**Technical Specifications** 

### **HP E24u G5 FHD USB-C Monitor**



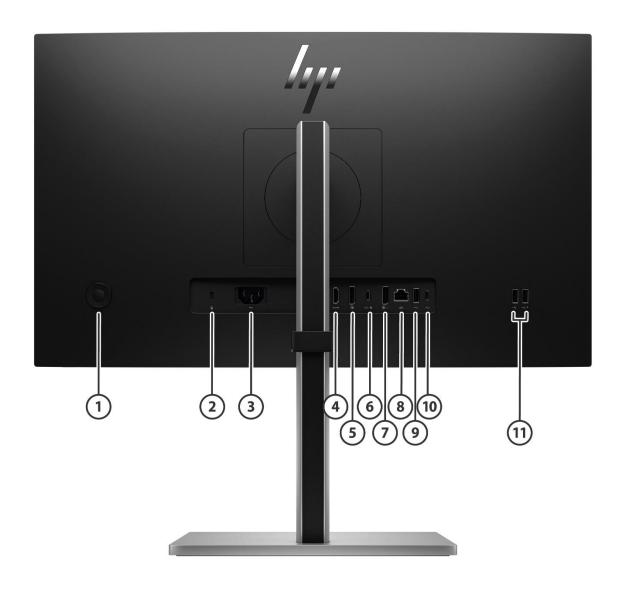
#### Front

1. Power Button

2. LED Power

### **Technical Specifications**

#### **HP E24u G5 FHD USB-C Monitor**



- 1. Joypad OSD button
- 2. Security Cable Slot
- 3. Power Connector
- 4. HDMI 1.4 Port
- 5. DisplayPort<sup>™</sup> 1.2
- **6.** SuperSpeed USB Type-C® 5Gbps signaling rate (Up to 65W USB Power Delivery, Alt Mode DisplayPort™ 1.2)

#### Back

- 7. DisplayPort™ 1.2 out
- 8. RJ-45 Port
- **9.** SuperSpeed USB Type-A 5Gbps signaling rate
- **10.** SuperSpeed USB Type-C® 5Gbps signaling rate (Up to 15W USB Power Delivery)
- **11.** SuperSpeed USB Type-A 5Gbps signaling rate (2, 1 charging)

#### **Technical Specifications**

Model: 6N4D0AA

Panel Specifications Display Size (Diagonal) 23.8" (60.5 cm)

Viewable Diagonal Size 23.8" (60.47 cm)
Panel Technology IPS

Panel TechnologyIPSMax Refresh Rate75Hz

Native ResolutionFHD (1920 x 1080)Panel Bit Depth8 bit (6 bit + FRC)

Aspect Ratio16:9Brightness (Typical)250 nitsContrast Ratio (Static)1000:1

**Dynamic Contrast Ratio** 8000000:1 =8M:1

Flicker Free Yes

Pixel Pitch 0.27 x 0.27 mm

Pixels Per Inch (PPI) 93 PPI

**Display Colors** Up to 16.7 million colors supported

Backlight Lamp Life Minimum (To Half 30k

**Brightness - In Hours)** 

Backlight TypeEdge-litScreen TreatmentAnti-glareHardness3HHaze25%

**Response Time (Typical)** 5ms GtG (with overdrive)

Horizontal Viewing Angle 178°

(Typical Cr>10)

Vertical Viewing Angle (Typical Cr>10) 178°

Panel Active Area Metric (W X H) 52.70 x 29.65 cm Panel Active Area Imperial (W X H) 20.75 x 11.67 in

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

Color sRGB 99%

Color Management Color Space/ Subsampling Support RGB 4:4:4, YCBCR 4:4:4, YCBCR 4:2:2

RGB Channel Adjust Yes, Gain
Default Color Temperature Neutral (6500K)

Monitor Specifications Bezel Type 3-sided borderless

Color Of Stand Black & 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

**Detachable Stand** Yes

Warranty 3/3/0 for LA, NA, EMEA, APJ

(3/3/3 in select APJ Countries)



### **Technical Specifications**

**Low Blue Light** Yes, HP Eye Ease (TÜV Low Blue Light Hardware Solution

certified)

Management Software HP Display Center, HP Display Manager\*

\*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 Control, Image Control, Input Control, Power Control, Menu Control, Management, Information,

Exit

Native Resolution FHD (1920 x 1080)

**Maximum Resolution** FHD (1920 x 1080 @ 75 Hz)

**Preset Graphic Modes/Supported** 640 x 480 @ 60 Hz **Resolutions** 640 x 480 @ 75 Hz

720 x 400 @ 70 Hz 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 800 @ 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

1280 x 1024 @ 60 Hz

Minimum Vertical Scan Rate

Maximum Vertical Scan Rate

75 Hz

Minimum Horizontal Scan Rate

Maximum Horizontal Scan Rate

Maximum Pixel Clock

User Programmable Modes

Yes, 18.

**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 **DisplayPort™ Out** 1 DisplayPort™ 1.2-out

**HDMI** 1 HDMI 1.4

**HDCP** Yes, DisplayPort™, HDMI and USB Type-C®

**USB Type-C® Video Input** 1 SuperSpeed USB Type-C® 5Gbps signaling rate (up to

65W USB Power Delivery, Alt Mode DisplayPort™ 1.2) **USB Type-C® Data**1 SuperSpeed USB Type-C® 5Gbps signaling rate (Up to

15W USB Power Delivery)

### **Technical Specifications**

**USB- A** 3 SuperSpeed USB Type-A 5Gbps signaling rate (1

charging)

**ETHERNET** 1 RJ-45 (10/100/1000 Mbps)

Special Features SWITCH Monitor Power button

Next Active Input / Up button Information / Down button Brightness / Left button Color / Right button Menu / Enter button

**Remote Manageability**\*,\*\* Through HP Display Manager,

In-Band MAC Address Pass Through (MAPT),

In-Band Wake on LAN (WoL),

PXE Boot.

Out-of-Band MAC Address Pass Through (MAPT),

Out-of-Band Wake on LAN (WoL).

\*Not all notebooks support remote manageability.

\*\*Out-of-band manageability only available with HP G7, G8 and G9 HP notebooks and not supported on non-HP devices.

User Presets 18
User Updateable Firmware Yes

Other Special Features Single Power On

**Power & Operating** 

**Specs** 

Power Supply Internal

**Power Source** 100 – 240 VAC 50/60 Hz

Power Consumption- Max160WEnergy Saving/Stand By Mode0.5WPower Consumption - Typical23.5W

Energy Star Data Operational Mode at 100 VAC 14.17 W

Operational Mode at 115 VAC14.17 WOperational Mode at 230 VAC14.62 W

EU Energy Efficiency Class (ErP LOT-5) On-mode Power Consumption for Standard Dynamic Range (SDR)

ErP LOT5 Energy Efficiency Class for Standard Dynamic Range (SDR)

15.6W



5°-35°C

Operating Conditions Operating Temperature - Celsius

Operating Temperature - Fahrenheit  $41^{\circ} - 95^{\circ}$ F Non-Operating Temperature - Celsius  $-40^{\circ} - 65^{\circ}$ C Non-Operating Temperature -  $-40^{\circ} - 149^{\circ}$ F

**Fahrenheit** 

**Operating Humidity** 20 – 80% Relative Humidity (non-condensing)

Non-Operating Humidity 5 – 95%

 $\begin{array}{ll} \textbf{Operating Altitude} & 0-5,000 \text{ m (16,400 ft.)} \\ \textbf{Non-operating Altitude} & 0-12,192 \text{ m (40,000 ft.)} \\ \end{array}$ 

Certifications and Low Halogen Yes\*

### **Technical Specifications**

•		1:-		
LO	mp	ılla	nc	62

\*External power supplies, WWAN modules, power cords, cables

and peripherals excluded.

**Agency Approvals and Certifications** WW application

CE/CB/KC/KCC/NOM/PSB/ICE/TUV-S/ISO 9241-307/cTUVus/GS/ISC/CCC/CEL/CECP/SEPA/TCO/TCO
Certified Edge/Hardware Low Blue Light/Energy
Star/VCCI/FCC/BSMI/BIS/NRCS/UAE/Ukraine/Vietnam
MEPS/Australian-New Zealand MEPS/Ukraine
EE/WEEE/EAC/PSE/E-Standby (Korea MEPS)/TGM

Microsoft WHQL Certification Win 11 (x64 only), Win 10 (x64 only)

**ENERGY STAR® Certified** Yes

**EPEAT® Registered** EPEAT® Gold in United States\*

Regions need to verify by country

\*Based on US EPEAT® registration according to IEEE 1680.1-

2018 EPEAT®. Status varies by country. Visit http://www.epeat.net for more information.

**China Energy Label** CEL Grade 1

TCO Certified Edge Yes
TCO Certified Yes

SmartWay Transport Partnership - NA Yes (NA sku)

only

### Contains Recycled Plastics

#### **Contains Recycled Plastics**

Contains ocean-bound recycled plastic\*; 85% ITE-derived

closed loop plastic\*\*

\* All plastic parts contain ocean-bound plastic. Percentage of ocean-bound plastic contained in each component varies by product.

\*\* ITE Derived Closed Loop Plastic percentage is based on the definition set in the IEEE 1680.1-2018 standard.

definition set in the IEEE 1680.1-2018 Stand

**Recycled Metals** 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.

### 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\*\*

\*100% outer box packaging and corrugated cushions made from

sustainably sourced certified and recycled fibers.

\*\*Molded pulp cushions are made from 100% recycled wood

fiber and organic materials.

### Unit Product/Package Specifications

**Product Dimensions** 

(Unpacked with stand) (W x D x H)

**Product Dimensions** (Packed) (W x D x H)

Display Head Dimensions

(Unpacked without stand) (W  $\times$  D  $\times$  H)

<u>Metric</u> 53.94 x 21.1 x 50.7 cm

62.1 x 14 x 40 cm

53.94 x 4.7 x 32.26 cm

(w/o hinge)

<u>Imperial</u> 21.24 x 8.31 x 19.96 inch

24.45 x 5.51 x 15.75 inch

21.24 x 1.85 x 12.7 inch

(w/o hinge)

53.94 x 7.5 x 32.26 cm 21.24 x 2.95 x 12.7 inch

### **Technical Specifications**

 (w/ hinge)
 (w/ hinge)

 Base Area Footprint
 242 x 187 mm
 9.53 x 7.36 inch

(w x d mm)

**Bezel Measurements** Bottom: 18.1 mm Bottom: 0.71 inch

**Product Weight** 6 kg 13.2 lb

(Unpacked with stand)

**Product Weight** 8 kg 17.6 lb

(Packed)

 Product Weight
 3.98 kg (w/o hinge)
 8.77 lb (w/o hinge)

 (Head Only)
 4.36 kg (w/ hinge)
 9.61 lb (w/ hinge)

Pallet InformationPallet DimensionsSlip Sheet:Slip Sheet:

(L x W x H mm) 1128 x 629 x 2009 mm 44.41 x 24.76 x 79.09 inch

(20' ft & 40' ft) (20' ft & 40' ft) Slip Sheet: Slip Sheet:

1128 x 629 x 2412 mm 44.41 x 24.76 x 94.96 inch

(40HQ) (40HQ) Pallet: Pallet:

1128 x 629 x 2140 mm 44.41 x 24.76 x 84.25 inch

(20' ft & 40' ft) (20' ft & 40' ft)

Pallet: Pallet:

1128 x 629 x 2540 mm 44.41 x 24.76 x 100 inch

(40HQ) (40HQ)

Pallet Total WeightSlip Sheet:Slip Sheet:

323.84 kg (20' ft & 40' ft) 713.94 lbs (20' ft & 40' ft)

 Slip Sheet:
 Slip Sheet:

 388.43 kg (40HQ)
 856.33 lbs (40HQ)

Pallet: Pallet:

336.18 kg (20' ft & 40' ft) 741.14 lbs (20' ft & 40' ft)

Pallet: Pallet:

400.96 kg (40HQ) 883.96 lbs (40HQ)

Pallet Layers Slip Sheet: 5 layers (20' ft & 40' ft)

Slip Sheet: 6 layers (40' ft HQ)
Pallet: 5 layers (20' ft & 40' ft)
Pallet: 6 layers (40' ft HQ)

Pallet Product per Layer 8 per layer (slip sheet)

8 per layer (pallet)

**Total Products per Pallet** Slip Sheet: 40 sets (20' ft & 40' ft)

Slip Sheet: 48 sets (40' ft HQ)
Pallet: 40 sets (20' ft & 40' ft)
Pallet: 48 sets (40' ft HQ)

**Container Load, 20-Foot** 720 sets (slip sheet)

720 sets (pallet)

**Container Load, 40-Foot** 1520 sets (slip sheet)

1520 sets (pallet)

Container Load, 40-Foot HighQ 1824 sets (slip sheet)

1824 sets (pallet)

### **Technical Specifications**

What's in the box? AC power cord (1.83m) 5.9ft

USB 3.1 C-C cable (1.8m)

Warranty

**Quick Setup Poster** 

User Guide and Warranty Languages **User Guide Languages** 

**Warranty 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 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**

### **ENVIRONMENTAL DATA**

E. I.I.I.C. PC.	<b>-1.</b>		"Control to College Control to the College Control		
Eco-Label Certifications	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:				
& declarations					
	IT ECO declaration				
	<ul> <li>US ENERGY STAR</li> </ul>	0.00			
	US Federal Energy Management Program (FEMP)				
	EPEAT® Gold reg	istered in the United States. See	http://www.epeat.net for registration		
	status in your country.				
	TCO Certified Edg	•			
	_				
	<ul> <li>China Energy Conservation Program (CECP)</li> <li>China State Environmental Protection Administration (SEPA)</li> </ul>				
			IIIIII (SEPA)		
	Taiwan Green Mark     Taiwan Green Mark     Taiwan Green Mark				
	Korea Eco-label				
	Japan PC Green label*				
Sustainable Impact	• 80% ITE – derived closed	d loop plastic			
Specifications	• 30% recycled metal				
	<ul> <li>Low halogen</li> </ul>				
	Outside Box and corruga	ated cushions are 100% sustaina	bly sourced and recyclable		
	Molded Paper Pulp Cush	ion inside box is 100% sustainat	oly sourced and recyclable		
	Recycled Plastic cushions				
System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the				
	Notebook model is based	on a "Typically Configured Note	book".		
		3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3			
Energy Consumption					
(in accordance with US					
ENERGY STAR® test					
	115VAC 60Hz 230VAC 50Hz 100VAC 50Hz				
	115VAC 60H2	230AVC 20H2	100VAC 50Hz		
method)	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz		
method) Normal Operation (Short	<b>115VAC, 60Hz</b> 14.17 W	230VAC, 50Hz 14.62 W	<b>100VAC, 50Hz</b> 14.17 W		
method)  Normal Operation (Short idle)	14.17 W	14.62 W	14.17 W		
method)  Normal Operation (Short idle)  Normal Operation (Long					
method)  Normal Operation (Short idle)  Normal Operation (Long idle)	14.17 W 14.17 W	14.62 W 14.62 W	14.17 W 14.17 W		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W 14.17 W 0.39 W	14.62 W 14.62 W 0.3 W	14.17 W 14.17 W 0.39 W		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)	14.17 W 14.17 W	14.62 W 14.62 W	14.17 W 14.17 W		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W 14.17 W 0.39 W 0.34 W	14.62 W 14.62 W 0.3 W	14.17 W 14.17 W 0.39 W		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W	14.62 W 14.62 W 0.3 W 0.31 W	14.17 W 14.17 W 0.39 W 0.34 W		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list	14.62 W  14.62 W  0.3 W  0.31 W  ted is for an ENERGY STAR® comp	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers man	14.62 W  14.62 W  0.3 W  0.31 W  ted is for an ENERGY STAR® comprised with the ENERGY STAR® Log	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S.		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers mails Environmental Protection	14.62 W  14.62 W  0.3 W  0.31 W  ted is for an ENERGY STAR® comprked with the ENERGY STAR® Logar Agency (EPA) ENERGY STAR® sp	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. ecifications for computers. If a model		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers mail Environmental Protection family does not offer ENE	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  0.34 W  0.31 W  14.62 W  16.62 W  16.63 W  16.64 W  16.64 W  16.64 W  16.65 W	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. recifications for computers. If a model tions, then energy efficiency data listed is		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers marked in the computer of the compute	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.34 W  14.62 W  15.64 I STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® SPECTOR OF THE STAR® SPECTOR OF THE STAR® COMPLET OF THE STAR STAR STAR STAR STAR STAR STAR STAR	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. ecifications for computers. If a model		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers mail Environmental Protection family does not offer ENE	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.34 W  14.62 W  15.64 I STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® SPECTOR OF THE STAR® SPECTOR OF THE STAR® COMPLET OF THE STAR STAR STAR STAR STAR STAR STAR STAR	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. recifications for computers. If a model tions, then energy efficiency data listed is		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers marked in the computer of the compute	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.34 W  14.62 W  15.64 I STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® COMPLET OF THE STAR® SPECTOR OF THE STAR® SPECTOR OF THE STAR® COMPLET OF THE STAR STAR STAR STAR STAR STAR STAR STAR	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. recifications for computers. If a model tions, then energy efficiency data listed is		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep  Off	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers man Environmental Protection family does not offer ENE for a typically configured Microsoft Windows® operations.	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  0.31 W  14.62 W  14.62 W  14.62 W  15.64 W  16.65 W	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. recifications for computers. If a model tions, then energy efficiency data listed is high efficiency power supply, and a		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep  Off  Heat Dissipation*	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers mai Environmental Protection family does not offer ENE for a typically configured Microsoft Windows® open.	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.31 W  14.62 W  15.64 In the ENERGY STAR® completed with the ENERGY STAR® Logon Agency (EPA) ENERGY STAR® spragger STAR® compliant configurate PC featuring a hard disk drive, a lating system.	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. ecifications for computers. If a model tions, then energy efficiency data listed is high efficiency power supply, and a		
method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep  Off  Heat Dissipation*  Normal Operation (Short	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers mai Environmental Protection family does not offer ENE for a typically configured Microsoft Windows® open.	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.31 W  14.62 W  15.64 In the ENERGY STAR® completed with the ENERGY STAR® Logon Agency (EPA) ENERGY STAR® spragger STAR® compliant configurate PC featuring a hard disk drive, a lating system.	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. ecifications for computers. If a model tions, then energy efficiency data listed is high efficiency power supply, and a		
Method)  Normal Operation (Short idle)  Normal Operation (Long idle)  Sleep  Off  Heat Dissipation*  Normal Operation (Short idle)	14.17 W  14.17 W  0.39 W  0.34 W  NOTE: Energy efficiency data list family. HP computers man Environmental Protection family does not offer ENE for a typically configured Microsoft Windows® open 115VAC, 60Hz  48.5 BTU/hr	14.62 W  14.62 W  0.3 W  0.31 W  14.62 W  14.62 W  0.31 W  14.62 W  14.62 W  15.64 In the ENERGY STAR® completed with the ENERGY STAR® Logard Agency (EPA) ENERGY STAR® sprogram (EPA) ENERGY STAR® sprogram (EPA) ENERGY STAR® at large system.  230VAC, 50Hz  50.0 BTU/hr	14.17 W  14.17 W  0.39 W  0.34 W  Diliant product if offered within the model go are compliant with the applicable U.S. recifications for computers. If a model tions, then energy efficiency data listed is high efficiency power supply, and a  100VAC, 50Hz  48.5 BTU/hr		



### **Technical Specifications**

Sleep	1.3 B1	ΓU/hr	1.0 BTU/hr	1.3 BTU/hr
Off	1.2 B1	ΓU/hr	1.1 BTU/hr	1.2 BTU/hr
	*NOTE: Heat attained for	-	s calculated based on the measur	ed watts, assuming the service level is
Longevity and Upgrading	This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the  Spare parts are available throughout the warranty period and or for up to "5" years after the end of production.			
Additional Information	<ul> <li>This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.</li> <li>This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.</li> <li>This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).</li> <li>This product is in compliance with the IEEE 1680 (EPEAT) standard at the Gold level, see www.epeat.net</li> <li>Plastics parts weighing over 25 grams used in the product are marked per IS011469 and IS01043.</li> <li>This product is 97.2% recycle-able when properly disposed of at end of life.</li> </ul>			
Packaging Materials	External:	PAPER/Pa	per	735 g
		PAPER/Pa	per	520 g
		PAPER/Mo		460 g
	Internal:		PE (Expanded Polyethylene)	14 q
	internati		PE (Expanded Polyethylene)	6 g
			PE (Expanded Polyethylene)	4 g
	The plastic i			<u> </u>
	The plastic packaging material contains at least 0.0% recycled content.  The corrugated paper packaging materials contains at least 92.7% recycled content.			
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.			
	evolve.			



### **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):				
	<ul> <li>Asbestos</li> <li>Certain Azo Colorants</li> <li>Certain Brominated Flame Retardants – may not be used as flame retardants in plastics</li> <li>Cadmium</li> <li>Chlorinated Hydrocarbons</li> <li>Chlorinated Paraffins</li> <li>Bis(2-Ethylhexyl) phthalate (DEHP)</li> <li>Benzyl butyl phthalate (BBP)</li> <li>Dibutyl phthalate (DBP)</li> <li>Diisobutyl phthalate (DIBP)</li> <li>Formaldehyde</li> <li>Halogenated Diphenyl Methanes</li> <li>Lead carbonates and sulfates</li> <li>Lead and Lead compounds</li> <li>Mercuric Oxide Batteries</li> <li>Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user.</li> <li>Ozone Depleting Substances</li> <li>Polybrominated Biphenyls (PBBs)</li> <li>Polybrominated Biphenyl Ethers (PBBEs)</li> <li>Polybrominated Biphenyl Oxides (PBBOs)</li> <li>Polychlorinated Biphenyl (PCB)</li> <li>Polychlorinated Terphenyls (PCT)</li> <li>Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.</li> <li>Radioactive Substances</li> <li>Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)</li> </ul>				
Packaging Usage	<ul> <li>HP follows these guidelines to decrease the environmental impact of product packaging:</li> <li>Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.</li> <li>Eliminate the use of ozone-depleting substances (ODS) in packaging materials.</li> <li>Design packaging materials for ease of disassembly.</li> <li>Maximize the use of post-consumer recycled content materials in packaging materials.</li> <li>Use readily recyclable packaging materials such as paper and corrugated materials.</li> <li>Reduce size and weight of packages to improve transportation fuel efficiency.</li> <li>Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.</li> </ul>				

### **Technical Specifications**

End-of-life Management	HP offers end-of-life HP product return and recycling programs in many geographic areas. To				
and Recycling	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.				
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HP, Inc. Corporate Environmental	For more information about HP's commitment to the environment:				
Information	Global Citizenship Report				
	http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications				
	http://www8.hp.com/us/en/hp-information/environment/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				
footnotes	Described of coord bound clostic contained in cook component units by a well-st				
Tootholes	Percentage of ocean-bound plastic contained in each component varies by product				
	<ul> <li>Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.</li> </ul>				
	External power supplies, WWAN modules, power cords, cables and peripherals excluded.				
	100% outer box packaging and corrugated cushions made from sustainably sourced				
	certified and recycled fibers.				
	Fiber cushions made from 100% recycled wood fiber and organic materials.				
	Plastic cushions are made from >90% recycled plastic.				
	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				
	150 . 152 . definitions for metal parts over 25 grains				

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### Summary

Change Log			
February 8, 2023	V1 to V2	Added	Environmental Data
	V2 to V3		

