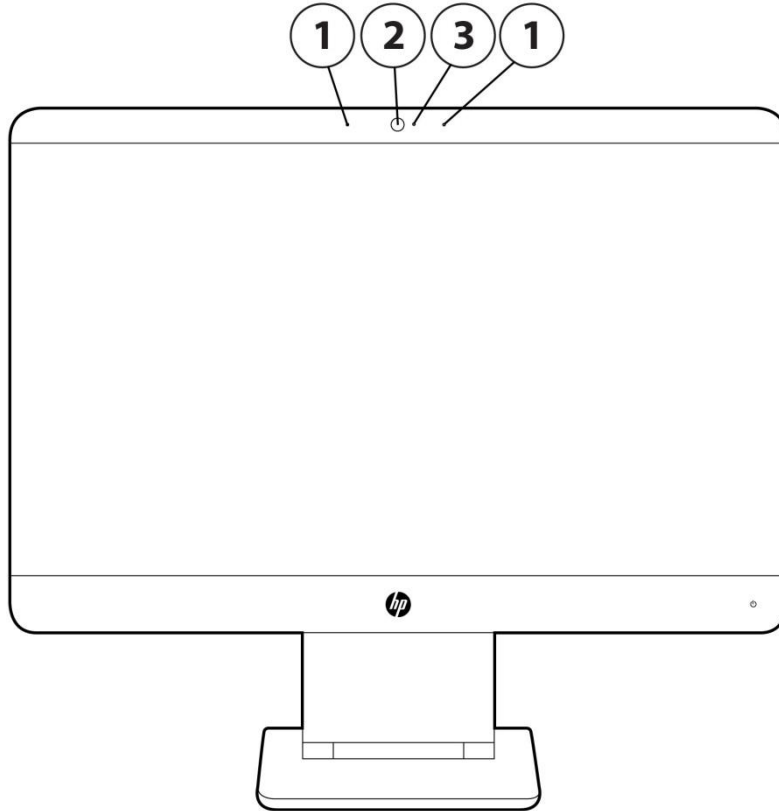


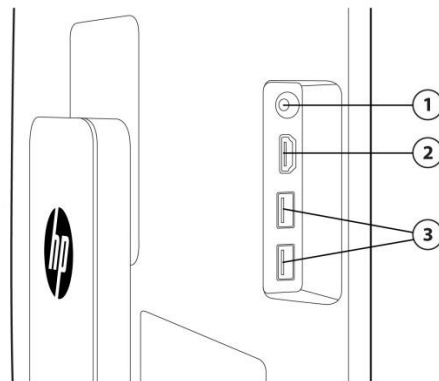
### Overview

### HP EliteDisplay S240ml 23.8-in IPS LED Backlit MHL Monitor



- 1. Microphones** Dual microphones
- 2. Webcam** 720p HD Webcam

- 3. Webcam LED** LED lights up when webcam is in use

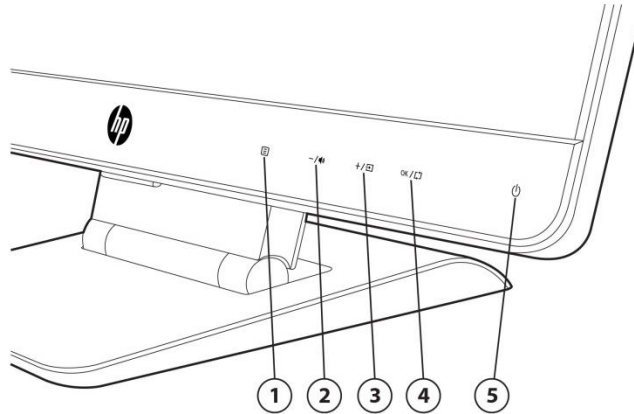


- 1. Audio out** For headset

- 3. USB 3.0 ports** Accessible connection for USB devices

### Overview

2. **HDMI/MHL connector** Supports MHL 2.0 connection with mobile devices



- |   |  |                          |   |
|---|--|--------------------------|---|
| <p>1. <b>Menu</b></p>                       | <p>Opens, selects or exits the OSD menu.</p>   | <p>4. <b>OK/Auto</b></p> | <p>If the OSD menu is on, press to select the highlighted menu item.<br/>If the OSD menu is inactive, press to activate the auto adjustment feature to optimize the screen image. The auto adjustment feature only functions if the active adjustment feature is VGA.</p> |
| <p>2. <b>Minus ("-") /Volume</b></p>        | <p>If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.<br/>If the OSD menu is inactive, press to adjust volume.</p>   | <p>5. <b>Power</b></p>   | <p>Turns the monitor on or off.</p>   |
| <p>3. <b>Plus ("+") / Input Control</b></p> | <p>If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.<br/>If the OSD menu is inactive, press to activate the source button that chooses the video signal input (DisplayPort, USB or VGA).</p> |                          |   |

### Overview

#### Model

F4M47AA

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#### Introduction

View your phone and tablet content on a bold, extra-large Full HD<sup>1</sup> IPS display that charges the devices with MHL. Switch to your PC for the complete HP EliteDisplay experience with advanced technology and integrated collaboration tools.

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#### Key Benefits

- Extend your visual workspace and instantly mirror your smart phone or tablet content and charge your devices through MHL.<sup>2</sup>
- Connect to the devices you use most with DisplayPort, HDMI, MHL, VGA, and USB, and meet online<sup>3</sup> with an integrated webcam, microphone, and speakers.
- Find your most comfortable viewing position with customizable adjustments and available wall or optional arm mounting.<sup>4</sup>
- The modern color palette, ultra-slim bezel, and slim design will grab your attention and the stunningly crisp Full HD<sup>1</sup> IPS viewing experience will keep it there.
- Design the screen for how you work with HP Display Assistant software.
- Reduce power consumption and help lower your costs with an intelligent, energy-efficient design that is ENERGY STAR<sup>®</sup> and TCO qualified and EPEAT<sup>®</sup> Gold registered.<sup>6</sup> The display also includes mercury-free display backlights, a low halogen design,<sup>7</sup> and arsenic-free display glass.
- Get award-winning service and support, and extend your protection with optional HP Care Packs.<sup>5</sup>

1. High-definition content required.

2. Requires the smart phone or tablet to be enabled for MHL or have an HDMI dongle to connect to the monitor. Some phones have implemented a unique 10 pin connector on the phone and require an adaptor to connect the HP supplied MHL cable to the phone. See your mobile device specifications.

3. Internet access required and sold separately.

4. Arm and VESA mounting hardware sold separately.

5. HP Care Pack Services are sold separately. Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. See [www.hp.com/go/cpc](http://www.hp.com/go/cpc) for details.

6. EPEAT<sup>®</sup> registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country.

7. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

### Technical Specifications

<b>Panel</b>	<b>Type</b>	IPS (In Plane Switching) LED Backlit LCD panel	
	<b>Viewable Image Area</b> (diagonal)	<b>60,45 cm</b> (23.8 in.) widescreen; diagonally measured	
	<b>Panel Active Area</b> (W x H)	<b>52,7 x 29,64 cm</b> (20.74 x 11.66 in)	
	<b>Aspect Ratio</b>	16:9	
	<b>Viewing Angle</b> (typical)	Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)	
	<b>Brightness</b> (typical)*	300 nits (cd/m <sup>2</sup> )	
	<b>Contrast Ratio</b> (typical)*	1000:1	
	<b>Dynamic Contrast Ratio</b> (typical)*	3,000,000:1	
	<b>Response Time</b> (typical)*	7 ms (gray to gray)	
	<b>Pixel Pitch</b>	0.2745 mm	
	<b>Backlight Lamp Life</b> (to half brightness)	30,000 hours	
	<b>Color Gamut</b> (typical)	72%	
	<b>Color Support**</b>	Can display up to 16.7 million colors	
<p>*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.</p> <p>** With the use of FRC technology.</p>			
<b>On Screen Display (OSD) Controls</b>	<b>Buttons or Switches</b>	Menu, Minus ("-")/Volume, Plus ("+") /Input Control, OK/Auto, Power	
	<b>Languages</b>	10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)	
	<b>User Controls</b>	Brightness, Contrast, Color, Image Control, OSD control, Management, Language, Information, Factory Reset, Input Control	
<b>Signal Interface/ Performance</b>	<b>Horizontal Frequency</b>	24 to 80 kHz	
	<b>Vertical Frequency</b>	50 to 60 Hz	
	<b>Native Resolution</b>	1920 x 1080 @ 60 Hz	
	<b>Preset VESA Graphic Modes</b> (non-interlaced)		1920 x 1080 @ 60 Hz
			1680 x 1050 @ 60 Hz
			1600 x 900 @ 60 Hz
			1440 x 900 @ 60 Hz
			1280 x 1024 @ 60 Hz
			1280 x 800 @ 60Hz
			1280 x 720 @ 60 Hz
		1024 x 768 @ 60 Hz	
	800 x 600 @ 60 Hz		
	720 x 400 @ 70 Hz		
	640 x 480 @ 60 Hz		

### Technical Specifications

	<b>Maximum Pixel Clock Speed</b>	170MHz	
	<b>User Programmable Modes</b>	Yes (10)	
	<b>Anti-Glare</b>	Yes, low haze	
	<b>Default Color Temperature</b>	Standard (6500K)	
<b>Video/Other Inputs</b>	<b>Plug and Play</b>	Yes	
	<b>Input Connectors (Video)</b>	(1) VGA (analog); (1) DisplayPort 1.2 (1) HDMI (1) MHL/HDMI HDCP support on digital inputs.	
	<b>Video Cables</b>	(1) VGA cable, (1) DisplayPort cable, (1) HDMI cable, (1) MHL cable	
	<b>Video Cable Length</b>	<b>1,8 m</b> (5.9 ft.)	
	<b>Audio</b>	(1) Audio in; (1) Headphone/line out Integrated 2W/channel speakers	
	<b>USB</b>	Yes; Integrated USB 3.0 hub with (3) Downstream and (1) Upstream ports	
	<b>Other Cables</b>	(1) Audio cable, <b>1,8 m</b> (5.9 ft.); (1) USB 3.0 cable, <b>1,8 m</b> (5.9 ft.)	
<b>Power</b>	<b>Webcam</b>	Built-in 720p HD Webcam w/ dual mic and LED	
	<b>Type</b>	External	
	<b>Input Power</b>	100 – 240 VAC, 50 – 60 Hz	
	<b>Typical Power Consumption</b>	35W	
	<b>Maximum</b>	65W	
	<b>Power Saving</b>	0.5W standby	
	<b>Power Cable Length</b>	<b>(1,9 m)</b> 6.2 ft, included	
<b>Mechanical</b>	<b>Dimensions (W x D x H)</b>	<b>Unpacked w/stand</b>	<b>54.03 x 23.94 x 50.36 cm</b> (21.27 x 9.43 x 19.83 in)
		<b>Unpacked w/o stand (head only)</b>	<b>54.03 x 3.33 x 36.38 cm</b> (21.27 x 1.31 x 14.32 in)
		<b>Packaged</b>	<b>62 x 14,9 x 58,2 cm</b> (24.4 x 5.87 x 22.9 in)
	<b>Weight</b>	<b>Bezel Measurements (top x sides x bottom)</b>	<b>22,98 x 2 x 38,65 mm</b> (0.90 x 0.078 x 1.52 in)
		<b>Head Only</b>	<b>4,1 kg</b> (9.04 lb)
		<b>Unpacked</b>	<b>6,6 kg</b> (14.55 lb)
		<b>Packaged</b>	<b>7,72 kg</b> (17.04 lb)
	<b>Tilt Range</b>	-5° to +21°	
	<b>Swivel Range</b>	N/A	
	<b>Height Adjustable</b>	Yes, 130 mm	
<b>Pivot Rotation</b>	N/A		
<b>Base</b>	Detachable		

### Technical Specifications

<b>Environmental</b>	<b>Temperature – Operating</b>	<b>5° to 35° C (41° to 95° F)</b>		
	<b>Temperature – Non-operating</b>	<b>-20° to 60° C (-4° to 140° F)</b>		
	<b>Humidity – Operating</b>	20% to 80% non-condensing		
	<b>Humidity – Non-operating</b>	5% to 95%, 38.7° C max wet-bulb		
	<b>Altitude – Operating</b>	<b>0 to 5000 m. (16,404 ft.)</b>		
	<b>Altitude – Non-operating</b>	<b>0 to 12192 m. (40,000 ft.)</b>		
	<b>White LED Backlights</b>	Yes		
	<b>CCFL Panel</b>	No		
	<b>Arsenic-Free Display Glass</b>	Yes		
	<b>Low Halogen<sup>3</sup></b>	Yes		
	<b>Mercury-Free Display Backlighting</b>	Yes		
	<b>Eco-Label Certifications &amp; declarations</b>	<p><b>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:</b></p> <ul style="list-style-type: none"> <li>• <b>IT ECO declaration</b></li> <li>• <b>US ENERGY STAR®</b></li> <li>• <b>TCO 6.0</b></li> <li>• <b>EPEAT® &lt; Gold&gt; registered in the United States. See <a href="http://www.epeat.net">http://www.epeat.net</a> for registration status in your country</b></li> </ul>		
	<b>Environmental Data</b>			

<b>Energy Consumption (in accordance with US ENERGY STAR® test method)</b>	<b>115VAC, 60Hz</b>	<b>230VAC, 50Hz</b>	<b>100VAC, 60Hz</b>
Normal Operation	14.73 W	13.78 W	13.83 W
Sleep	0.4 W	0.4 W	0.4 W
Off	0.23 W	0.22 W	0.21 W
<b>Heat Dissipation*</b>	<b>115VAC, 60Hz</b>	<b>230VAC, 50Hz</b>	<b>100VAC, 60Hz</b>
Normal Operation	50 BTU/hr	47 BTU/hr	47 BTU/hr
Sleep	1 BTU/hr	1 BTU/hr	1 BTU/hr
Off	1 BTU/hr	1 BTU/hr	1 BTU/hr

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

### Technical Specifications

#### 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).
- This product is in compliance with the IEEE 1680 (EPEAT) standard at the <gold> level, see [www.epeat.net](http://www.epeat.net)
- Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.
- This product contains 16.1% post-consumer recycled plastic (by wt.)
- This product is 98.6% recycle-able when properly disposed of at end of life.

#### Packaging Materials

<b>External:</b>	PAPER/Cardboard & misc	945 g
<b>Internal:</b>	PLASTIC/EPS (Expanded Polystyrene)	300 g
	PLASTIC/Polyethylene low density	10 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).

### Technical Specifications

#### 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/pdf/gse.pdf>):

- 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.



### Technical Specifications

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.

#### 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

##### HP USB Graphics Adapter—Part number NL571AA

Enables connection of up to six simultaneous displays to help you boost productivity and multi-task across several open applications. Use one Adapter to bridge between a notebook or desktop PC and second monitor or use multiple Adapters to connect several displays to each other.

##### HP Dual Output USB Graphics Adapter —Part Number C5U89AA

You can boost your productivity by creating a dual-monitor setup with the HP Dual Output USB Graphics Adapter – featuring both DVI-I and DisplayPort inputs to drive displays at high resolutions through a single USB 3.0 connection to your PC.

##### HP LCD Monitor Quick Release—Part number EM870AA <sup>1</sup>

An easy-to-use, VESA-compliant, LCD monitor mounting solution that allows you to quickly and securely attach an LCD monitor to a variety of stands, brackets, arms or wall mounts.

##### HP Integrated Work Center Stand for Small Form Factors v3 — Part number F2P06AA<sup>5</sup>

Maximize your available work space with the stylish and innovative HP Integrated Work Center for Small Form Factors v3 (HP IWC SFF v3), designed to match the newest HP PC designs. Create a customized "all-in-one" solution by combining an HP Small Form Factor (SFF) Business Desktop PC or Workstation with an LED monitor up to 24 diagonal inches.

##### HP Integrated Work Center Stand - USDT / Thin Clients — Part numbers E8H16AA/AT (black and meteorite), LH526AA/AT (black and silver).<sup>6</sup>

HP Integrated Work Center Stand - USDT / Thin Clients - The HP Integrated Work Center Stand is designed to help maximize the use of limited desk space without compromising performance or productivity by accommodating an HP Ultra-slim Desktop PC or an HP Thin Client, and most HP 17 to 24-inch<sup>1</sup> diagonal LCD monitors, with VESA standard mounting brackets.

##### HP Single Monitor Arm— Part number BT861AA

The flexible design of the HP Single Monitor Arm provides a seemingly endless range of display adjustments with an amazing 13 inches of lift, 50 degrees of tilt, and 360 degrees of pan and rotation - all at your fingertips - helping you stay comfortable and productive throughout the day.

### Technical Specifications

	<b>HP Adjustable Dual Display Stand—Part Number AW664AA</b>	Premium space-saving dual screen solution provides access to more monitor real estate and makes it possible to manage multiple applications simultaneously. Weight adjustable for dual monitors from 17-24". Rotate displays into portrait/landscape positions.
	<b>HP Display and Notebook II Stand—Part number E8G00AA</b>	Quickly and easily create a comfortable workspace for your notebook or notebook and docking station and an external display with the HP Display and Notebook II Stand, which brings your notebook PC, docking station, and display up off the desk.
	<b>HP Adjustable Display Stand—Part number AW663AA</b>	Turn your HP Business Notebook into a desktop solution supporting up to a 24 inch display. A dual-hinged, smooth-motion display stand allows for greater depth, height and tilt adjustment for maximum comfort.
	<b>HP Business Digital Headset – Part number QK550AA</b>	A headset that is perfect for call centers, telephone-intensive jobs, or casual use while working at your desk. The over-the-head flexible design includes light padding, full size leather ear phones and a mounted microphone boom.
<b>What's in the box?</b>	<b>Monitor and Accessories</b>	HP EliteDisplay S240ml 23.8-in IPS LED Backlit MHL Monitor, External power supply (65W), AC power cord (1.9m), VGA cable (1.8m), USB3.0 cable (1.8m), DisplayPort cable (1.8m), Audio cable (1.8m), HDMI cable (1.8m), MHL cable (1.8m)
	<b>Documentation</b>	CD (includes user guide, warranty, drivers)
	<b>Featured Software</b>	HP Display Assistant is a software utility that enables theft deterrence and allows monitor adjustment, color calibration, and security/asset management using the Display Data Channel Command Interface (DDC/CI) protocol of the connected PC or workstation. Cyberlink YouCam and Cyberlink Media Suite.
<b>Other</b>	<b>User Guide Languages</b>	English, French, Spanish, B. Portuguese, S. Chinese, T. Chinese, Bahasa Indonesia, Korean, Japanese.
	<b>Warranty Languages</b>	English, French, Spanish, B. Portuguese, S. Chinese, T. Chinese, Bahasa Indonesia, Korean, Japanese.
	<b>Color</b>	Meteorite Gray and Black
	<b>VESA External Mounting</b>	Yes (one set of standard 4-hole pattern, 100 mm).
	<b>Security Lock-Ready</b>	Yes
<b>Certification and Compliance</b>		CE, CB, KCC, TUV-S, TUV Bauart, cCSAus, ISO 9241-307, CCC, CECP, SEPA, EPA, VCCI, FCC, ICES-003, BSMI, RCM, ENERGY STAR®, EPEAT Gold <sup>®7</sup> , CEL Grade 1, TCO Certified, SmartWay Transport Partnership (NA only), Microsoft WHQL.
<b>Service and Warranty</b>		Protected by HP, including a 3 year standard limited warranty. Optional Care Pack Services are extended service contracts which go beyond your standard warranties. <sup>2</sup>

1. The HP Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) for all devices mounted. 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.
2. 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

### Technical Specifications

<http://www.hp.com/go/lookuptool>. Additional HP Care Pack Services information by product is available at

<http://www.hp.com/hps/carepack>.

3. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
4. HP Smart AC Technology will charge HP notebooks up to 90W and only allow power pass through for HP Notebooks above 90W.
5. 17 to 24-inch diagonal monitors need to meet supported weight limits of 6 to 12.1 lbs. (2.7 to 5.5 kg).
6. The Integrated Work Center Stand has been designed to support 17 to 24-inch diagonal HP LCD monitors from 2.3 kg to 5.2 kg (5.07 lbs to 11.24 lbs).
7. EPEAT® Gold where HP registers commercial display products. See [www.epeat.net](http://www.epeat.net) for registration status in your country.

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### Summary of changes

#### Summary of changes

<b>Date of change:</b>	<b>Version History:</b>		<b>Description of change:</b>
September 16, 2014	From v1 to v2	Change	Change the footnote #2
May 16, 2016	From v2 to v3	Update	Updated Environmental Data Values