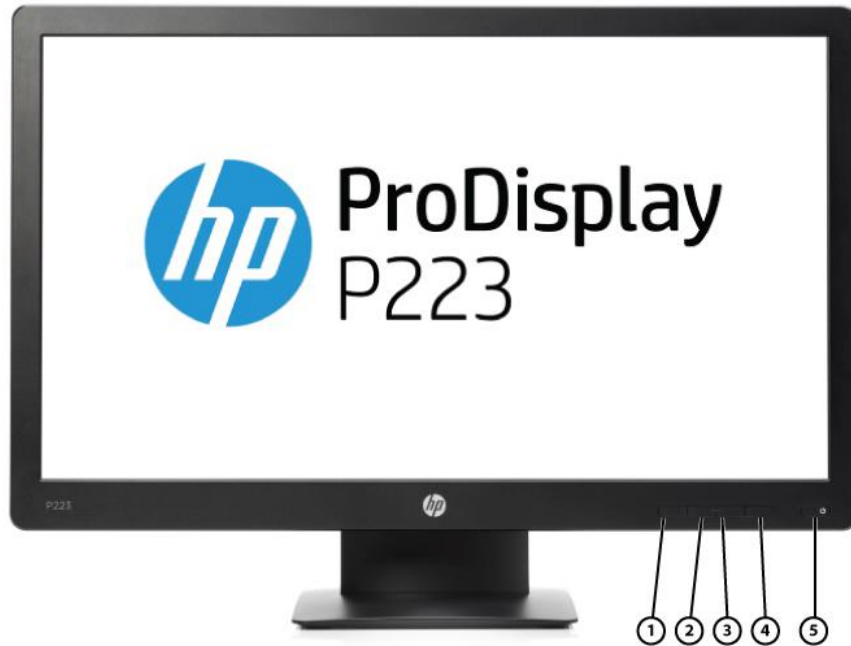


Overview

HP ProDisplay P223 21.5-inch Monitor



1. Menu button
2. Minus ("-")
3. Plus ("+") /Input Control

4. OK/Auto,
5. Power button/LED



HP ProDisplay P223 and HP Adjustable Dual Display Stand dual monitor configuration shown. (Note: monitors and stands sold separately)

Your ideal office configuration begins with two HP ProDisplay P223 monitors combined with an HP Adjustable Dual Display Stand (AW664AA) for a small footprint, high productivity work solution.*

*NOTE: Multi-monitor support is dependent on your system. Check your user guide or technical specifications for compatibility. Optional accessories may be required.

Overview

Overview

Put your HP Pro PC content front and center on an ample 21.5-inch diagonal FHD screen with the HP ProDisplay P223 21.5-inch Monitor.

Key features:

- Share your content in crisp, clear color on the 21.5-inch diagonal screen with 1920 x 1080 resolution, and 3000:1 contrast ratio.¹
- Experience stunning FHD picture quality, ultra-fast graphics refresh, and vivid colors with DisplayPort™.
- Attach your HP PC or select HP Thin Client directly behind the display.²
- Reduce power consumption and help lower your costs with an energy-efficient design.
- Get a stable product lifecycle and minimum one-year lifespan, plus Global Series availability around the world.
- Free up valuable desk space with mounting options³ enabled by the 100-mm VESA pattern.
- Customize a total solution with options³ designed for your display.
- Design the screen for how you work with HP Display Assistant software, which enables screen partitioning and helps deter theft by deactivating a display that's disconnected without approval.
- Rest assured that your IT investment is supported by a three-year standard limited warranty. Add HP Care services⁴ to extend your protection beyond the standard limited warranties.

1 All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

2 Requires HP Quick Release, sold separately. See product QuickSpecs for exact PC and thin client compatibility.

3 Each accessory sold separately. Mounting hardware sold separately. Head only model sold separately and availability varies by region.

4 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 for details. HP Services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

Change Log

Models:

X7R61AA - HP ProDisplay P223 21.5-inch Monitor

Z4L11AA - HP ProDisplay P223 21.5-inch Monitor Head Only

| | | |
|--|---|--|
| Panel | Type | 21.5-inch VA w/LED backlight |
| | Viewable Image Area (diagonal) | 54,61 cm (21.5-inch) widescreen; diagonally measured |
| | Panel Active Area (W × H) | 47,6 x 26,7 cm (18.74 × 10.51 in) |
| | Resolution | 1920 x 1080 @ 60 Hz |
| | Aspect Ratio | 16:9 |
| | Viewing Angle | Up to 178° horizontal/178° vertical typical |
| | Brightness | 250 cd/m ² |
| | Contrast Ratio (Typical) | 3000:1 Static; 5,000,000:1 Dynamic (DCR) |
| | Response Time* | 5 ms typical (gray to gray) |
| | Pixel Pitch | .248 mm |
| | Pixels Per Inch (PPI) | 102.4 DPI |
| | Backlight Lamp Life (to half brightness) | 30,000 hours minimum |
| | Color Support | Up to 16.7 million colors with the use of FRC technology |
| | Color Gamut (Typical) | 72% |
| <p>* Product default is 8ms response time and can be adjusted to as low as 5ms in the display menu. See user guide for more information. All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.</p> | | |
| User Controls | Buttons or Switches | Menu, Minus ("-"), Plus ("+")/Input Control, OK/Auto, Power |
| | Languages | 10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese) |
| | On Screen Display (OSD) User Controls | Brightness, Contrast, Input Control, Color Control, Image Control, Power Control, OSD control, Management, Language, Information, Exit |
| | User Programmable Modes | Yes, 10 |
| Signal Interface/ Performance | Audio Controls | N/A |
| | Horizontal Frequency | 24-80 kHz |
| | Vertical Frequency | 50-60 Hz |
| | Native Resolution | 1920 x 1080 @ 60 Hz |
| | Preset Graphic Modes (non-interlaced) | 640 x 480 @ 60Hz |
| | | 720 x 400 @ 70Hz |
| 800 x 600 @ 60Hz | | |
| 1024 x 768 @ 60Hz | | |
| 1280 x 720 @ 60Hz | | |
| | 1280 x 800 @ 60Hz | |

Change Log

| | | | |
|---|------------------------------------|--|--|
| | | 1280 x 1024 @ 60Hz | |
| | | 1440 x 900 @ 60Hz | |
| | | 1600 x 900 @ 60Hz | |
| | | 1680 x 1050 @ 60Hz | |
| | | 1920 x 1080 @ 60Hz | |
| | Anti-Glare | Yes | |
| Video/Other Inputs | Plug and Play | Yes | |
| | Input Connectors | (1) DisplayPort™ 1.2, (1) VGA | |
| | | HDCP support on DisplayPort™ | |
| | USB | N/A | |
| | Video Cables Included | (1) DisplayPort™ 1,8 m (5.9 ft) | |
| | | (1) VGA 1,8 m (5.9 ft) | |
| | Audio | N/A | |
| Multimedia | Speakers | N/A | |
| Power | Power Supply | Internal | |
| | Input Power | 100 - 240 VAC 50/60 Hz | |
| | Maximum Power | 28 W | |
| | Typical Power | 20 W | |
| | Sleep Power | 0.5 W | |
| | Power Cable Length | 1,9 m (6.2 ft) | |
| Mechanical | Dimensions (W × D × H) | Unpacked w/stand (highest setting) | 51,5 x 19,12 x 38,9 cm (20.28 x 7.53 x 15.32 in) |
| | | Unpacked w/o stand (head only) | 51,5 x 5,49 x 32,7 cm (20.28 x 2.16 x 12.87 in) |
| | | Packaged | 58,9 x 14 x 42 cm (23.19 x 5.51 x 16.54 in) |
| | Weight | Head Only | 2,9 kg (6.4 lb) |
| | | Unpacked with stand | 3,5 kg (7.7 lb) |
| | | Packaged | 4,7 kg (10.4 lb) |
| Ergonomic Features (not available on head only model) | Detachable Stand | Yes, ships detached | |
| | Height Adjustment | N/A | |
| | Tilt Range | -5° to + 22° vertical | |
| | Swivel | N/A | |
| | Pivot | N/A | |
| Environmental | Temperature - Operating | 5° to 35° C (41° to 95° F) | |
| | Temperature - Non-operating | -20° to 60° C (-4° to 140° F) | |
| | Humidity - Operating | 20% to 80% non-condensing | |
| | Humidity - Non-operating | 5% to 95%, 38.7° C max wet-bulb | |
| | Altitude - Operating | 0 to 5,000 m (0 to 16,404 ft) | |

Change Log

| | |
|--|---------------------------------------|
| Altitude – Non-operating | 0 to 12,192 m (0 to 40,000 ft) |
| White LED Backlights | Yes |
| CCFL Panel | No |
| Arsenic-Free Display Glass | Yes |
| Low Halogen¹ | Yes (except cables) |
| Mercury-Free Display Backlighting | Yes |

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
- US ENERGY STAR®
- TCO or TCO Certified Edge
- EPEAT® Gold registered in the United States. See <http://www.epeat.net> for registration status in your country

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

| | 115VAC, 60Hz | 230VAC, 50Hz | 100VAC, 50Hz |
|------------------|---------------------|---------------------|---------------------|
| Normal Operation | 14.5 W | 14.5 W | 14.5 W |
| Sleep | 0.3 W | 0.3 W | 0.3 W |
| Off | 0.1 W | 0.2 W | 0.1 W |

Heat Dissipation*

| | 115VAC, 60Hz | 230VAC, 50Hz | 100VAC, 50Hz |
|------------------|---------------------|---------------------|---------------------|
| Normal Operation | 50 BTU/hr | 50 BTU/hr | 50 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.

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
- Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.
- This product contains 18.8% post-consumer recycled plastic (by wt.)
- This product is 98.1% recycle-able when properly disposed of at end of life.

Packaging Materials

| | | |
|------------------|-------------------------------------|-------|
| External: | PAPER/Corrugated | 580 g |
| Internal: | PLASTIC/Polystyrene Expanded - EPS | 202 g |
| | PLASTIC/Polyethylene Expanded - EPE | 28 g |

Change Log

RoHS Compliance

HP, Inc. 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/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.

Change Log

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.

HP, Inc. 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://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04755842>

and

<http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf>

Options (each sold separately)

HP LCD Speaker Bar—
Part number NQ576AA

Powered directly by the connected 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 dual external headphone jacks. Sold separately. For more information, refer to the product's QuickSpecs.

**HP Adjustable Dual
Display Stand—**Part
Number AW664AA

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.

**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, 75 degrees of tilt, and 360 degrees of pan and rotation – all at your fingertips -- helping you stay comfortable and productive throughout the day.

**HP DisplayPort™ Cable
Kit—**Part number
VN567AA

Connects a DisplayPort™ connector on an HP Business Desktop computer to a DisplayPort™ connector on a monitor

**HP LCD Monitor Quick
Release—** Part number
EM870AA⁴

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. For more information, refer to this product's QuickSpecs document.

**HP Business PC Security
Lock V2 Kit—** Part
number N3R93AA

Help prevent chassis tampering and secure your PC and display in workspaces and public areas. Simply route the cable through the PC's lock slot and your display, anchor to a desk, table, or other fixed surface, and lock with your individual key. A master key configuration is also available upon request.

Change Log

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|-------------------------------------|--|--|
| What's in the box? | Monitor and Accessories Documentation Software | HP ProDisplay P223 21.5-inch Monitor, AC power cord (1.9 m) 6.2 ft, DisplayPort™ cable (1.8 m), VGA cable (1.8 m) 5.9 ft CD (includes user guide, warranty, drivers) HP Display Assistant |
| Other | User Guide Languages Warranty Languages Color VESA Mounting Security Lock-Ready Country of Origin | English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish. English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish. Black 100 mm VESA mount Yes China |
| Certification and Compliance | | TCO Certified, CEL Grade 2, Microsoft WHQL Certification (Windows 10, Windows 8.1, Windows 7), ENERGY STAR® Qualified, EPEAT® Gold ² , CE, CB, KC, KCC, NOM, PSB, ICE, TUV-S, CCC, CECP, SEPA, EPA, ISC, VCCI, FCC, Taiwan: BMSI, SmartWay Transportation Partnership for NA Model |
| 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 HP Care Pack Services are extended service contracts that extend your protection beyond the standard warranties. ³ |

1. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
2. EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. See HP's 3rd party option store for solar energy accessory <http://www.hp.com/go/options>.
3. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit: <http://www.hp.com/go/cpc>.
4. 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.

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Change Log

| Change Log | |
|-------------------|--|
| V1 | Quickspecs launched |
| V2 | Options and Environmental Sections updated |
| V3 | Response Time of Panel Section updated |
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