

Overview

HP V203p 19.5-inch LED Backlit Monitor



- 1. Menu:** Opens and closes the OSD menu.
- 2. Function buttons:** Use these buttons to navigate through the OSD menu based on the indicators next to the buttons that are activated while the OSD menu is open.
- 3. Power:** Turns the monitor on or off.
- 4. Power LED:** fully powered = white; sleep mode = amber; sleep timer mode = flashing amber.



Use two HP V203p 19.5-inch monitors with an HP Adjustable Dual Display Stand (AW664AA) for a small footprint, high productivity work solution.

(Multi-monitor support depends on your PC capability.
Monitors, stands, keyboard, mouse and notebook are sold separately.)

Overview

Part numbers

T3U90AA / T3U90AC

Introduction

Deploy an everyday display that's just right for your documents, e-mail, and office productivity with the HP V203p 19.5-inch Monitor.

Key Benefits

- Get crisp, clear views of your content from almost any angle on the ample 19.5-inch diagonal IPS screen with 1440 x 900 resolution and 6M:1 dynamic contrast ratio.¹ Connect to your legacy and current devices with the VGA input.
- Streamline your workspace with a compact display that complements HP PCs and an internal power supply that leaves plenty of room to work.
- Reduce power consumption and help lower your costs with an intelligent, energy-efficient display that is ENERGY STAR® certified, EPEAT® Gold registered², and has mercury-free display backlights and arsenic-free display glass.
- Mount your HP Desktop Mini 2603 directly behind the display for an integrated, affordable all-in-one that's perfect for small spaces. Or, use the integrated VESA mount to place the display on a wall or stand.³
- Rest assured that your IT investment is supported by a three-year standard limited warranty. To extend your protection, select optional HP Care Packs.⁴

1. All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
 2. Compatible with HP Desktop Mini 260 G1 and G2, sold separately. HP Quick Release required and sold separately. Mounting hardware sold separately. Options sold separately.
 3. EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status in your country.
 4. Sold separately. 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 www.hp.com/go/cpc. 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.
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Technical Specifications

Technical Specifications

Panel	Type	IPS with LED backlight
	Viewable Image Area	49,53 cm (19.5 in) widescreen; diagonally measured
	Active Area (W x H)	41,86 x 26,23 cm (16.48 x 10.32 in)
	Aspect Ratio	16:10
	Viewing Angle (typical)	Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	250 cd/m ²
	Contrast Ratio (typical)*	1000:1
	Dynamic Contrast Ratio (typical)*	6,000,000:1
	Response Rate (typical)*	8 ms (gray to gray)
	Pixel Pitch	0.3 mm
	Backlight Lamp Life * (to half brightness)	30K hours minimum
	Color Gamut *	72% (typical)
	Color Support **	Can display up to 16.7 million colors
	*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.	
	** With the use of FRC technology.	
On Screen Display (OSD)	Buttons or Switches	Menu, Function Buttons, Power
	Languages	10 (German, Simplified Chinese, Traditional Chinese, Japanese, English, Spanish, French, Italian, Netherlands, Brazilian Portuguese)
	User Controls	Brightness, Contrast, Color Control, Image Control, Power Control, Menu Control, Management, Information, Exit
Signal Interface/ Performance	Horizontal Frequency	24 to 70 kHz
	Vertical Frequency	50 to 75 Hz
	Native Resolution	1440 x 900 @ 60 Hz
	Preset VESA Graphic Modes (non-interlaced)	1440 x 900 @ 60 Hz 1280 X 1024 @ 60 Hz 1280 x 800 @ 60 Hz 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
	Maximum Pixel Clock Speed	110 MHz
	User Programmable Modes	Yes, 10
	Anti-Glare	Yes

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	Default Color Temperature	Neutral	
Video/Other Inputs	Plug and Play	Yes	
	Input Signal	VGA	
	Video Cable	(1) VGA	
	Video Cable Lengths	1,5 m (4.9 ft)	
Power	Power Supply	Internal	
	Input Power	100 - 240 VAC (50/60 Hz)	
	Typical Power Consumption	18 W	
	Maximum	20 W	
	Power Saving	<0.5 W	
	Power Cable Length	1,5 m (4.9 ft)	
Mechanical	Dimensions (W x D x H)	Unpacked w/stand	45,46 x 19,43 x 37,64 cm (17.89 x 7.65 x 14.81in)
		Unpacked w/o stand (head only)	45,46 x 4,75 x 30,12 cm (17.89 x 1.87 x 11.85 in)
		Packaged	51,5 x 11,7 x 40 cm (20.28 x 4.61 x 15.75 in)
	Weight	Head Only	2,51 kg (5.52 lb)
		Unpacked	2,87 kg (6.31 lb)
		Packaged	3,98 kg (8.75 lb)
	Tilt Range	-5° to + 15° vertical	
	Swivel Range	N/A	
	Height Adjustable	N/A	
	Pivot Rotation	N/A	
Base	Detachable		
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)	
	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 Halogen⁴	No	
	Mercury-Free Display Backlighting	Yes	

Technical Specifications

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
- US ENERGY STAR®
- 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, 60Hz
Normal Operation	13.35 W	13.25 W	13.35 W
Sleep	0.31 W	0.45 W	0.3 W
Off	0.16 W	0.45 W	0.16 W

Heat Dissipation*

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	46 BTU/hr	45 BTU/hr	46 BTU/hr
Sleep	1 BTU/hr	2 BTU/hr	1 BTU/hr
Off	1 BTU/hr	2 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 0% post-consumer recycled plastic (by wt.)
- This product is 97.5% recycle-able when properly disposed of at end of life.

Packaging Materials

External:	PAPER/Cardboard & misc	470 g
Internal:	PLASTIC/EPS (Expanded Polystyrene)	70 g
	PLASTIC/Polyethylene low density	22 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

Technical Specifications

Material Usage

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).

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.

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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.

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

and

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

Options

(sold separately)

HP LCD Monitor Quick Release – Part number EM870AA¹

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 Kit – Part number PV606AA

Attaches to the rear of the PC with a six-foot steel cable that can be used to secure a PC or peripherals such as mice, keyboards, monitors or USB security devices to protect them against unauthorized removal by physically connecting the system to an anchor point.

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.

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.

Technical Specifications

What's in the box?	Monitor and accessories	HP V203p 19.5-inch diagonal monitor AC power cord 1,5 m (4.9 ft) VGA cable 1,5 m (4.9 ft)
	Documentation	Printed documentation
Other	User Guide Languages	English, Latin America, B. Portuguese, French Canadian, Japanese, T. Chinese, S. Chinese, Korean, Indonesian, Arabic, Czech, Danish, Finnish, French, Greek, German, Hungarian, Italian, Kazakh, Dutch, Norwegian, Polish, Portuguese, Russian, Swedish, Slovenian, Spanish, Turkish.
	Warranty Languages	English, Latin America, B. Portuguese, French Canadian, Japanese, T. Chinese, S. Chinese, Korean, Indonesian, Arabic, Czech, Danish, Finnish, French, Greek, German, Hungarian, Italian, Kazakh, Dutch, Norwegian, Polish, Portuguese, Russian, Swedish, Slovenian, Spanish, Turkish.
	Bezel Color	Black
	VESA External Mounting	Yes, one set of standard 4-hole pattern, 100 mm.
	Security Lock-Ready	Yes, one security lock slot available
	Country of Origin	China
Certifications and Compliance	EPEAT® Gold (select regions) ³ , ENERGY STAR® qualified, CB, CE, FCC marking, ErP, CSA/C-UL/C-ETL Mark, UL/CSA-NTRL/ETL-NRTL Mark, ICES, Argentina S-Mark, Japan VCCI, CCC, China CEL, Taiwan BSMI, Bauart, ISO9241-307, GOST 25861, HRN N NO.201, GOST R 50377-1992, GOST 25861, EEI certificate, IS 1121, SASO, SABS IEC 60950-1, NOM-019-SCFI-1998, KC Mark, KCC Mark, PSB mark, ISC mark, C-Tick, China Energy Label (CEL) Grade 1, SmartWay - NA only, TCO	
Compatibility	Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.	
Service and Warranty	Protected by HP, including up to a 1 year standard limited warranty*. Optional Care Pack Services are extended service contracts which go beyond your standard warranties. ²	
	*Warranty term may vary by region.	

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. 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..
3. EPEAT® Gold where HP registers commercial display products. See www.epeat.net for registration status in your country.
4. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

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Change Log

Summary of Changes

Date of change:	Version History:		Description of change:
18/03/2016	From v1 to v2	Added	Environmental Data
12/05/2016	From v2 to v3	Update	Modified Environmental Data position
28/03/2017	From v3 to v4	Update	EPEAT certification changed from Silver to Gold