

HEWLETT-PACKARD

HP Vectra CS Personal Computer

Data Sheet

Exceptional Value for the PC User

The Hewlett-Packard Vectra CS personal computer delivers exceptional value in integrated computing environments by providing high performance at an excellent price. It is just one member of HP's product line of high-quality, industry-compatible office workstations. This family includes a broad range of terminal and personal computer solutions for your systems environment.

Designed to support industry standards, the HP Vectra CS PC offers IBM® PC/XT compatibility—i.e., access to an extensive array of off-the-shelf software, third-party accessories and peripherals.

Even better, its power extends beyond your desktop—the HP Vectra CS PC is an excellent terminal or node on your computer network.

Perfect Partner for HP's Minicomputers and Networks

The HP Vectra CS PC is ideally suited for HP distributed computing environments. Every unit includes terminal emulation capabilities to provide the valuable link to HP's minicomputers and host-based resources such as high-speed printers and large databases. Even if you need information from another vendor's host computer,



Hewlett-Packard provides the communications link to tap those resources.

For shared filing, printing, and communications on a local area network (LAN), you can add an HP StarLAN adapter and software to the HP Vectra CS PC model of your choice.

With point-to-point, remote, or LAN connection, the HP Vectra CS PC makes a superb workstation in any integrated environment.

Perhaps, though, you only need a versatile, stand-alone PC to improve your personal productivity. The HP Vectra CS PC is still the right choice.

Entry System for Productivity

The HP Vectra CS PC is an excellent entry-level system for basic office tasks: word processing, spreadsheet analysis, graphics, file management, and data communications.

Its 7.16-MHz processor, fast memory data path (16-bit memory bus), and 640 Kbytes of standard memory make the HP Vectra CS PC a solid choice for these applications.

For your convenience, a serial port and a parallel port come standard with your system. Adding a printer, modem, or host connection doesn't require an optional card or consume a slot.

As your needs grow, the HP Vectra CS PC can keep up with you. It offers unsurpassed room for growth for an entry-level system. Seven expansion slots leave plenty of space for accessories. Three mass storage shelves accommodate up to two flexible disc drives and a hard disc.

For the first flexible disc drive in your HP Vectra CS PC, you can choose either the traditional 5.25-in., 360-Kbyte or the new high-capacity 3.5-in., 1.44-Mbyte drive. If you'd like, you can add a second drive of the same type, or you can have one 5.25-in. and one 3.5-in. for ease in moving data between formats.

Even with two flexible disc drives, you still will have enough space for an internal 20-Mbyte disc drive, which holds thousands of pages of information at your fingertips.

To satisfy individual preferences, HP offers a wide range of pre-assembled configurations. Whether you want only flexible disc drives or a hard disc, you can select the model that fits your needs best.

HP Vectra CS PC Configurations

All HP Vectra CS PCs come with 640 Kbytes of user memory, a flexible disc controller, a serial port, and a parallel port.

Model	Flexible disc size (Mbytes)	Hard disc (Mbytes)	Video adapter
Model 10, D1110A	5.25 inch (360 Kbytes)	none	none
Model 15,* D1115A	3.5 inch (1.44 Mbytes)	none	none
Model 16, D1116A	Two 5.25 inch (360 Kbytes)	none	VGA
Model 20, D1120A	5.25 inch (360 Kbytes)	20	none
Model 26, D1126A	5.25 inch (360 Kbytes)	20	VGA
Model 27,* D1127A	3.5 inch (1.44 Mbytes)	20	VGA

*Models 15 and 27 are orderable after July 1, 1988

Accessories for Speed and Power

In addition to the numerous 8-bit accessory cards available for the HP Vectra PC family, you can benefit from these accessories for the HP Vectra CS PC:

- **Fast hard-disc controller** with a 20-Mbyte disc drive enhances your overall system performance.
- **Expanded memory (EMS) adapter** allows you to work more efficiently with larger spreadsheets and databases.
- **8087 numeric coprocessor** boosts PC performance for your math-intensive tasks.
- **HP-HIL accessory interface** provides HP-HIL (Human Interface Link) support to connect an HP Mouse, HP Graphics Tablet, or HP Touch accessory.

Quality for Lasting Value

The name Hewlett-Packard is synonymous with excellence. HP's extensive testing and quality controls provide superior reliability, outstanding quality, and exceptional lasting value. A world-wide service organization is dedicated to keeping your equipment in first-rate condition, and HP's skilled support professionals provide valuable technical assistance and advice. With all of these advantages, it is understandable that in survey after survey, Hewlett-Packard has been consistently ranked first in customer satisfaction.



Features

System Processing Unit

- Passive backplane with eight 8-bit I/O slots
 - One slot reserved for CPU Board (required)
- Seven IBM PC/XT-compatible accessory slots
 - One slot reserved for hard disc controller (optional)
- Three half-height data storage shelves
 - Two suitable for flexible disc drives
- Optional keylock (HP 45986A) provides system security

CPU Board

- 8086-compatible 16-bit CMOS microprocessor running at 7.16-MHz clock rate, zero wait states
- 16-bit memory bus; 8-bit I/O bus
- 640 Kbytes of zero-wait-state memory
- Socket for Intel 8087 numeric coprocessor
- One serial port and one parallel port (9-pin RS-232 and Centronics)
- DIN keyboard interface
- Flexible disc controller
- Clock/calendar and system configuration in CMOS RAM with battery backup

Internal Memory

- 64 Kbytes of Read Only Memory (ROM) for system BIOS
- 640 Kbytes of Random Access Memory (RAM), the maximum that MS-DOS can directly address

Keyboard

- Detachable, typewriter-style, 101-key IBM PC/AT enhanced keyboard format with adjustable tilt
- Industry-standard DIN keyboard cable connector
- Full-travel, step-sculptured keys with tactile feedback and color-coded legends
- Separate numeric and cursor keypads

Data Storage

Internal

- 5.25-inch 360-Kbyte flexible disc drive (HP 45811A)
- 3.5-inch 1.44-Mbyte flexible disc drive (HP 45813A)
- 20-Mbyte hard disc subsystem (HP D1173A)
- 40-Mbyte internal tape backup mechanism (D1671A; available Third Quarter, 1988)

External

- 67-Mbyte 1/4-inch cartridge tape drive (HP 9144A), requires HP-IB disc/tape interface (HP 88500A)

Video

The HP Vectra CS PC supports the new high-performance HP Video Graphics Subsystem:

- HP Video Graphics Adapter (D1180A), compatible with software written for IBM MDA, CGA, EGA, VGA, and Hercules Graphics Card video standards. Order Option 1A7 (512 Kbytes video memory) for support of extended modes.
- HP Video Graphics Color Display (D1182A)

- HP Monochrome Video Graphics Display (D1181W, soft-white phosphor; D1181G, green phosphor; D1181A, amber phosphor)

System Software

- Microsoft® MS-DOS® 3.2 for the HP Vectra Personal Computer. Includes Personal Applications Manager, File Manager, Multiple Character Set Utilities, and Multi-Voluming Utility (HP 45951B, 5.25-inch discs; HP 45951C, 3.5-inch discs)
- Microsoft® MS-DOS 3.3 for the HP Vectra Personal Computer. Includes Personal Applications Manager, File Manager, Multiple Character Set Utilities, and Multi-Voluming Utility (HP 45951D, 5.25-inch discs; HP 45951E, 3.5-inch discs) (available Summer 1988)
- Microsoft® Windows for the HP Vectra PC Version 2.0 (HP 45954B, 5.25-inch discs; HP 45954C, 3.5-inch discs)

Terminal Emulation

- HP Terminal program included with each HP Vectra CS PC
- HP Terminal ROM Card (HP 24531A)

Documentation

- HP Vectra CS PC Technical Reference Manual (HP D1100-90001)
- Microsoft MS-DOS 3.2 Programmer's Reference Manual (HP 5061-8971)

Accessories

HP Vectra CS Expanded Memory Card (HP D1174A)

- Option 001: 1 Mbyte EMS card
 - Option 002: 2 Mbyte EMS card
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8087 Numeric Coprocessor (HP D1172A)

- Intel 8087 coprocessor
 - Operates at 7.16 MHz
 - Plugs into socket on the CPU board (does not require an I/O slot)
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20-Mbyte Hard Disc Subsystem (HP D1173A)

- 20-Mbyte hard disc mechanism
 - Fast hard disc controller
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HP-HIL Accessory Interface (HP D1171A)

- Supports HP-HIL devices such as HP Touch, HP Graphics Tablet, HP Mouse
 - Does not support any HP-HIL keyboard
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HP-HIL Input Devices

All HP-HIL devices require the Vectra CS HP-HIL Accessory Interface (HP D1171A)

- HP Mouse (HP 46060A)
- HP Graphics Tablet (HP 45911A)
- HP Touchscreen Plus (HP D1183A)

Note: For HP Color Video Graphics Display (HP D1182A) only

- Barcode reader (HP 92916A)
 - A-size digitizer (HP 46087B)
 - B-size digitizer (HP 46088B) compatible
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Physical Characteristics:

System Weight: (not including keyboard or monitor) 29.4 lbs. (13.3 kg)

System Dimensions: 16.7 in. wide × 15.4 in. deep × 6.3 in. high (42.5 cm × 39.0 cm × 16.0 cm)

System Footprint: 1.8 sq. ft. (0.17 m²), without keyboard.

Keyboard Dimensions: 18.4 in. wide × 7.8 in. deep × 1.4 in. (2.2 in.) flat (standing) position (46.8 cm × 19.8 cm × 3.4 cm)

Keyboard Weight: 4.2 lbs. (1.9 kg)

Environmental Conditions

- Operating temperature: 41°F to 104°F (5°C to 40°C)
- Non-operating temperature: -40°F to 158°F (-40°C to 70°C)
- Humidity: 15 to 80% (non-condensing)
- Operating altitude: 15,000 ft. (4.6 km)
- Non-operating altitude: 50,000 ft. (15.2 km)

Note: Operating temperature and humidity range may vary with data storage media.

Input Voltage

- Auto-ranging power supply
 - 90 to 132V lower range over 47 to 63 Hz
 - 198 to 264V upper range over 47 to 63 Hz
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Power Consumption

- 465W (487W) maximum with 110V (220V), convenience outlet used at 150W
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Heat

- 710 BTUs/hour maximum
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Power Availability

- 176W peak for 10 sec. duration, 134W continuous
 - Accessory cards: 9.0A at 5V; 0.39A at 12V; 0.25A at -5V, 0.25A at -12V
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Regulatory Compliance

Radio Frequency Interference

- FCC Class B
- FTZ 1046/84 Level B (Manufacturer's Declaration)
- SABS approval
- VCCI approval

Safety Approvals

- UL Listed
- CSA, TUV Certified
- NEMKO, FEI Approved
- IEC 380/435 Compliance

Datacomm

- Germany, Finland, Belgium, UK and Nordic Network - pending
- Australian Telecom Category A License

Ergonomics

- Complies with German Standard ZH1/618
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