

## *Introduction*

### **Docking Stations Models**

HP USB-C Dock G5

5TW10AA/5TW10UT/5TW10ET

HP USB-C/A Universal Dock G2

5TW13AA/5TW13UT/5TW13ET

HP 4.5 mm and USB-C Dock Adapter G2

6LX61AA

Introduction

Introduction

It is common practice to use more than one dock with your computer. There are users who have a dock at the office, carry a travel hub or dock for use while traveling and also have a dock at home.

There are many reasons to use a lock with your computer and your dock. The currently shipping docks:

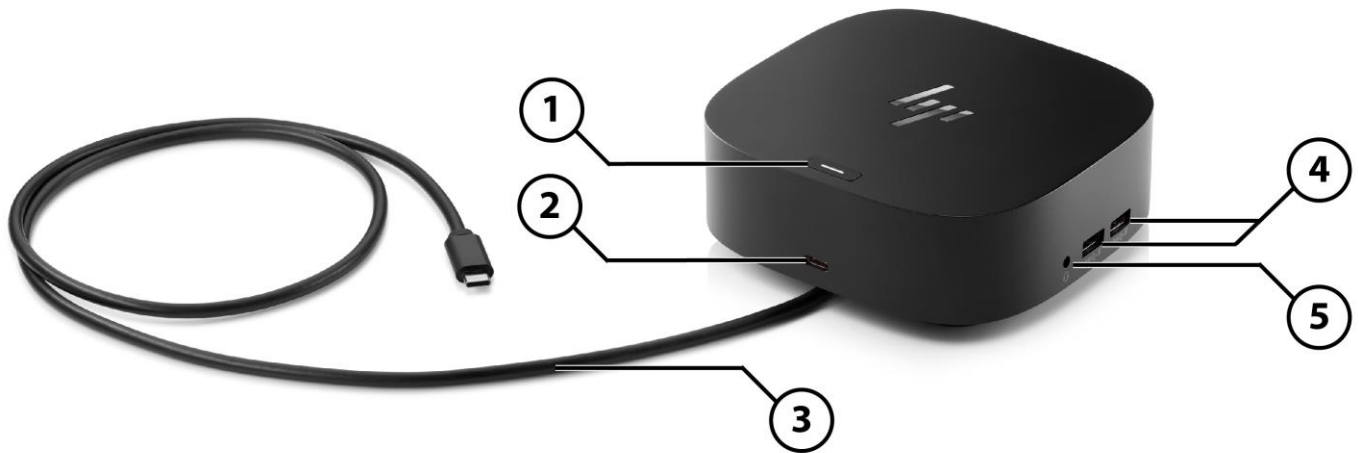
HP USB-C Dock G5	5TW10AA/5TW10UT/5TW10ET
HP USB-C/A Universal Dock G2	5TW13AA/5TW13UT/5TW13ET

are compatible with the following HP locks:

HP Dual Head Keyed Cable Lock	T1A64AA
HP Keyed Cable Lock 10mm	T1A62AA
HP Combination Lock	T0Y15AA

## Technical Specifications - HP USB-C Dock G5

### HP USB-C Dock G5



### Front and Side View

- |                                                             |                                     |
|-------------------------------------------------------------|-------------------------------------|
| 1. 1 LED power button                                       | 4. 2 USB-A 3.2 Gen 1 charging ports |
| 2. 1 USB -C 3.2 port with data and power out (15W)          | 5. 1 Combo audio jack               |
| 3. 1 USB-C cable to connect to host system (1 meter length) |                                     |

## HP USB-C Dock G5



### Back View

- |    |                                  |    |                 |
|----|----------------------------------|----|-----------------|
| 1. | 2 USB-A 3.2 Gen 1 charging ports | 4. | 1 HDMI 2.0 port |
| 2. | 2 DisplayPort™ 1.4 ports         | 5. | 1 RJ45 port     |
| 3. | 1 Standard lock slot             |    |                 |



### Bottom View

1. Insert 4.5 mm barrel from included 120W power supply.

## Technical Specifications - HP USB-C Dock G5

### HP USB-C Dock G5

Components	
<b>Part number</b>	5TW10AA/5TW10UT/5TW10ET
<b>Product dimensions (LxWxH)</b>	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)
<b>Package dimensions (LxWxH)</b>	7.63 x 6.18 x 6.57 in (194 x 157 x 167 mm)
<b>Weight</b>	1.49 lb (0.68 kg)
<b>Top components</b>	Mechanical power button with LED indicator to power or wake host system <sup>1</sup>
<b>Front components</b>	1 x USB-C 3.2 Gen 1 port with data and power out (15W) 1 x USB-C cable to connect to host system (1 meter cable length)
<b>Side components</b>	2 x USB-A 3.2 Gen 1 charging ports 1 x Combo audio jack
<b>Back components</b>	2 x USB-A 3.2 Gen 1 charging ports 2 x DisplayPort™ 1.4 ports 1 x RJ45 port (10/100/1000) 1 x HDMI 2.0 port 1 x Standard lock slot
<b>External monitor support</b>	For hosts that support DisplayPort 1.4 with Display Stream Compression: 3x FHD @ 60 Hz 3x QHD @ 60 Hz 3x 4k @ 60 Hz  For hosts that support DisplayPort 1.3/1.4: 3x FHD @ 60 Hz 3x QHD @ 60 Hz 2x 4K @ 60 Hz  For hosts that support DisplayPort 1.2: 3x FHD @ 60 Hz 2x QHD @ 60 Hz 1x 4K @ 60 Hz
<b>Networking</b>	Supports 1 Gb of Ethernet
<b>Network manageability features</b>	eTag Disconnected Firmware updates PXE Boot Wake on LAN (from the Off, Sleep or Hibernation States <sup>2</sup> ) MAC address pass-through (from the On, Off, Sleep or Hibernation States <sup>3</sup> ) WLAN-LAN Switching
<b>Power to system</b>	Up to 100W via USB-C <sup>4</sup> . Up to 75W on non HP machines. Separate AC power needed for HP ZBooks that require more than 100W power delivered via USB-C alt mode.
<b>Supported platforms</b>	Tested and supported on the following 3rd party notebooks: Apple MacBook Pro 13 2022 (M2), Dell Latitude 5540 2022 (11th Gen Intel® Core™), Dell Latitude 7430 2022 (12th Gen Intel® Core™), Dell XPS 13 2022 (12th Gen Intel® Core™), Lenovo ThinkPad X1 Carbon Gen 9 2021 (11th Gen Intel® Core™), Lenovo ThinkPad X1 Carbon Gen 10 2022 (12th Gen Intel® Core™).
<b>Power to host (USB-C PD)</b>	5V, 9V, 10V, 12V, 15V, 20V all at 5A MAX



## Technical Specifications - HP USB-C Dock G5

<b>Supported operating systems</b>	Windows 11 21H2 Windows 11 22H2 Windows 10 RS4 Windows 10 RS5 Windows 10 19H1 Windows 10 19H2 Windows 10 20H1 Windows 10 20H2 Windows 10 21H1 Windows 10 21H2 Windows 10 22H2 ChromeOS v92.0.4515.157 ChromeOS M92 (HP notebooks only) ChromeOS M93 (HP notebooks only) ThinPro 8.0 Windows 10 IoT Enterprise LTSC 2021 macOS Monterey v12.0 macOS Big Sur 11.5.2
<b>Power adapter</b>	120W
<b>Security slot type</b>	1x Kensington Lock Slot <sup>5</sup>
<b>Power barrel connector</b>	4.5mm

1. For USB-C functionality, host PC must support the DisplayPort™ Alt mode protocol through its USB-C port. Thunderbolt™-enabled notebooks will function at USB-C speeds. Charging and port replication is supported on notebooks that have implemented USB-C industry specifications. Power button to turn on or wake the system, Wake-on LAN from warm and cold dock, Wake-on LAN from S4/S5, and MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock features only function on HP or HP-supported notebooks. HP does not provide Ethernet and audio drivers on Mac PCs.

2. Your computer might support Wake on LAN from the Off, Sleep or Hibernate States, or only when the computer is On or in Sleep.

3. Your computer might support MAC address pass-through the On, Off, Sleep or Hibernate States, or only when the computer is On or in Sleep.

4. Due to Qualcomm system limitations, users can either enable the dock to charge the PC or allow PC to charge external devices through USB-C ports when PC is in S4 (hibernation) or S5 (off) state. The “USB-C Charging” setting in F10 settings is currently set to disabled, which allows the dock to charge the PC but disables the PC’s capability to charge external devices through USB-C ports in S4/S5. Devices can be charged via USB-A on the PC or any USB port on the dock. To change this, visit the “USB-C Charging” setting in F10 and change to enable and connect the PC’s AC adapter to continue use with the dock.

5. Compatible with the following HP locks: T1A62AA HP Keyed Cable Lock 10mm, T1A63AA HP Keyed Cable Lock 10mm (master), T1A64AA HP Dual Headed Keyed Cable Lock 10mm, T1A65AA HP Dual Headed Keyed Cable Lock 10mm (master), TOY16AA HP Essential Combination Lock, TOY15AA HP Combination Lock.

**NOTE:** The DSC supported version and color format depends on GFX capability. DSC is disabled when display is attached to the VGA port or to an external DP2 VGA dongle.

## HP USB-C Dock G5

### Video Resolution (Continues on the next page)

**Video resolution and support is dependent on the maximum capability of the notebook.<sup>1</sup>**  
**This table shows which ports to use to achieve the display configuration.**

	Display Configurations	Output ports
<b>Single Display</b>	(1) 2.5k Display	Any port
	(1) 4k Display	Any port
	(1) 5K single cable*	Either DP port
	(1) 5K dual cable	Both DP ports
	(1) 8K dual cable	Both DP ports
	(1) 8K single cable*	Either DP port
<b>Dual Displays</b>	(2) FHD Displays	Any 2 ports
	(2) 2.5k Displays	Any 2 ports
	(1) 4K and (1) FHD	Any 2 ports
	(2) 4k Displays	Any 2 ports
	(1) 5K single* + 1 FHD	5K on either DP, FHD on any other port
	(1) 5K dual cable + 1 FHD	Both DP ports for 5K and FHD on HDMI
<b>Triple Displays</b>	(3) 1680 x 1050 Displays	All 3 ports
	(3) FHD Displays	All 3 ports
	(2) 2.5K and (1) FHD	Any 3 ports
	(3) 2.5K	All 3 ports
	(1) 4K + (1) 2.5k + (1) FHD	Any 3 ports
	(1) 4k and (2) 2.5k Displays	Any 3 ports
	(2) 4K and (1) FHD	Any 3 ports
	(3) 4K	Any 3 ports
	(2) 5K single cable* and (1) 4K	5K on either DP, 4K on HDMI

1. For Chrome users, dual displays are supported at full HD. Triple displays are only supported on select Chromebox machines. For Apple users, the maximum display resolution using Apple is one display on a DP 1.4 host at UHD@60Hz. On an Apple DP 1.2 host you will get QHD~2.5K

**NOTE\*:** Information provided for when single cable 5K and 8K displays are available on the market.

## HP USB-C Dock G5

Video Resolution							
	Display Configurations <sup>1</sup>	Host					
		High Res mode DP Alt Mode (DP x4)			Multi-Function (default)(DP x2)		
		DP 1.2	DP 1.3/1.4	DP 1.4w/DSC**	DP 1.2 MF	DP1.3/1.4MF	DP1.4 MF w/DSC**
<b>Single Display</b>	(1) 2.5K Display	Y	Y	Y	Y	Y	Y
	(1) 4K Display	Y	Y	Y		Y	Y
	(1) 5K single cable*		Y	Y			Y
	(1) 5K dual cable	Y (D5)	Y (D5)	Y (D5)			Y (D5)
	(1) 8K dual cable			Y (D5)			
	(1) 8K single cable*			Y			
<b>Dual Displays</b>	(2) FHD Displays	Y	Y	Y	Y	Y	Y
	(2) 2.5K Displays	Y	Y	Y		Y	Y
	(1) 4K and (1) FHD	Y	Y	Y		Y (D3)	Y
	(2) 4K Displays		Y (D1)	Y			Y
	(1) 5K single* + 1 FHD		Y (D4)	Y			Y
	(1) 5K dual cable + 1 FHD			Y (D5)			Y (D5)
<b>Triple Displays</b>	(3) 1680 x 1050 Displays	Y	Y	Y	Y	Y	Y
	(3) FHD Displays	Y	Y	Y		Y	Y
	(2) 2.5K and (1) FHD	Y	Y	Y			Y
	(3) 2.5K		Y	Y			Y
	(1) 4K + (1) 2.5K + (1) FHD		Y	Y			Y
	(1) 4K and (2) 2.5K Displays		Y (D1)	Y			Y
	(2) 4K and (1) FHD			Y			Y (D2)
	(3) 4K			Y			
	(2) 5K single cable* and (1) 4K			Y			

1. Assumes the host supports up to 3 simultaneous displays with no resolution limitations. Some lower power processors may have a resolution limitation.

### NOTES:

D1 - Only supports up to 3840 x 2160 (UHD 4K)

D2 - Only supports up to dual 3840 x 2160 (UHD 4K) and 1920 x 1080 (FHD)

D3 - Only supports up to 4096 x 2160 (4K) @ 30Hz

D4 - Supports up to 5120 x 2880 (5K) and 1920 x 1080 (FHD) with reduced blanking timing

D5 - Both DP cables must be connected to the same graphics controller and the graphics driver must support the tile display feature under MST. Currently, no GPU (in 2019) supports tiled 5K and 8K over MST. However, it is possible that future GPUs may add this support.

Unless noted, displays are driven @ 60Hz, 8bpp

\*Information provided for when single cable 5K and 8K displays are available on the market.

\*\* The DSC supported version and color format depends on GFX capability. DSC is disabled when display is attached to the VGA port or to an external DP2VGA dongle.

FHD = 1920 x 1200 or 1920 x 1080

2.5K = 2560 x 1600 or 2560 x 1440

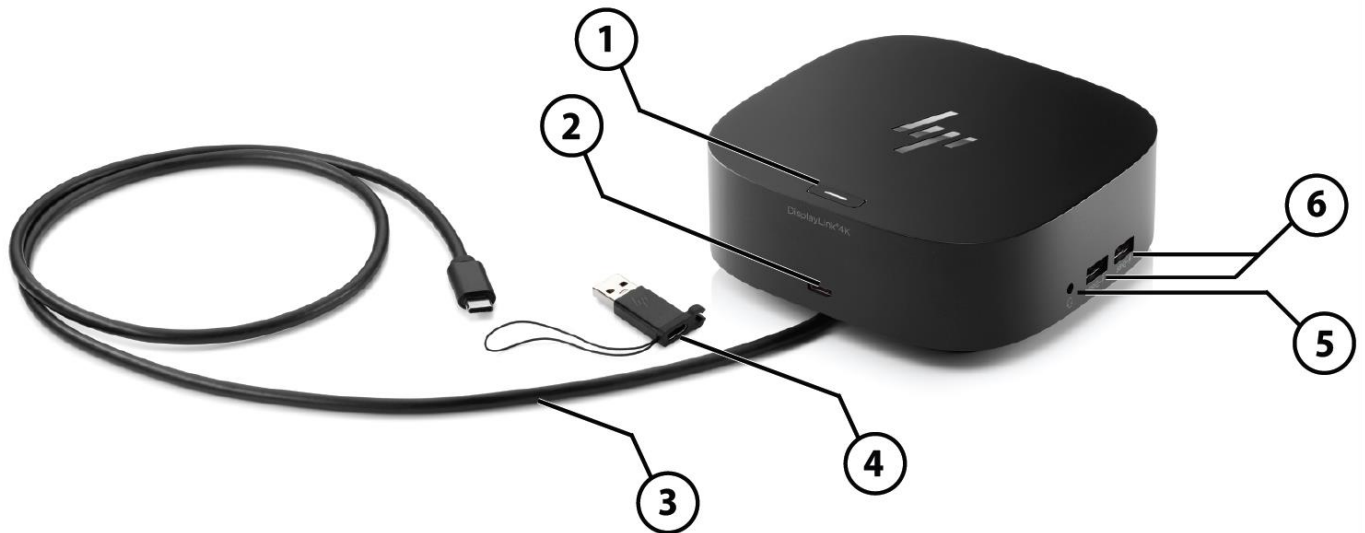
4K = 4096 x 2160 or 3840 x 2160

5K = 5120 x 2880



## Technical Specifications - HP USB-C/A Universal Dock G2

### HP USB-C/A Universal Dock G2



#### Front and Side View

- |                                                             |                               |
|-------------------------------------------------------------|-------------------------------|
| 1. 1 LED power button                                       | 4. USB-A Adapter              |
| 2. 1 Type-C USB 3.2 port with data and power out (15W)      | 5. 1 Combo audio jack         |
| 3. 1 USB-C cable to connect to host system (1 meter length) | 6. 2 USB-A 3.2 charging ports |

## HP USB-C/A Universal Dock G2



### Back View

- |    |                            |    |                 |
|----|----------------------------|----|-----------------|
| 1. | 2 USB-A 3.2 charging ports | 4. | 1 HDMI 2.0 port |
| 2. | 2 DisplayPort™ 1.2 ports   | 5. | 1 RJ45 port     |
| 3. | 1 Standard lock slot       |    |                 |



### Bottom View

1. Insert 4.5 mm barrel from included 120W power supply.

## HP USB-C/A Universal Dock G2

### Components

This table shows how to achieve the resolutions provided in the previous table. Please refer to the notes at the bottom of the table.

<b>Part number</b>	5TW13AA/5TW13UT/5TW13ET
<b>Product dimensions (L x W x H)</b>	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)
<b>Package dimensions (L x W x H)</b>	7.63 x 6.18 x 6.57 in (194 x 157 x 167 mm)
<b>Weight</b>	1.53 lb (0.695 kg)
<b>Top components</b>	Mechanical power button with LED indicator to power or wake host system <sup>1</sup>
<b>Front components</b>	1 x USB-C 3.2 Gen 1 port with data and power out (15W) 1 x USB-C cable to connect to host system (1 meter cable length)
<b>Side components</b>	2 x USB-A 3.2 Gen 1 charging ports 1 x Combo audio jack
<b>Back components</b>	2 x USB-A 3.2 Gen 1 charging ports 2 x DisplayPort™ 1.2 ports 1 x RJ45 port (10/100/1000) 1 x HDMI 2.0 port 1 x Standard lock slot
<b>External monitor support</b>	For hosts that support DisplayPort 1.4 with Display Stream Compression: 3x FHD @ 60 Hz 3x QHD @ 60 Hz 3x 4K @ 60 Hz  For hosts that support DisplayPort 1.3/1.4: 3x FHD @ 60 Hz 3x QHD @ 60 Hz 2x 4K @ 60 Hz  For hosts support DisplayPort 1.2: 3x FHD @ 60 Hz 2x QHD @ 60 Hz 1x 4K @ 60 Hz
<b>Networking</b>	Supports 1 Gb of Ethernet
<b>Network manageability features</b>	eTag Disconnected Firmware updates PXE Boot Wake on LAN (from the Off, Sleep or Hibernation States <sup>2</sup> ) MAC address pass-through (from the On, Off, Sleep or Hibernation States <sup>3</sup> ) WLAN-LAN Switching
<b>Power to system</b>	Up to 100W via USB-C. Up to 75W on non HP machines. Separate AC power needed for HP ZBooks that require more than 100W power delivered via USB-C alt mode.
<b>Supported platforms</b>	Tested and supported on the following 3rd party notebooks" part should read: Tested and supported on the following 3rd party notebooks: Apple MacBook Pro 13 2022 (M2), Dell Latitude 5540 2022 (11th Gen Intel® Core™), Dell Latitude 7430 2022 (12th Gen Intel® Core™), Dell XPS 13 2022 (12th Gen Intel® Core™), Lenovo ThinkPad X1 Carbon Gen 10 2022 (12th Gen Intel® Core™).
<b>Power to host (USB-C PD)</b>	5V, 9V, 10V, 12V, 15V, 20V all at 5A MAX

## Technical Specifications - HP USB-C/A Universal Dock G2

<b>Supported operating systems</b>	Windows 11 21H2 Windows 11 22H2 Windows 10 RS4 Windows 10 RS5 Windows 10 19H1 Windows 10 19H2 Windows 10 20H1 Windows 10 20H2 Windows 10 21H1 Windows 10 21H2 Windows 10 22H2 Windows 7 ChromeOS v92.0.4515.157 ChromeOS M92 (HP notebooks only) ChromeOS M93 (HP notebooks only) ThinPro 8.0 Windows 10 IoT Enterprise LTSC 2021 macOS Monterey v12.0 macOS Big Sur 11.5.2
<b>Drivers</b>	DisplayLink drivers must be downloaded either through the HP support site or via Microsoft Windows updates.
<b>Power Adapter</b>	120W
<b>Security Slot Type</b>	1x Kensington Lock Slot <sup>4</sup>
<b>Power Barrel Connector</b>	4.5mm

1. For USB-C functionality, host PC must support the DisplayPort™ Alt mode protocol through its USB-C port. Thunderbolt™-enabled notebooks will function at USB-C speeds. Charging and port replication is supported on notebooks that have implemented USB-C industry specifications. Power button to turn on or wake the system, Wake-on LAN from warm and cold dock, Wake-on LAN from S4/S5, and MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock features only function on HP or HP-supported notebooks. HP does not provide Ethernet and audio drivers on Mac PCs.

2. Your computer might support Wake on LAN from the Off, Sleep or Hibernate States, or only when the computer is On or in Sleep.

3. Your computer might support MAC address pass-through the On, Off, Sleep or Hibernate States, or only when the computer is On or in Sleep.

4. Compatible with the following HP locks: T1A62AA HP Keyed Cable Lock 10mm, T1A63AA HP Keyed Cable Lock 10mm (master), T1A64AA HP Dual Headed Keyed Cable Lock 10mm, T1A65AA HP Dual Headed Keyed Cable Lock 10mm (master), TOY16AA HP Essential Combination Lock, TOY15AA HP Combination Lock.

## Technical Specifications - HP USB-C/A Universal Dock G2

### HP USB-C/A Universal Dock G2

#### Video Resolution

Video resolution and support is dependent on the maximum capability of the notebook.

	Display Configurations <sup>1</sup>	DP1	DP2	HDMI	Host		
					Multi-Function (default)(x2 DP)		
					DP 1.2 MF	DP1.3/1.4MF	DP1.4 MF w/DSC
Single Display	(1) 4K Display	Any port					
	(1) 5K dual cable	Both DP ports					
Dual Displays	(2) 4K Displays	Any 2 ports *D1					
	(1) 5K dual cable + (1) 2.5K	Both DP ports for 5K and 2.5K on HDMI		Y	Y	Y	
	(1) 5K dual cable + (1) 4K	Both DP ports for 5K and 4K on HDMI		Y (D2)	Y (D1)	Y	
Triple Displays	(3) 2.5K Displays	All 3 ports		Y	Y	Y	
	(2) 4K Displays + (1) 2.5K	4K on DP ports *D1, 2.5k on HDMI		Y	Y	Y	
	(3) 4K Displays	4K on DP ports *D1 and 4K on HDMI		Y (D2)	Y (D1)	Y	

#### High Res Video Resolution

	Display Configurations/High Resolution Mode <sup>1</sup>	DP1	DP2	HDMI	Host		
					High Res mode DP Alt Mode (DP x4) **		
					DP 1.2	DP1.3/1.4	DP1.4 w/DSC
Single Display	(1) 4K Display	Any port <sup>2</sup>			Y	Y	Y
Dual Displays	(2) 4k Displays	Any 2 ports; DP ports limited to UHD 4K <sup>2</sup>			Y	Y	Y
Triple Displays	(3) 4K Displays	4K on both DP ports (D1) and 4K on HDMI <sup>2</sup>			Y	Y	Y

1. Assumes the host supports up to 3 simultaneous displays with no resolution limitations. Some lower power processors may have a resolution limitation.

2. In High Res mode, DisplayLink is running at USB2.0 speeds. This has a significant performance impact on DP1 and DP2 output.

#### NOTES:

D1 - Only supports 3840 x 2160 (UHD 4K)

D2 - Only supports 4096 x 2160 (4K @ 30Hz) on HDMI

\*\*DP host is only applicable to the HDMI output when BOTH DP ports are active, or when the host is in High Res mode

Unless noted, displays are driven @ 60Hz, 8bpp

FHD = 1920 x 1200 or 1920 x 1080

2.5K = 2560 x 1600 or 2560 x 1440

4K = 4096 x 2160 or 3840 x 2160

5K = 5120 x 2880

## *Technical Specifications - HP 4.5 mm and USB-C Dock Adapter G2*

### **HP 4.5 mm and USB-C Dock Adapter G2**



1. 1 Type-C USB 3.2 port to connect your HP USB-C/A Universal Dock G2 Type-C cable
2. 1 4.5 mm barrel AC adapter (65 W)
3. 1 Type-A USB 3.2 Plug Port



HP 4.5 mm and USB-C Dock Adapter G2 shown with the HP USB-C/A Universal Dock G2

## Technical Specifications - HP 4.5 mm and USB-C Dock Adapter G2

### HP 4.5 mm and USB-C Dock Adapter G2

Components	
<b>Part number</b>	6LX61AA
<b>Model number</b>	HSA-Q001
<b>Dimensions</b>	without cable: 1.77 x 1.33 x 0.39 in (45 x 34 x 10 mm) with cable: 8.14 x 1.33 x 0.39 in (206.9 x 34 x 10 mm)
<b>Weight</b>	0.053 lb (0.024 kg)
<b>Front components</b>	1 x Type-A USB 3.2 Plug Port (USB signal only) 1 x 4.5 mm DC Barrel Plug Connector (Power only)
<b>Rear components</b>	USB-C Receptacle (USB signal + PD power)
<b>Input power</b>	20V/3.3A (66W) max
<b>Output power</b>	20V/3.25A (65W) max
<b>Supported operating systems</b>	Windows 7 and above, Windows10 S4, Chrome
<b>Normal operation voltage</b>	20V
<b>Average operation power</b>	0.7W
<b>Max operation power</b>	1W
<b>Temperature (operation)</b>	32~104 F (0~°C)
<b>Temperature (non-operation)</b>	-4~140 F (-20~+60°C)
<b>Relative humidity (operation)</b>	20%~90% RH, non-condensing
<b>Relative humidity (non-operation)</b>	20%~95% RH, non-condensing
<b>Altitude (operation)</b>	10000ft (3048m)
<b>Altitude (non-operation)</b>	30000ft (9144m)
<b>Shock (operation)</b>	40G, 2 ms, half-sine
<b>Shock (non-operation)</b>	240G, 2 ms, half-sine
<b>Random vibration (operation)</b>	~0.21Grms, 50~2000 Hz
<b>Random vibration (non-operation)</b>	~2.09Grms, 50~2000, non-operating
<b>Option kit contents</b>	HP 4.5mm and USB-C Dock Adapter G2
<b>Supported platform</b>	HP USB-C/A Universal Dock G2

**NOTE:** The HP 4.5mm and USB-C Dock Adapter G2 is only compatible with the HP USB-C/A Universal Dock G2.

[illegible]

Not all configuration components are available in all regions/countries.  
c09126888 – Worldwide – Version 1 – February 19, 2025