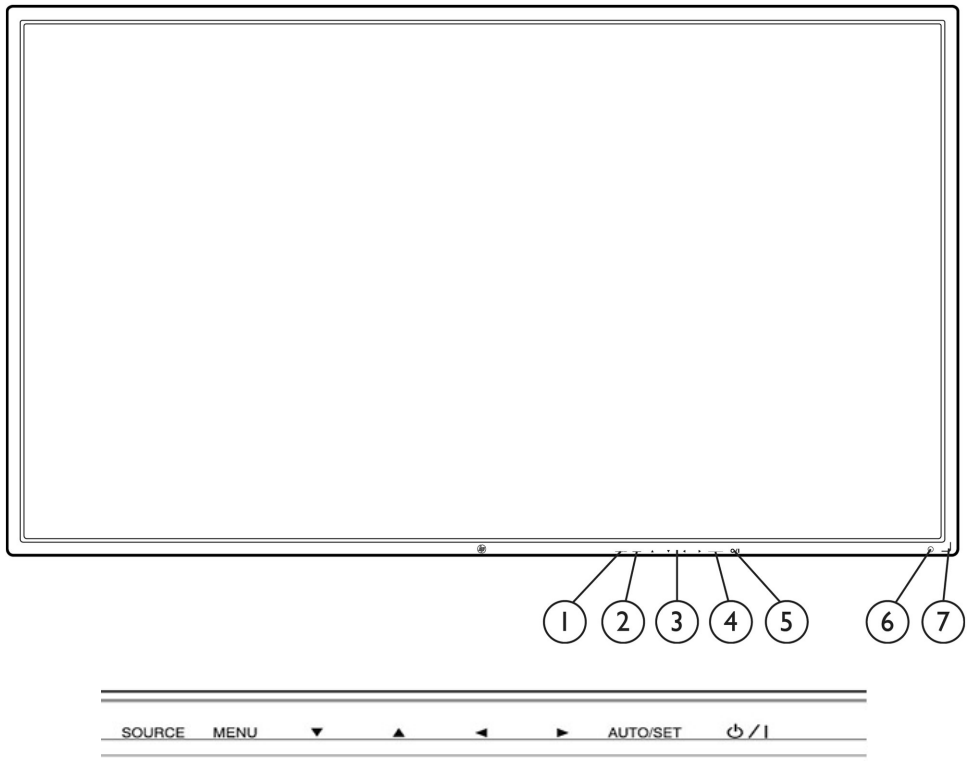
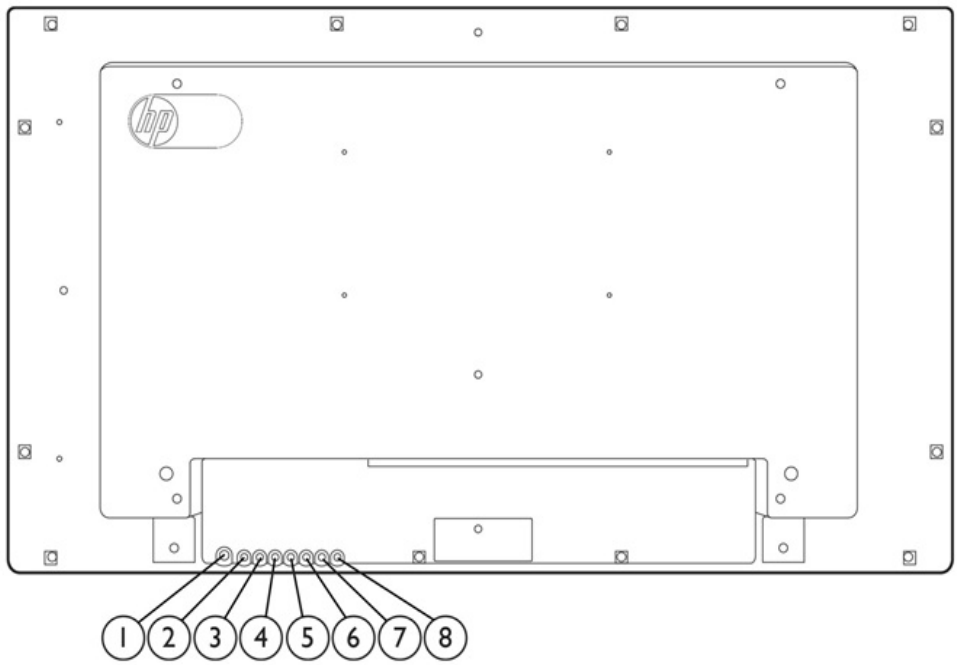
Overview



1. **SOURCE** Source: Toggles between video inputs:
   - RGB PC - VGA or 15-pin D-Sub analog signal
   - HDMI/DVI - Digital signal
   - DisplayPort (DP) - Digital signal
2. **MENU** Menu: Opens or closes the OSD (On-screen Display) menu screen.
3. **OSD** OSD select/adjust buttons: Selects an OSD menu icon or adjusts the settings in the OSD screen. (▼▲ Adjusts up and down; ◄► Adjusts the volume)
4. **AUTO/SET** Auto/Set: When OSD window is closed, activates the auto adjustment feature to optimize the screen image. When OSD window is open, press to select a menu item or save changes.
5. **Power** Press to turn on the power. Press again to turn it off.
6. **IR receiver** Receives signals from the remote control. Located under bottom bezel.
7. **Power indicator** Lights up blue when the display operates normally (on mode). If the display is in sleep (Energy Saving) mode, the indicator color changes to amber. Located under bottom bezel.

Overview



OSD Buttons on back of display

1. On/Off
2. Auto/Set
3. ▲Up
4. ▼Down
5. ◄Left
6. ▼Right
7. Menu
8. Source

At a Glance

- 1920 x 1080 native resolution supporting 1080p (Full HD)
- Landscape and portrait wall mounting positions
- Video inputs support HDMI In, DisplayPort In/Out, RGB In/Out, and RS-232-C In/Out signal inputs
- LAN port for remote display control and controlling the HP Media Sign Player
- HP Media Sign Player-Play image, video, and music files from a USB storage device, define play list, timing options, scheduling
- USB port for the HP Media Sign Player
- Screen adjustment buttons (Power On/Off, AUTO/SET, OSD Controls, MENU, and SOURCE) on the back of the display
- User controls to adjust Picture, Tile Mode, Timer, Energy Saving, Aspect Ratio, Audio, and additional setup options
- HP Network Sign Manger - management software which runs on any network connected media player or PC and enables central site control and management of all network attached or serial attached HP LD4220tm displays. With HP Network Sign Manager, you can adjust all the display settings and play media files stored in the USB device. It also allows you to organize and manage network attached displays in groups, such as all the displays within a building or campus.
- Security cable provision on rear panel to lock down the display and help prevent theft
- Support VESA compliant mounting interface with 600 x 400 mm (23.62 x 15.75 in) hole pattern
- Audio input jack and external speaker ports

Model

XH216AA

Technical Specifications

Panel	**Type**	**106,7 cm** (42-inch) diagonal Wide-Aspect Active Matrix TFT (thin film transistor)
	Viewable Image Area	**106,7 cm** (42 in) widescreen; diagonally measured
	Screen Opening (W x H)	**93,3 x 52,6 cm** (36.74 x 20.7 in)
	Aspect Ratio	16:9
	Viewing Angle (typical)	Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	700 nits (cd/m^2)
	Contrast Ratio (typical)*	1200:1, Dynamic contrast ratio: 3000:1
	Response Time (typical)*	9 ms
	Pixel Pitch	0.4845 mm square
	Color Gamut	72% color gamut
	*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.	
On Screen Display (OSD) **Controls**	**Buttons or Switches**	Source, menu, OSD Select/Adjust, auto/set, power
	Languages	English, French, German, Spanish, Italian, Portuguese, Chinese, Japanese, Korean, Russian
	User Controls	Source selection, HP Media Sign Player, picture modes, tile modes, color temperature, aspect ratio, audio modes, auto volume, on/off time, key lock, ISM method, auto config., clock, phase
Signal Interface/ Performance	**Horizontal Frequency**	30 to 83 kHz
	Vertical Frequency	56 ~ 76 Hz (Analog); 56 ~ 61 Hz (Digital)
	Native Resolution	1920 x 1080 @ 60 Hz (Analog/Digital) (Full HD)
	Max Resolution	1920 x 1080 @ 60 Hz (Digital) 1920 x 1080 @ 60 Hz (Analog)
	Preset VESA Graphic Modes (non-interlaced)	1920 x 1080 @ 60 Hz 1680 x 1050 @ 60Hz 1600 x 900 @ 60Hz 1440 x 900 @ 60Hz 1280 x 1024 @ 60 Hz, 75 Hz 1280 x 720 @ 60 Hz 1024 x 768 @ 60 Hz, 75 Hz 800 x 600 @ 60 Hz and 75 Hz 640 x 480 @ 60 Hz and 75 Hz
	Text Mode	720 x 400 @ 70 Hz
	Mac Mode	832 x 624 @ 75 Hz
	Maximum Pixel Clock Speed	150 MHz

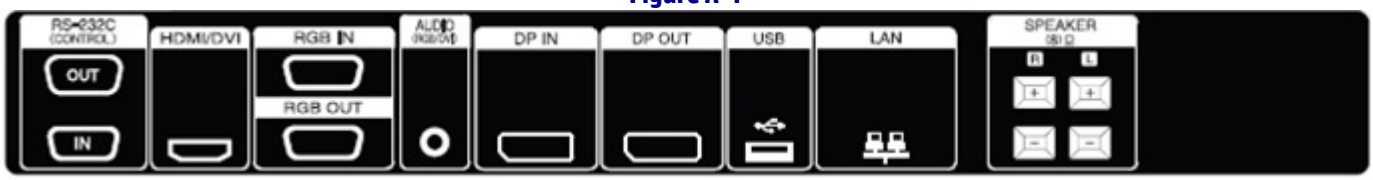
Technical Specifications

	User Programmable Modes	Yes, 10
	Anti-Glare	Yes
	Anti-Static	Yes
	Default Color Temperature	6500K
Touch specifications	**Positional Accuracy**	Typical centroid accuracy 0.06 in (1.5 mm)
	Touch-Sensitive minimum size	Touch : ø6mm Drawing : ø6mm
	Touch Activation Force	No minimum touch activation force
	Expected Life Performance	Over 60,000,000 single point touch
	Optical Light Transmission (per ASTM D1003)	Up to 89% (Visible Light 380~780nm)
	Chemical Resistance	The active area of the touchscreen is resistant to all chemicals that do not affect glass, such as: • Acetone • Toluene • Methyl ethyl ketone • Isopropyl alcohol • Methyl alcohol • Ethyl acetate • Ammonia-based glass cleaners • Gasoline • Kerosene • Vinegar
Video/ Other Inputs (see **Figure A-1** below)	**RS232C**	1 input and 1 output
	Input Signal	VGA (RGB), HDMI/DVI (can connect to DVI with optional adapter sold separately), DisplayPort (DP)
	Output	VGA (RGB) and DisplayPort (DP) out for tiling
	USB for use with HP Media Sign Player	USB connects a USB storage device to the HP Media Sign Player. HP Media Sign Player can play multimedia files (Photo, Music, and Movie) from a USB storage device (not included). See User Guide for more details on this function.
	NOTE: USB storage devices below USB 2.0 are supported as well, but they might not work properly. Not all media file formats are supported. See User Guide for more details.	
	LAN (RJ45)	1 input for remote control. Same commands as RS232.
	Audio	1 audio input jack, AUDIO (RGB/DVI) connects the audio cable to the Line Out on the media player/computer sound card.
	Speaker	Connects the external speakers (not included) to the display.
	Plug and Play	Yes
	Input Impedance	75 ohms ± 10%

Technical Specifications

	Sync Input	TTL separate sync	
	VGA Cable Length	**1,8 m** (5.9 ft)	
	HDMI Cable Length	**1,8 m** (5.9 ft)	
	DisplayPort Cable Length	**1,8 m** (5.9 ft)	

Figure A-1



Power	**Input Power**	Auto-Sensing, 100 to 240 VAC	
	Frequency	50/60 Hz	
	Typical Power Consumption	220 W	
	Maximum	250 W	
	Power Saving	Sleep: 2 W (HDMI / DisplayPort) and 1 W (VGA) Off: = 1 W	
	Power Cable Length	**1,9 m** (6.2 ft)	
Mechanical	**Dimensions** (H x W x D) See **Figures B-1 and B-2** below.	**Unpacked w/o stand** (feet) **or speakers** (head only)	**56.38 x 97.42 x 13.25 cm** (22.2 x 38.35 x 5.22 in)
	(with optional speakers attached)	**Unpacked w/speakers**	**56.38 x 97.42 x 13.25 cm** (22. 2 x 38.35 x 5.22 in)
	(with optional stand/feet) attached)	**Unpacked w/stand** (feet)	**63,70 x 97.42 x 25,86 cm** (25.1 x 38.35 x 10.18 in)
	(with optional stand/feet and speakers attached)	**Unpacked w/stand** (feet) **/speakers**	**63,70 x 97.42 x 25,86 cm** (25.1 x 38.35 x 10.18 in)
		Packaged	**70,0 x 108,0 x 28,5 cm** (27.6 x 42.5 x 11.2 in)
	Weight - maximum	**Unpacked w/o stand** (feet) **or speakers** (head only)	**25,9 kg** (57.03 lbs)
	(with optional speakers attached)	**Unpacked w/speakers**	**26,6 kg** (58.52 lbs)
	(with optional stand/feet attached)	**Unpacked w/stand** (feet)	**27,1 kg** (59.75 lbs)
	(with optional stand/feet and speakers attached)	**Unpacked w/stand** (feet) **/speakers**	**27,9 kg** (61.43 lbs)
		Packaged	**32,0 kg** (70.5 lbs)
	Tilt Range	None	
	Swivel Range	None	
	Height Adjustable	None	

Technical Specifications

	Pivot Rotation	None
	Base (feet)	Display Stand Kit sold separately

Figure B-1 HP LD4210 - Front and side view (shown with optional stand/feet and speakers)

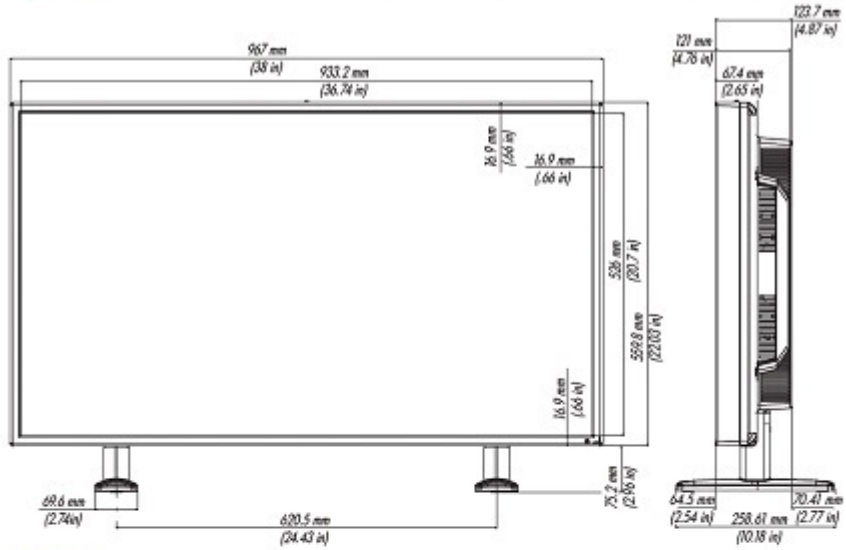
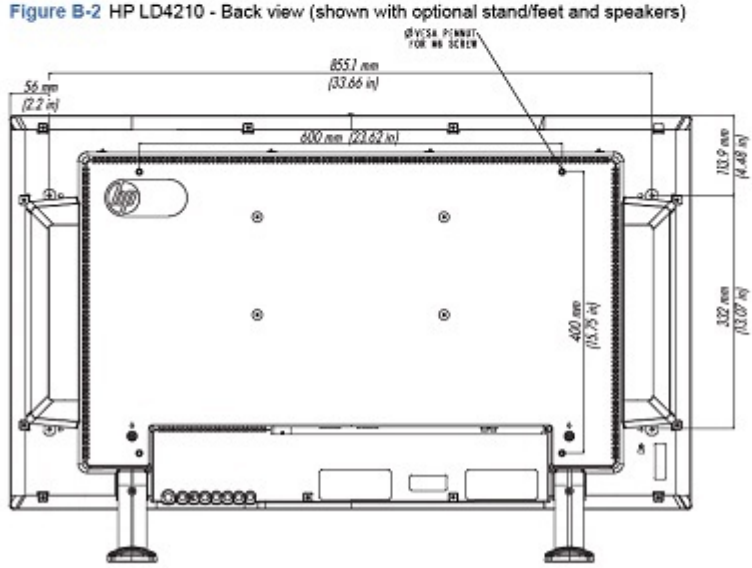


Figure B-2 HP LD4210 - Back view (shown with optional stand/feet and speakers)



NOTE: Stand (feet) and speakers shown above are optional and sold separately.

Environmental	**Temperature - Operating**	**0° to 35° C** (32° to 95° F)
	Temperature - Non-operating	**-20° to 60° C** (-29° to 140° F)
	Humidity - Operating	10% to 80% non-condensing
	Humidity - Non-operating	5% to 95%, 38.7° C max wet-bulb
	Altitude - Operating	**0 to 5000 m** (0 to 16,404 ft)

Technical Specifications

	Altitude - Non-operating	**0 to 12,192 m** (0 to 40,000 ft)
Environmental Data	**Eco-Label Certifications & declarations**	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks: • IT ECO declaration

Energy Consumption (in accordance with US ENERGY STAR® test method)

	115VAC, 60Hz	**230VAC, 50Hz**	**100VAC, 60Hz**
Normal Operation	163.7 W	159.6 W	166.5 W
Sleep	0.71 W	0.76 W	0.67 W
Off	0.39 W	0.43 W	0.38 W

Heat Dissipation*	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 60Hz**
Normal Operation	560 BTU/hr	546 BTU/hr	569 BTU/hr
Sleep	2.4 BTU/hr	3 BTU/hr	2.2 BTU/hr
Off	1.3 BTU/hr	1.4 BTU/hr	1.2 BTU/hr

* Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Additional Information	• This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2002/95/EC. • This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC. • This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986). • Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043. • This product contains 0% post-consumer recycled plastic (by wt.) • This product is 92.0% recycle-able when properly disposed of at end of life.	
Packaging Materials	**External:**	Paper 1964 g
	Internal:	Polyethylene high density 108 g
		EPP (Expanded Polypropolene) 360 g
RoHS Compliance	Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).	
Material Usage	This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at: http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html):	

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants - may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel - finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) - except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Packaging

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Technical Specifications

	Hewlett-Packard Corporate Environmental Information	For more information about HP's commitment to the environment: Global Citizenship Report http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html ISO 14001 certificates: http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html
Options (sold separately)	**HP Digital Signage Display Security Wall Mount-Part number WB975AA, WB976AA (EMEA)**	Attaches to the VESA mounting holes on the back of the display to hang the display in landscape or portrait orientation on a wall.
	42-inch Display Stand Kit (feet) -Part number XT655AA	The two-footed stand provides support for the digital signage display when used on a table top. Designed to help the display maintain stability when touched, the feet slide into to bottom of display and lock into place with included screws.
	HP Digital Signage Speakers-Part number NK352AA	Add a full range of sound (10 watts each) with these rear-facing speakers that discreetly attach to the rear of the display.
	HP Business PC Security Lock Kit-Part number PV606AA	Attaches to the rear of the display with a six-foot steel cable to protect it against unauthorized removal by physically connecting it to an anchor point.
Other	**Accessories Included**	Remote control, VGA cable, HDMI cable, DisplayPort cable, Power cable
	Software	HP Network Sign Manger - management software which runs on any network connected media player or PC and enables central site control and management of all network attached or serial attached HP LD4220tm displays. With HP Network Sign Manager, you can adjust all the display settings and play media files stored in the USB device. It also allows you to organize and manage network attached displays in groups, such as all the displays within a building or campus.
	User Guide Languages	Danish, Dutch, Finnish, French, German, Italian, Norwegian, Spanish, Swedish, Czech, Greek, Hungarian, Polish, Russian, Slovenian, Turkish, Arabic, B. Portuguese, Bahasa Indonesian, S. Chinese, T. Chinese, Korean, Japanese
	Warranty Languages	Danish, Dutch, Finnish, French, German, Italian, Norwegian, Spanish, Swedish, Czech, Greek, Hungarian, Polish, Russian, Slovenian, Turkish, Arabic, B. Portuguese, Bahasa Indonesian, S. Chinese, T. Chinese, Korean, Japanese
	Color	Black
	VESA External Mounting	Yes, 600 x 400mm 4-hole pattern
	Security Lock-Ready	Yes, one security slot available
Certification and Compliance	UL UL60950-1 First Edition, cUL CAN/CSA-C22.2 NO. 60950-1-03, NOM NYCE, TUV EN60950-1, PSE J60065 (H14), J55013 (H14), CCC GB4943, GB9254, GB17625.1, PSB IEC60950-1, TUV-S (Argentina) IEC60950-1, BSMI CNS13438, CNS14336, FCC CLASS B FCC 47 CFR Part 15 Class B, ICES-003 Class B, ICES-003 Class B, CE EN55022B, EN55024, EN61000-3-2, 3, VCCI VCCI-V-2 V-3 V-4, CISPR-22B, C-Tick AS/NZS3548:1995, KCC (Korean) Requirements, Korea Energy Boy, SmartWay - NA only - Energy logistics, EUP Lot 6 Tier 1, China Energy Label (CEL).	

Technical Specifications

Compatibility	Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.
Service and Warranty	Protected by HP, including a 3 year standard limited warranty. Optional Care Pack Services are extended service contracts which go beyond your standard warranties.1

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1 HP Care Pack Services extend service contracts beyond the standard warranties. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at http://www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at http://www.hp.com/hps/carepack.
All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.