Technical Specifications

HP Series 5 Pro 24" WUXGA Monitor - 524pn
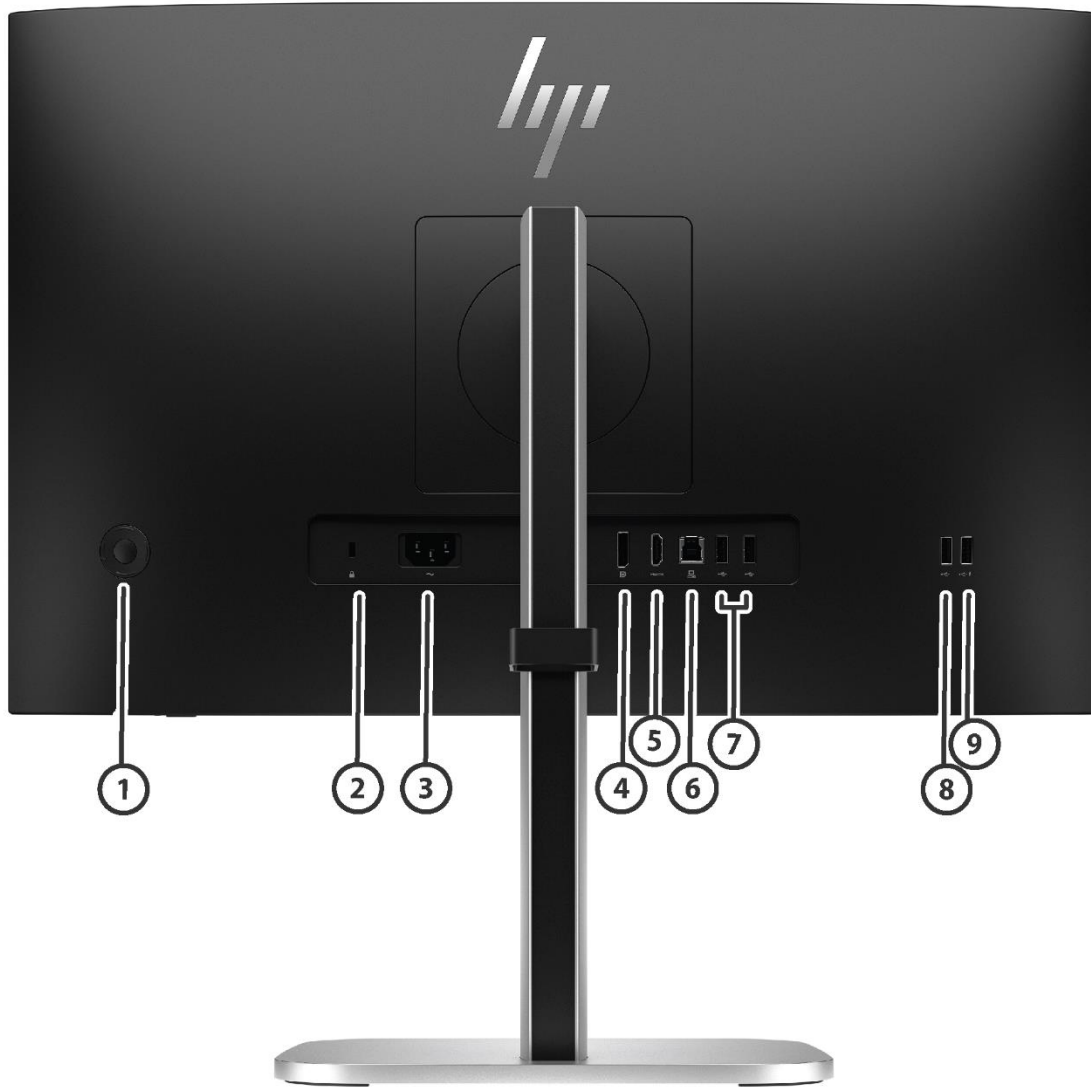

Front

1. Power Button
2. Power LED

Technical Specifications

HP Series 5 Pro 24" WUXGA Monitor - 524pn

Back

1. Joypad OSD button
2. Security Cable Slot
3. Power Connector
4. DisplayPort™ 1.2

5. HDMI 1.4 port

6. USB-B port
7. 2x SuperSpeed USB Type-A 5Gbps signaling rate
8. SuperSpeed USB Type-A 5Gbps signaling rate
9. SuperSpeed USB Type-A 5Gbps signaling rate (charging)

QuickSpecs

Technical Specifications

Model: 9D9A7AA

Panel Specifications	Display Size (Diagonal)	61 cm (24")
	Viewable Diagonal Size	61.13 cm (24")
	Panel Technology	IPS
	Curvature	Flat
	Max Refresh Rate	100 Hz
	Native Resolution	WUXGA (1920 x 1200)
	Panel Bit Depth	8 bit (6 bit + FRC)
	Aspect Ratio	16:10
	Brightness (Typical)	350 nits
	Display Contrast Ratio (Static)	1500:1
	Display Contrast Ratio (Dynamic)	10000000:1 = 10M:1
	Flicker Free	Yes
	Pixel Pitch	0.2700 x 0.2700 mm
	Pixels Per Inch (PPI)	94 PPI
	Display Colors	Up to 16.7 million colors supported
		Number of colors through A-FRC technology.
	Backlight Lamp Life Minimum (To Half Brightness - In Hours)	30,000 hours
	Backlight Type	Edge-lit, WLED
	Screen Treatment	Anti-glare
	Hardness	3H
	Haze	25%
	Response Time (Typical)	5ms GtG (with overdrive)
	Horizontal Viewing Angle (Typical Cr>10)	178°
	Vertical Viewing Angle (Typical Cr>10)	178°
	Panel Active Area Metric (W X H)	51.84 x 32.40 cm
	Panel Active Area Imperial (W X H)	20.41 x 12.76 in

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

Color	sRGB	100%

Color Management	Color Space	RGB 4:4:4, YCBCR 4:4:4, YCBCR 4:2:2
	RGB Channel Adjust	Yes, Gain
	Default Color Temperature	Standard (6500K)

Monitor Specifications	Bezel Type	3-sided borderless
	Color Of Stand	Black and Silver
	Color Of Head	Black
	Tilt	-5 to +23°
	Swivel	±45°
	Pivot	±90
	Height Adjust Range	150 mm
	Vesa Mounting	100 mm x 100 mm
	Security Lock	Security lock-ready

QuickSpecs

Technical Specifications

	Detachable Stand	Yes
	Warranty	3/3/0 for LA, NA, EMEA, APJ; (3/3/3 in select APJ Countries)
	Low Blue Light	Yes, HP Eye Ease (TÜV Low Blue Light Hardware Solution certified)
	Zero Bright Dot Guarantee	No* *The HP Pixel Policy allows no bright sub-pixel defects for this display. For complete details, see http://support.hp.com/us-en/document/c00288895.
	Management Software	HP Client Management Script Library*, HP Display Center** *The Client Management Script Library must be downloaded to the connected PC to run CMSL commands. Some limitations may apply to legacy displays. Visit support.hp.com to download **Host PC requires Windows 10 and above. HP Display Center is available on the Microsoft store.
On Screen Display (OSD)	**On Screen Display**	Brightness+, Color, Input, Image, Power, Menu, Management, Information, Exit
	Native Resolution	WUXGA (1920 x 1200)
	Maximum Resolution	WUXGA (1920 x 1200 @ 100 Hz)
	Preset Graphic Modes/Supported Resolutions	640 x 480 @ 60 Hz 640 x 480 @ 75 Hz 720 x 400 @ 70 Hz 720 x480 @ 60Hz 720 x 576 @50Hz 800 x 600 @ 60 Hz 800 x 600 @ 75 Hz 1024 x 768 @ 60 Hz 1024 x 768 @ 75 Hz 1280 x 720 @ 50 Hz 1280 x 720 @ 60 Hz 1280 x 720 @100 Hz 1280 x 800 @ 60 Hz 1280 x 1024 @ 60 Hz 1280 x 1024 @ 75 Hz 1440 x 900 @ 60 Hz 1600 x 900 @ 60 Hz 1680 x 1050 @ 60 Hz 1920 x1080 @ 50 Hz 1920 x 1080 @ 60 Hz 1920 x 1080 @ 75 Hz 1920 x 1080@ 100 Hz 1920 x 1200 @ 60 Hz 1920 x 1200 @ 75 Hz 1920 x 1200 @ 100 Hz
	Minimum Vertical Scan Rate	50 Hz
	Maximum Vertical Scan Rate	100 Hz
	Minimum Horizontal Scan Rate	30 kHz

QuickSpecs

Technical Specifications

	Maximum Horizontal Scan Rate	130 kHz
	Maximum Pixel Clock	300 MHz
	User Programmable Modes	Yes, 20
	User-Assignable Function Buttons	Yes, 4 (6 options)
	Languages	11 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese, S-Chinese and Russian)
Connector Types	**DisplayPort™**	1 DisplayPort™ 1.2
	HDMI	1 HDMI 1.4
	HDCP	Yes, DisplayPort™ and HDMI
	USB-Type-A	4 SuperSpeed USB Type-A 5Gbps signaling rate (1 charging)
	USB-B (Hub enablement)	1 USB-B
Special Features	**Switch**	Monitor Power button Next Active Input / Up button Information / Down button Brightness / Left button Color / Right button Menu / Enter button
	User Presets	20
	User Updateable Firmware	Yes
Power & Operating Specs	**Power Supply**	Internal
	Power Source	100 – 240 VAC 50/60 Hz
	Power Consumption- Max	58 W
	Energy Saving/Stand By Mode	0.5 W
	Power Consumption - Typical	22 W
Energy Star Data	**Operational Mode at 100 VAC**	10.8 W
	Operational Mode at 115 VAC	10.8 W
	Operational Mode at 230 VAC	12.9 W
EU Energy Efficiency Class (ErP LOT-5)	**On-mode Power Consumption for Standard Dynamic Range (SDR)**	12.3 W
	ErP LOT5 Energy Efficiency Class for Standard Dynamic Range (SDR)	A↑G C
Operating Conditions	**Operating Temperature - Celsius**	5~35°C
	Operating Temperature - Fahrenheit	41– 95°F
	Non-Operating Temperature - Celsius	−40 – 65°C
	Non-Operating Temperature - Fahrenheit	−4 – 149°F
	Operating Humidity	20 – 80% Relative Humidity (non-condensing)
	Non-Operating Humidity	5~95%RH
	Operating Altitude Metric	0~5,000m
	Non-operating Altitude Metric	0~12,192m
	Operating Altitude Imperial	0~16,400ft

Technical Specifications

	Non-operating Altitude Imperial	0~40,000ft
Certifications and Compliances	**Low Halogen**	Yes*
		* External power supplies, WWAN modules, power cords, cables and peripherals excluded. Service parts obtained after purchase may not be Low Halogen.
	Agency Approvals and Certifications	WW application CB/KC/NOM/TUV-S/ISO 9241-307/EAC/cTUVus/PSB/ISC/CCC/CECP/SEPA/TCO/TCO Certified Edge/GS/TUV HW LBL/UAE/Ukraine/BIS/NRCS/CE/FCC/VCCI/BSMI/EMF/KCC/ICES/RCM/Australian-New Zealand DoC/Energy Star/Korea MEPS/Ukraine EE/CEL/California CEC/WEEE/PSE/TGM
	Microsoft WHQL Certification	Windows 11 (x64 only), Windows 10 (x64 only)
	ENERGY STAR® Certified	Yes
	EPEAT® Registered	EPEAT® Gold in United States*
	Regions need to verify by country	EPEAT® registered with Climate+ *EPEAT® Gold **NOTE:** Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit www.epeat.net for more information.
	China Energy Label	CEL Grade 2
	TCO Certified Edge	Yes
	TCO Certified	Yes
	SmartWay Transport Partnership - NA only	Yes (NA sku)
Contains Recycled Materials	**Recycled Plastics**	85% ITE-derived closed loop plastic* Contains Ocean-Bound Plastic** * Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard. ** All plastic parts contain ocean-bound plastic. Percentage of ocean-bound plastic contained in each component varies by product.
	Recycled Metal	At least 30% recycled metal* * Recycled metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal parts over 25 grams.
	Recycled Glass	20% recycled glass* * Percentage of recycled glass in the monitor panel varies by product. Recycled glass is expressed as a percentage of the total weight of the glass.
	Recyclable Packaging (Box, packing materials)	Outside Box and corrugated cushions are 100% sustainably sourced and recyclable* & Molded Paper Pulp Cushion inside box is 100% sustainably sourced and recyclable**

QuickSpecs

Technical Specifications

*100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.
**Molded pulp cushions contains 100% recycled wood fiber and organic materials.

		Metric	**Imperial**
Unit Product/Package Specifications	**Product Dimensions** (Unpacked with stand) (W x D x H)	53.28x18.95x51.75 cm	20.98x7.46x20.37 in
	Product Dimensions (Packed) (W x D x H)	62.1x14x41.1 cm	24.45 x 5.51 x 16.18 in
	Display Head Dimensions (Unpacked without stand) (W x D x H)	53.28x4.70x34.29 cm	20.98x1.85x13.5 in
	Base Area Footprint (w x d mm)	242 x 189.50mm	9.53 x 7.46 in
	Bezel Measurements	Top: NA Sides: NA Bottom: 9.25	Top: NA Sides: NA Bottom: 0.37
	Product Weight (Unpacked with stand)	5.1 kg	11.2 lb
	Product Weight (Packed)	7.4 kg	16.3 lb
	Product Weight (Head Only)	3.5 kg	7.7 lbs
Pallet Information	**Pallet Dimensions** (L x W x H mm)	Slip Sheet: 1128 x 629 x 2068 mm (20' ft & 40' ft) Slip Sheet: 1128 x 629 x 2480 mm (40' HQ) Pallet: 1128 x 629 x 2192 mm (20' ft & 40' ft & 40' HQ)	Slip Sheet: 44.41 x 24.76 x 81.42 inch (20' ft & 40' ft) Slip Sheet: 44.41 x 24.76 x 97.64 inch (40' HQ) Pallet: 44.41 x 24.76 x 86.3 inch (20' ft & 40' ft & 40' HQ)
	Pallet Total Weight	Slip Sheet: 300.5 kg (20' ft & 40' ft) Slip Sheet: 360.2 kg (40' HQ) Pallet: 310.5 kg (20' ft & 40' ft & 40' HQ)	Slip Sheet: 662.5 lbs (20' ft & 40' ft) Slip Sheet: 794.1 lbs (40' HQ) Pallet: 684.5 lbs (20' ft & 40' ft & 40' HQ)
	Pallet Layers	Slip Sheet: 5 layers (20' ft & 40' ft) Slip Sheet: 6 layers (40' HQ) Pallet: 5 layers (20' ft & 40' ft & 40' HQ)	
	Pallet Product per Layer	8 per layer (slip sheet & pallet)	
	Total Products per Pallet	Slip Sheet: 40 sets (20' ft & 40' ft) Slip Sheet: 48 sets (40' HQ) Pallet: 40 sets (20' ft & 40' ft & 40' HQ)	
	Container Load, 20-Foot	720 sets (slip sheet and pallet)	
	Container Load, 40-Foot	1520 sets (slip sheet and pallet)	
	Container Load, 40-Foot HighQ	1824 sets (slip sheet) 1520 sets (pallet)	
What's in the box?	AC power cord (1.83m) 5.9ft DisplayPort™ 1.2 cable (1.8m) HDMI 1.4cable (1.8m) 5.9 ft USB 3.2 B-A cable (1.8m)		

QuickSpecs

Technical Specifications

	Warranty Quick Setup Poster	
User Guide and Warranty Languages	**User Guide Languages**	Arabic, Bahasa Indonesia, Bulgarian, Chinese-S, Chinese-T, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Kazakh, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese (Brazilian), Portuguese (Iberian), Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkey, Ukrainian
	Warranty Languages	English US (EN), English AP (EN-AP), English LA (EN-LA), English UK (EN-GB), Arabic (AR) -17x, Bahasa Indonesia (ID), Bosnian (BS), Bulgarian (BG), Chinese-S (CN), Chinese-T (TW), Croatian (HR), Czech (CS), Danish (DA), Dutch (NL), Estonian (ET), Finnish (FI), French Canadian (FC), French European (FR), German (DE), Greek (EL), Hebrew (HE), Hungarian (HU), Italian (IT), Japanese (JA), Kazakh (KK), Korean (KO), Latvian (LV), Lithuanian (LT), Norwegian (NO), Polish (PL), Portuguese, Brazilian (BR), Portuguese, Iberian (PT), Romanian (RO), Russian (RU), Serbian (SR), Slovak (SK), Slovenian (SL), Spanish, Castilian (ES-ES), Spanish, Latin America (ES-MX), Swedish (SV), Thai (TH), Turkish (TR), Ukrainian (UK), Vietnamese (VI)

Technical Specifications

Summary

Change Log			
November 22, 2024	V1 to V2	Updated Added	Management Software Section Certification Section
	V2 to V3		
	V3 to V4		