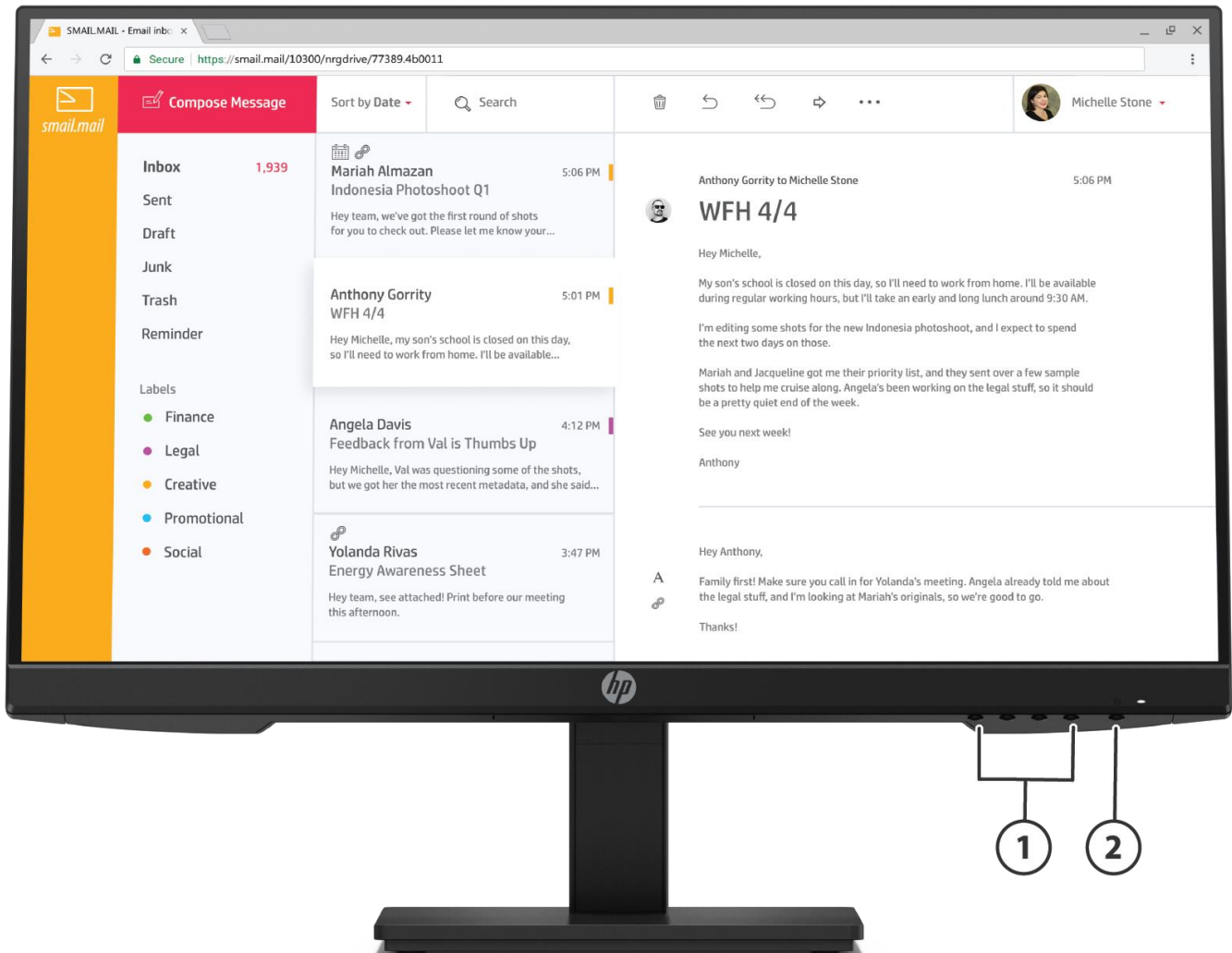


Technical Specifications

HP P24h G4 23.8-inch Monitor



Front

1. Function Buttons

2. Power Button

Technical Specifications

HP P24h G4 23.8-inch Monitor



- 1. Power Connector
- 2. DisplayPort™ Connector
- 3. HDMI Port

Back

- 4. VGA Port
- 5. Audio-in Jack (Select models only)
- 6. Security Cable Slot

Technical Specifications

Models: 7VH45AA

Panel Specifications	Display Size (Diagonal)	23.8-in
	Display Panel Type	IPS
	Micro-Edge Bezel	Yes, 3-sided
	Native Resolution/Timing	1920×1080 @ 60 Hz
	Native Resolution Note*	1 VGA, 1 HDMI 1.4, 1 DisplayPort 1.2
	Panel Bit Depth	6bit + AFRC
	Aspect Ratio	16:9
	Brightness - Typical	250 cd/m ²
	Static Contrast Ratio - Typical	1000:1
	Static Contrast Ratio - Minimum	700:1
	Dynamic Contrast Ratio (DCR)	8,000,000:1
	Flicker Free	Yes
	Pixel Pitch	0.2745 x 0.2745 mm
	Pixels Per Inch (PPI)	93
	Backlight Lamp Life (to half brightness - in hours)	30k minimum
	Anti-Glare Panel	Yes
	Response Time - Typical	5ms (gray to gray)
	Horizontal Viewing Angle (typical CR>10)	178°
	Vertical Viewing Angle (typical CR>10)	178°
	Panel Active Area (w x h)	527.04 mmx 296.46 mm
	Preset Graphic Modes/Supported Resolutions	640 x 480 @ 60 Hz 720 x 400 @ 70 Hz 800 x 600 @ 60 Hz 1024 x 768 @ 60 Hz 1280 x 720 @ 60 Hz 1280 x 800 @ 60 Hz 1280 x 1024 @ 60 Hz 1366 x 768 @ 60 Hz 1440 x 900 @ 60 Hz 1600 x 900 @ 60 Hz 1680 x 1050 @ 60 Hz 1920 x 1080 @ 60 Hz
	Maximum Resolution	1920 x 1080 @ 75 Hz
	Recommended Resolution	1920 x 1080 @ 60 Hz
	Vertical Scan Range	48Hz - 75Hz
	Horizontal Scan Range	30KHz - 86KHz
	Default Color Temperature	Neutral (6500K)
	Maximum Pixel Clock Speed	180MHz

*VGA or DisplayPort™ 1.2 or HDMI 1.4 required to drive panel at its native resolution

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

Color Gamut Coverage	NTSC	72%
Color Management	Factory Color Calibrated	Yes
	Factory Color Presets	Warm - 5000K Neutral - 6500K Cool - 9300K

Technical Specifications

	Color Space / Subsampling Support	RGB 4:4:4, YCBCR 4:4:4, YCBCR 4:2:2
	Default Color Temperature	Neutral (6500 K)
	Low Blue Light Modes	Yes
	RGB Channel Adjust	Yes, Gain
Monitor Specifications	Exterior Color of Monitor Bezel and Stand	Black
	Plug & Play	Yes
	Tilt	–5° to +23°
	Swivel	360°
	Pivot	Clockwise 90°
	Height Adjustment Range	100 mm
	VESA Mounting	Yes
	Security Lock Ready	Yes
	Detachable Base	Yes
	Warranty	Based on region
Multimedia	Speakers	Yes, 1 pair
	Speakers Output Power	2 W per channel
On Screen Display (OSD)	On Screen Display User Controls	Brightness+, Color, Image, Input, Power, Menu, Management, Information, Exit
	User Programmable Modes	Yes, 20
	Monitor Control Buttons or Switches	Menu/OK, Minus ("-")/Brightness, Plus ("+")/Color, Back/Input, Power
	User-Assignable Function Buttons	Yes, 3 (5 options)
	Audio Controls	Yes, Volume
	Languages	10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)
Connector Types	DisplayPort™	1, DisplayPort™ 1.2
	HDMI	1, HDMI 1.4
	VGA	1
	HDCP support	Yes, (DisplayPort™ and HDMI)
	Audio Input	1, Analog
Power & Operating Specs	Power Supply	Internal
	Power Source	100 – 240 VAC 50/60 Hz
	Power Consumption - Maximum	24 W
	Energy Saving/Standby Mode	0.5 W
	Power Consumption - Typical	22 W
	Power cable length	1.9 m
Energy Star Data	Operational Mode at 100 VAC	12.1 W >13.1 W
	Operational Mode at 115 VAC	12.1 W >13.1 W
	Operational Mode at 230 VAC	12.1 W >13.1 W
EU Energy Efficiency Class (EC1062)	On-mode Power Consumption (EC 1062/2010)	63.03 W >14.28 W
	Annual Power Consumption (EC 1062/2010)	17.7 kWh >20.8 kWh
	Energy Efficiency Class (EC 1062/2010)	A >A+
Operating Conditions	Operating Temperature - Celsius	5° – 35°C
	Operating Temperature - Fahrenheit	41°C -95°F

Technical Specifications

Environmental Features and Certifications	Non-operating Temperature - Celsius	-20° – 60°C
	Non-operating Temperature - Fahrenheit	29° – 140°F
	Operating Humidity	20 – 80% Relative Humidity (non-condensing)
	Non-operating Humidity	5 – 95%
	Operating Altitude	0 – 5,000 m (16,400 ft.)
	Non-operating Altitude	0 – 12,192 m (40,000 ft.)
	Mercury-free LED display backlighting	Yes, Mercury-free LED backlighting
	Arsenic-Free Display Glass	Yes
	Low Halogen**	Yes GSE HP-00011-01B, table 2 defines low-halogen (BFR, CFR, PVC) NOTE: External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
	Agency Approvals and Certifications	CE, CB, KC, KCC, NOM, PSB, ICE, TUV-S/ISO 9241-307/ EAC/UL/CSA/PSB/ISC/CCC/CEL/Energy Star/ISC/VCCI/FCC/BSMI/Vietnam MEPS/Australian-New Zealand MEPS/WEEE
	Microsoft WHQL Certification	Win 10, Win 8, Win 7
	ENERGY STAR®	Yes, ENERGY STAR® 8
	EPEAT® 2019 Registered*	Yes, Sliver
	China Energy Label	CEL Grade 1
	TCO Certified	Yes
	SmartWay Transport Partnership - NA only	Yes (NA SKU)

* Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit <http://www.epeat.net> for more information.

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

Note: DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries.

Unit Product/Package Specifications	Product Dimensions	Metric	Imperial
	(Unpacked with stand) (W x D x H)	53.82 x 21.16 x 46.43 cm	21.19 x 8.33 x 18.28 in
	Product Dimensions (Packed) (W x D x H)	59.8 x 16.5 x 41.5 cm	23.54 x 6.50 x 16.34 in
	Display Head Dimensions (Unpacked without stand) (W x D x H)	53.82 x 4.59 x 32.56 cm	21.19 x 1.80 x 12.82 in
	Base Area Footprint (w x d mm)	214.6 x 211.6 mm	8.45 x 8.33 in
	Bezel Measurements	Bottom 22.5 mm	Bottom 0.89 in
	Product Weight (Unpacked with stand)	4.61 kg	9.94 lb
	Product Weight (Packed)	6.14 kg	13.51 lb
	Product Weight (Head Only)	2.53 kg	5.56 lb
Pallet Information	Pallet Dimensions (L x W x H)	1216 x 960 x 126 mm	47.84 x 37.80 x 4.96 in

Technical Specifications

	Pallet Total Weight (L x W x H)	323.55 Kg	712.46 lbs
	Pallet Layers	5	
	Pallet Product per Layer	10	
	Total Products per Pallet	50	
	Container Load, 20-Foot	500 units	
	Container Load, 40-Foot	1,100 units	
	Container Load, 40-Foot HighQ	1,100 units	
Software Included	HP Display Assistant		
What's in the box?	AC Power Cord	(1.9m) 6.2 ft	
	Audio Cable	(1.8m) 5.9 ft	
	VGA Cable	(1.8m) 5.9 ft	
	HDMI Cable	(1.8m) 5.9 ft	
User Guide and Warranty Languages	User Guide Languages	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.	
	Warranty Languages	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.	

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® - TCO or TCO Certified Edge - EPEAT® Silver registered in the United States. Based on US EPEAT registration according to IEEE 1680.1-2018 EPEAT. Status varies by country. See http://www.epeat.net for more information.		
	Energy Consumption (in accordance with US ENERGY STAR® test method)			
		115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
	Normal Operation	11.86 W	11.88 W	11.90 W
	Sleep	0.18 W	0.19 W	0.18 W
	Off	0.12 W	0.13 W	0.12 W
	Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
	Normal Operation	40 BTU/hr	40 BTU/hr	40 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 1680.1 (EPEAT) standard at the Silver level, see http://www.epeat.net - Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043. - This product contains 26.9% post-consumer recycled plastic (by wt.) according to IEEE 1680.1-2018 standard, criterion 4.2.1.1. - This product is 96.6% recycle-able when properly disposed of at end of life.		
	Packaging Materials	External:	PAPER/Corrugated	735 g
		Internal:	PLASTIC/Polystyrene Expanded - EPS	326 g
			PLASTIC/Polyethylene Expanded - EPE	32 g
			PLASTIC/Polyethylene high density - HDPE	8 g
	RoHS Compliance	HP Inc. complies fully with materials regulations. We were among the first companies to extend the restrictions in the European Union (EU) Restriction of Hazardous Substances (RoHS) Directive to our products worldwide through the HP GSE. HP has contributed to the development of related legislation in Europe, as well as China, India, and Vietnam. We believe the RoHS directive and similar laws play an important role in promoting industry-wide elimination of substances of concern. We have supported the inclusion of additional substances—including PVC, BFRs, and certain phthalates—in future RoHS legislation that pertains to electrical and electronics products. We met our voluntary objective to achieve worldwide compliance with the new EU RoHS requirements for virtually all relevant products by July 2013, and we will continue to extend the scope of the commitment to include further restricted substances as regulations continue to evolve. To obtain a copy of the HP RoHS Compliance Statement, see HP RoHS position statement.		

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/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 • Bis(2-Ethylhexyl) phthalate (DEHP) • Benzyl butyl phthalate (BBP) • Dibutyl phthalate (DBP) • Diisobutyl phthalate (DIBP) • 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.
	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

Technical Specifications

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Summary

Change Log			
November 5, 2019	V1 to V2	Added	Environmental tab
December 13, 2019	V2 to V3	Added	HDMI Cable