is ideal for text-intensive tasks such as word processing, as well as other applications for which color is not required. In addition, it is an excellent choice for most network server applications.



Features

- 14-inch flat screen, page-white display
- VGA compatibility
- 64 shades of gray in VGA mode
- Integrated tilt/swivel base
- Front panel brightness and contrast controls

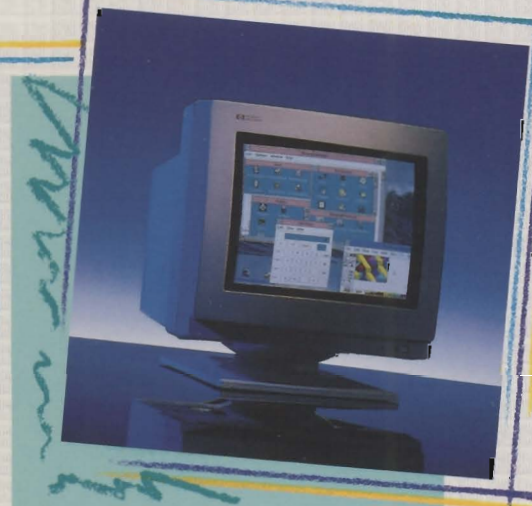
HP Super VGA Display

Color and Super VGA for office and entry-level CAD

Graphics
Intensive

HP D1194A

The HP Super VGA Display is a 14-inch, color display with an integrated tilt/swivel base. Designed for office professionals, users of Microsoft® Windows, and entry-level CAD users, it provides color, plus VGA and Super VGA resolutions at a competitive price.



Features

- 14-inch color Super VGA display
- VGA and Super VGA (800x600) resolutions
- Integrated tilt/swivel base
- Front panel brightness and contrast controls
- Supports an unlimited number of colors
- Wide-ranging power supply

Text
Intensive

Text
Intensive

HP Ergonomic Super VGA Display

Ergonomic features for office and entry-level CAD

HP D1195A

The HP Ergonomic Super VGA Display meets the needs of office PC and entry-level CAD users who desire ergonomic features. Supporting both VGA and Super VGA resolutions, it displays Super VGA at a 72-Hz refresh rate to provide flicker-free, clear images and to fit more information on the screen. This display complies with the stringent Swedish National Board for Measurement and Testing (MPR II) standards for low-emission monitors.

Features

- 14-inch color Super VGA Display
- VGA and 72-Hz Super VGA (800x600) resolutions
- Meets MPR II guidelines for reduced emissions
- Integrated tilt/swivel base
- Front-accessible controls
- Supports an unlimited number of colors
- Wide-ranging power supply

NEW! The HP Ultra VGA 17-inch Display

Ergonomics and high resolution for advanced office and CAD users

HP D1193A

The HP Ultra VGA Display, a multisync monitor that supports resolutions from standard VGA (up to 640x480) to Ultra VGA (1024x768) noninterlaced, is ideal for advanced office and CAD users. It offers high resolution to fit more information on the screen, to alleviate eyestrain, a silica-coated flat-square tube to reduce glare, and a tilt/swivel base with front-accessible controls. It complies with the latest guidelines from the Swedish National Board for Measurement and Testing for low-frequency emissions (MPR II).

NEW!

Features

- 17-inch, flat-square tube
- Multisync display, supporting multiple resolutions at high refresh rates
- Meets MPR II guidelines for reduced emissions
- Integrated tilt/swivel base
- Front-accessible controls
- Supports an unlimited number of colors
- Wide-ranging power supply

Graphics
Intensive

Graphics
Intensive

Text
Intensive

Text
Intensive

HP 20-inch High-Resolution Color Display

Multisync, user-programmable video for graphics-intensive tasks

Graphics Intensive

HP D1187A

The HP 20-inch High-Resolution Color Display offers superior performance for graphical user interfaces, CAD, desktop publishing, and other graphics-intensive programs. HP's largest video monitor, it supports resolutions up to 1280x1024. The display meets the need for higher resolution and offers a larger screen.



Features

- 20-inch, multisync display
- Supports multiple resolutions from standard VGA (640x480) through 1280x1024 noninterlaced
- Supports an unlimited number of colors
- Front accessible controls for brightness and contrast
- Optional tilt/swivel base (HP D1189A)

HP Super VGA and Ultra VGA Boards

Enhanced graphics performance

HP D2382A

HP D2325A

HP's Super VGA Board complies with industry-standard VGA and Super VGA resolutions. With the latest drivers for the most popular graphics software, this board meets a range of needs from entry-level office users to LAN users. And the optional memory upgrade (HP D2383A) lets you run VGA (640x480) resolutions with 256 colors.

The HP Ultra VGA Board offers exceptional video performance for graphics-intensive applications such as Windows and AutoCAD™. It enhances overall system performance through hardware accelerators that relieve the CPU of common video processing functions. Offering the flexibility and power for ultimate video performance, the HP Ultra VGA Board displays resolutions up to 1024x768 noninterlaced, and supports ergonomic refresh rates up to 72 Hz for flicker-free operation. This board is upgradable to 1 Mbyte of video memory (HP D2326A) to give 256 colors in 800x600 and 1024x768 resolutions.



Text Intensive

Video Graphic Resolutions Compatibility Matrix

How to use this matrix:

HP supports the seven most commonly used industry-standard video modes, as shown in this table. To select a video solution, first refer to the column containing your PC or selected video card. Next, refer to the desired resolution

and refresh rate for your application. Then read across to select a compatible monitor. In addition, if you have an HP Vectra RS/25C, 486/25T, 486/33T, or 386/25 (Model 1) PC, you will need to select a video accessory board. Remember that your PC's integrated video solution or your video accessory board must match the resolution and refresh rate of your monitor.

For example if you require high resolution 1024x768 for your CAD or Windows application, and also desire ergonomic features, the table shows that you can use the HP Ultra VGA Board with the new HP Ultra VGA 17-inch Display.

	Systems & Accessory Boards					Monitors								
	Resolution	Colors	Refresh Rate Hz	Horizontal Scan Rate KHz	HP Super VGA Board (D2382A) and HP Vectra 386/25 ¹ PC	HP Ultra VGA Board (D2325A)	HP Vectra 386/16N, 386/20N, 386/25N PCs	HP Vectra 386s/20 PC	HP Vectra 486s/20, 486/25U, 486/33U, 486/50U, 486/66U PCs	HP Mono VGA Display ⁴ D1192A	HP Super VGA Display ⁵ D1194A	HP Ergonomic Super VGA Display ⁵ D1195A	HP Ultra VGA 17" Display ⁶ D1193A	HP 20" Hi-Res Display ⁶ D1187A
Standard VGA modes	640 x 480	16	60	31.5	•	•	•	•	•	•	•	•	•	•
Standard VGA modes	640 x 480	256	60	31.5	• ²	•	• ²	•	•	•	•	•	•	•
Ergonomic VGA	640 x 480	16	72	37.9	•	•	•	•	•	•	•	•	•	•
Ergonomic VGA	640 x 480	256	72	37.9	•	•	• ²	•	•	•	•	•	•	•
Super VGA	800 x 600	16	60	37.9	•	•	•	•	•	•	•	•	•	•
Super VGA	800 x 600	256	60	37.9	•	•	•	• ³	•	•	•	•	•	•
Ergonomic Super VGA	800 x 600	16	72	48.1	•	•	•	•	•	•	•	•	•	•
Ergonomic Super VGA	800 x 600	256	72	48.1	•	•	•	• ³	•	•	•	•	•	•
Hi-Res	1024 x 768	16	60	48.4	•	•	• ²	•	•	•	•	•	•	•
Hi-Res	1024 x 768	256	60	48.4	•	•	•	• ³	•	•	•	•	•	•
Ergonomic Hi-Res	1024 x 768	16	70	56.5	•	•	•	•	•	•	•	•	•	•
Ergonomic Hi-Res	1024 x 768	256	70	56.5	•	•	•	• ³	•	•	•	•	•	•
Hi-Res	1280 x 1024	256	60	64 Max	•	•	•	•	•	•	•	•	•	•

¹HP Super VGA board comes standard on all HP Vectra 386/25 PCs except model 1s. ²Requires 256-Kbyte Upgrade Kit (HP D2383B). ³Requires 516-Kbyte VRAM Upgrade Kit (HP D2326A). ⁴Supports up to 64 shades of gray in VGA mode. ⁵The display will support any number of colors, limited by the capabilities of your PC's video solution. ⁶This display supports any number of colors, limited by the capabilities of your PC's video solution. It supports horizontal scan rates from 30-64 KHz.

Features of the HP Video Displays

	HP Monochrome Display D1192A	HP Super VGA Display D1194A	HP Ergonomic Super VGA Display D1195A	HP Ultra VGA 17-inch Display D1193A	HP 20" High-Resolution Display D1187A
Power Source	90-132 V, 59-61 Hz 0.8A Max	90-264 V, 47-63 Hz 70W Max	90-264 V, 47-63 Hz 70W Max	88-135 V, 47-63 Hz 120 Max	100-120 or 220-240 V, 47-63 Hz 165W Max
Picture Tube	14-inch Non-glare, flat screen Paper-white phosphor	14-inch Direct etching P22 dark phosphor 0.28 mm dot pitch	14-inch Silica coated P22 dark phosphor 0.28 mm dot pitch	17-inch Flat square Silica coated anti-glare P22 phosphor 0.28 mm dot pitch	20-inch Silica coated anti-glare P22 phosphor 0.31 mm dot pitch
Input signals	R.G.B. Analog 15-pin D-Sub miniature	R.G.B. Analog 15-pin D-Sub miniature	R.G.B. Analog 15-pin D-Sub miniature	R.G.B. Analog 15-pin D-Sub miniature	Analog, RS343 5 BNC connectors
Horizontal Sync Vertical Sync	31.5 kHz 60/60/70 Hz	31.5 kHz and 37.9 kHz 50/60/70 Hz	31.5 kHz and 48.1 kHz 60/60/70/72 Hz	31.5 kHz through 60 kHz 50/60/70/72 Hz	30-64 kHz 50-90 Hz
Weight Dimensions (HxWxD)	8.0 kg (17.6 lbs)	13.0 kg (28.6 lbs)	13.5 kg (29.7 lbs)	19.3 kg (43.1 lbs)	31.6 kg (69.7 lbs)
Height	346 mm (13.6 in)	36.45 cm (14.35 in)	36.45 cm (14.35 in)	425 mm (16.7 in)	449 mm
Width	333 mm (13.1 in)	35.40 cm (13.94 in)	35.40 cm (13.94 in)	413 mm (16.3 in)	498 mm
Depth	340 mm (13.4 in)	38.98 cm (15.35 in)	38.98 cm (15.35 in)	433 mm (17.1 in)	534 mm
Regulations	UL listed, CSA, FCC Class B VCCI, DHHS, Vom/Mex	UL listed, CSA, FCC Class B DHHS 21 CFR, TUV EN60950 NEMKO, Seti, German PTB NOM, EN65022-B, Korean EMI VCCI, FTZ 1048/84 Class B SABS, ZH1/618	UL listed, CSA, FCC Class B DHHS 21 CFR, TUV EN60950 NEMKO, Seti, German PTB NOM, EN55022-B, Korean EMI VCCI, FTZ 1046/B4 Class B SABS, ZH1/618, MPR2 2.01-2.04	UL listed, CSA, FCC Class B DHHS 21 CFR, TUV EN60950 NEMKO, Seti, German PTB NOM, EN55022-B, Korean EMI VCCI, FTZ 1046/B4 Class B SABS, ZH1/618, MPR2 2.01-2.04	UL listed, CSA, TUV, NEMKO SETI, FCC Class A, VDE 0871 VCCI, German PTB ZH1/618

Features of the HP Video Accessory Boards

	HP Super VGA Board D2382A	HP Ultra VGA Board D2325A
VGA support	Yes	Yes
Video hardware accelerator	•	86C911 (\$3)
Video signal	Analog R.G.B.	Analog R.G.B.
Max resolution	800 x 600	1024 x 768
Max number of colors	256	256
Ergonomic refresh	•	up to 72 Hz
Standard memory	256 KB	512 KB VRAM
Maximum Memory	512 KB	1 MB VRAM
Interface	16-bit ISA	16-bit ISA

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Line of Vision

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video solutions can help put
more vision into your work.

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