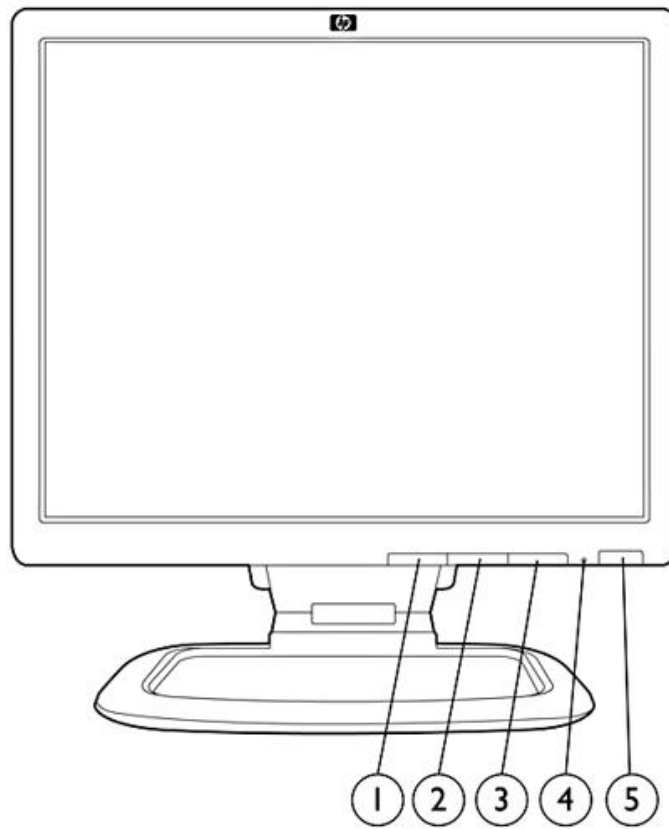


## Technical Specifications

### Overview

#### HP L1950 Flat Panel Monitor



1. Menu/Select
2. "-" OSD Navigation/Auto Adjust
3. "+" OSD Navigation/Input Select

4. Power LED
5. Power

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### Models

Part Number: GG458AA

### Technical Specifications

<b>Panel</b>	<b>Type</b>	Active matrix, thin film transistor (TFT)
	<b>Viewable Image Area</b> (diagonal)	19 in (48.25 cm)
	<b>Screen Opening</b> (WxH)	14.9 x 11.9 in (37.8 x 30.3 cm)
	<b>Viewing Angle</b> (typical)*	Up to 160° horizontal/160° vertical (10:1 contrast ratio)
	<b>Brightness</b> (typical)*	300 nits (cd/m <sup>2</sup> )
	<b>Contrast Ratio</b> (typical)*	800:1
	<b>Response Time</b> (typical)*	5 ms (rise + fall)
	<b>Pixel Pitch</b>	0.294 mm
	<b>Backlight Lamp Life (to half brightness)</b>	40K hours
	* All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.	
<b>Video/Other Inputs</b>	<b>Plug and Play</b>	Yes (supports VESA DDC2B and DDC/CI; PC2001 compliant)
	<b>USB 2.0 Hub</b>	Self-powered; two ports (cable included)
	<b>Input Signal</b>	Two connectors: one 15-pin mini D-sub analog VGA and one DVI-D
	<b>Input Impedance</b>	75 ohms ± 2%
	<b>Sync Input</b>	Separate sync (HSYNC/VSYNC)
	<b>Video Cable</b>	15-pin D-sub mini connector; detached
	<b>Video Cable Length</b>	70.9 in/1.8 m; detached
<b>Signal Interface/ Performance</b>	<b>Horizontal Frequency</b>	24 to 83 kHz
	<b>Vertical Frequency</b>	50 to 77 Hz
	<b>Native Resolution</b>	1280 x 1024 @ 60 Hz (analog) 1280 x 1024 @ 60 Hz (digital)
	<b>Max Resolution (Analog)</b>	1280 x 1024 @ 75 Hz
	<b>Max Resolution (Digital)</b>	1280 x 1024 @ 75 Hz
	<b>Preset VESA Modes</b> (non-interlaced)	640 x 480 @ 60 Hz, 72 Hz, 75 Hz
		720 x 400 @ 70 Hz
		800 x 600 @ 60 Hz, 72 Hz, 75 Hz
		1024 x 768 @ 60 Hz, 70 Hz, 75 Hz
		1280 x 1024 @ 60 Hz, 75 Hz
	<b>Preset MAC Mode</b>	832 x 624 @ 75 Hz
		1152 x 870 @ 75 Hz
		1152 x 900 @ 76 Hz
	<b>Preset SUN Mode</b>	1152 x 900 @ 76 Hz
<b>Fail Safe Mode</b>	Yes (limits out of range signal messages)	
<b>Max Pixel Clock Speed</b>	140 MHz	
<b>User Programmable Modes</b>	Yes, 15	
<b>Anti-Glare</b>	Yes	
<b>Anti-Static</b>	Yes	

### Technical Specifications

	<b>AssetControl</b>	Yes (accessible on HP Compaq Business Desktops featuring HP Client Manager)										
	<b>Default Color Temperature</b>	6500° Kelvin										
<b>On Screen Display (OSD) Controls</b>	<b>Buttons and Switches</b>	3-button OSD (menu, minus, plus); power on/off; second level OSD buttons include dual-input switch, auto-adjust										
	<b>Languages</b>	English, Spanish, French, German, Dutch, Italian, Simplified Chinese, Japanese										
	<b>User Controls</b>	Size and positioning, contrast, brightness, clock, clock phase, selectable color temperature, serial number, mode displayed, sleep timer, input selection, factory reset, individual color contrast, full-screen resolution										
<b>Power</b>	<b>Power Supply</b>	Auto-ranging, 90 to 265 VAC; internal power supply										
	<b>Input Power</b>	100 ~ 240 VAC										
	<b>Nominal Current</b>	1.5 A maximum										
	<b>Frequency</b>	50 ~ 60 Hz										
	<b>Average</b>	30 watts										
	<b>Power Saving Mode</b>	< 2 watts										
	<b>Off Mode</b>	< 1 watts										
	<b>Power Cable Length</b>	74.8 in (1.9 m); detached										
<b>Mechanical</b>	<b>Dimensions (H x W x D)</b>	<table border="0"> <tbody> <tr> <td>Packaged</td> <td>22.2 x 16.5 x 9.0 in (56.5 x 42.0 x 22.6 cm)</td> </tr> <tr> <td>Unpacked with stand (minimum)</td> <td>14.9 x 16.30 x 11.9 in (37.8 x 41.4 x 30.1 cm)</td> </tr> <tr> <td>Unpacked with stand (maximum height)</td> <td>20.0 x 16.3 x 11.9 in (50.8 x 41.4 x 30.1 cm)</td> </tr> <tr> <td>Base area (footprint)</td> <td>11.85 x 11.5 in (30.1 x 29.3 cm)</td> </tr> <tr> <td>Panel only (without stand)</td> <td>16.3 x 13.7 x 2.3 in (41.4 x 34.7 x 5.8 cm)</td> </tr> </tbody> </table>	Packaged	22.2 x 16.5 x 9.0 in (56.5 x 42.0 x 22.6 cm)	Unpacked with stand (minimum)	14.9 x 16.30 x 11.9 in (37.8 x 41.4 x 30.1 cm)	Unpacked with stand (maximum height)	20.0 x 16.3 x 11.9 in (50.8 x 41.4 x 30.1 cm)	Base area (footprint)	11.85 x 11.5 in (30.1 x 29.3 cm)	Panel only (without stand)	16.3 x 13.7 x 2.3 in (41.4 x 34.7 x 5.8 cm)
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	<b>Bezel Width</b>	18 mm left and right, 18 mm top, and 27 mm bottom										
	<b>Tilt Range</b>	-5° to +35°										
	<b>Swivel Range</b>	± 45° horizontal swivel										
	<b>Height Adjustable</b>	Yes (5.1 in/13.0 cm adjustment range)										
	<b>Pivot Rotation</b>	Yes, 90° into portrait orientation										
	<b>Base</b>	Ships attached and is removable (four screws)										
<b>Environmental</b>	<b>Temp. – Operating</b>	41° to 95° F (5° to 35° C)										

### Technical Specifications

Temp. – Non-operating	-4° to 140° F (-20° to 60° C)
Humidity – Operating	20% to 80%, non-condensing
Humidity – Non-operating	5% to 90%
Altitude – Operating	0 to 12,000 ft (0 to 3,658 m)
Altitude – Non-operating	0 to 40,000 ft (0 to 12,192 m)

### Options

**HP Silver Flat Panel Speaker Bar – Part number: EE418AA** Powered directly by the monitor or PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP flat panel monitors. Features include dual speakers with full sound range and external jack for headphones. Sold separately. For more information, refer to the HP Silver Flat Panel Speaker Bar QuickSpec.

**HP Compaq dc 7800 Series Ultra-slim Desktop Integrated Work Center Stand – Part number: GN783AA** Allows mounting of a 17- or 19-inch HP flat panel monitor and an HP Compaq dc7800 Ultra-slim Desktop PC on a single stand for the convenience of an "all-in-one" form factor. Sold separately. For more information, refer to this product's QuickSpec document.

**HP Flat Panel Monitor Quick Release – Part number EM870AA<sup>i</sup>** An easy-to-use, VESA-compliant, flat panel monitor mounting solution that allows you to quickly and securely attach a flat panel monitor to a variety of stands, brackets, arms or wall mounts. For more information, refer to this product's QuickSpec document.

### Other

#### Accessories Included Software

VGA cable, AC power cord, USB cable, user CD-ROM

HP Display LiteSaver feature allows you to schedule Sleep mode at preset times to help protect the monitor against image retention, drastically lower power consumption and energy costs, and extend the lifespan of the monitor.

HP Display Assistant is a software utility that allows monitor adjustment and color calibration using the Display Data Channel Command Interface (DDC/CI) protocol of the connected PC.

#### User Guide Languages

English, French, German, Spanish, Italian, Dutch, Brazilian Portuguese, Danish, Finnish, Greek, Japanese, Korean, Latin American Spanish, Norwegian, Polish, Russian, Slovenian, Turkish, Swedish, Traditional Chinese, Simplified Chinese

#### Warranty Languages

English, Canadian French, LA Spanish, Brazilian Portuguese, Danish, German, Castilian Spanish, French, Italian, Dutch, Norwegian, Finnish, Swedish, Bahasa Indonesian, Korean, T. Chinese, Simplified Chinese

#### Cabinet Color

Carbonite black and silver (two-tone)

#### VESA Mounting Support

Yes (standard 4 hole pattern, 100 mm); base must first be removed

#### Kensington Lock

Yes

### Certification and Compliance

Australian ACA Approval, Canadian Requirements/CSA, CE Marking, China CCIB/CCEE Approval, CISPR Requirements, Eastern European Approvals, Energy Star Compliant, FCC Approval, German Ergonomic (TUV and GS Mark), ISO 13406-2 Compliant (Pixel Defect Guidelines), Mexican NOM Approval, MPR-II Compliant, PC2001 Compliant, PC99 Certified, S. Korean MIC Approval, Taiwan BSMI Approval, TCO 03 (emissions, ergonomics, environment), TUV-Ergo, UL Listed, VCCI Approvals, Microsoft® Windows® Certification, Windows Vista™ Certification

### Technical Specifications

<b>Compatibility</b>	VESA Video Signal Standard (VSI) Compliant video cards have been tested and proven compatible for use with the HP L1950 Flat Panel Monitor. Recommended for use with HP products.
<b>Service and Warranty</b>	Three years parts, labor, and on-site service. 24-hour, 90-day, toll-free technical support. Replacement options may include second business day on-site service, or next business day direct replacement, at HP's sole discretion. With direct replacement, HP will ship a replacement display product directly to you. Using the prepaid shipping labels provided, return your failed display to HP in the same packaging as the replacement. Certain restrictions and exclusions apply. For details see your product warranty or contact HP Customer Support.

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<sup>i</sup> The HP Flat Panel Monitor Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) depending upon the mounting configuration used. Please note this is a total weight limit for all devices mounted, i.e. the combined weight of the monitor and a second device such as the HP Compaq t5000 Series Thin Client cannot exceed 24 pounds. Because mounting surfaces vary widely and the final mounting method and configuration may vary, mounting fasteners are not supplied (other than the VESA-compliant screws). HP recommends that you consult with a qualified engineering, architectural or construction professional to determine the appropriate type and quantity of mounting fasteners required for your application and to ensure that your mounting solution is properly installed to support applied loads.