

### Technical Specifications

#### HP DOCK SOLUTIONS

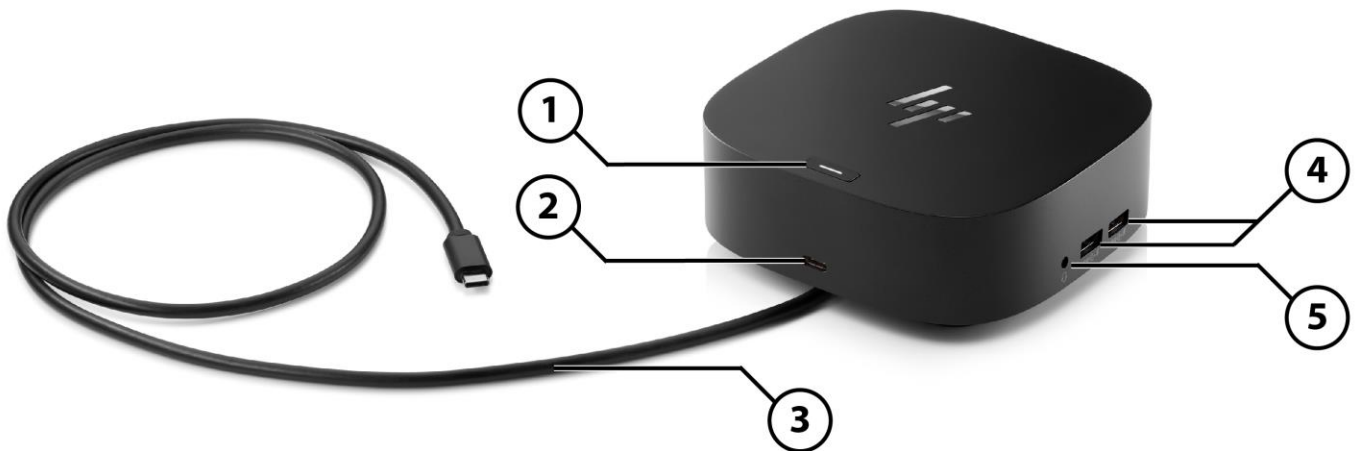
##### Models

##### Docking Stations

HP USB-C Dock G5	5TW10AA
HP USB-C/A Universal Dock G2	5TW13AA
HP 4.5 mm and USB-C Dock Adapter G2	6LX61AA
HP Thunderbolt™ Dock 120W G2	2UK37AA
HP Thunderbolt™ Dock 230W G2	2UK38AA
HP Thunderbolt™ Dock G2 w/ Combo Cable	3TR87AA
HP Thunderbolt™ Dock 120W G2 w/Audio	3YE87AA
HP Thunderbolt™ Dock G2 Audio Module	3AQ21AA
HP USB-C® Dock G4	3FF69AA
HP USB-C® Universal Dock w/4.5mm Adapter	2UF95AA
HP USB-C® Universal Dock	1MK33AA
HP USB-C® Mini Dock	1PM64AA
HP USB Travel Dock	TOK30AA
HP UltraSlim Docking Station	D9Y32AA

### Technical Specifications

#### HP USB-C Dock G5



#### Front and Side View

- |  |                             |
|--|-----------------------------|
| 1. 1 LED power button  | 4. 2 USB 3.0 charging ports |
| 2. 1 Type-C® USB 3.0 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 3.0 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. | 1. Insert 4.5 mm barrel from included 120W power supply. |
|----|--|

### Technical Specifications

Components	
<b>Part number</b>	5TW10AA
<b>Product dimensions</b> (L x W x H)	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)
<b>Package dimensions</b> (L x W x H)	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>	LED and power button to power or wake host system <sup>1</sup>
<b>Front components</b>	One Type-C® USB 3.0 port with data and power out (15W) One USB-C® cable to connect to host system (1 meter cable length)
<b>Side components</b>	Two USB 3.0 charging ports One combo audio jack
<b>Back components</b>	Two USB 3.0 charging ports Two DisplayPort™ 1.4 ports One RJ45 port One HDMI 2.0 port One standard lock slot
<b>External monitor support</b>	3 displays is the maximum displays supported, depending on the capabilities of the host machine. Triple 4K displays requires a DP 1.4 machine with DSC <sup>2</sup> in high res mode.
<b>Power to system</b>	Up to 100W via USB-C® (up to 75W on non HP machines)
<b>Power to host (USB-C PD)</b>	5V , 9V, 10V, 12V, 15V, 20V all at 5A MAX
<b>Operating systems<sup>1</sup></b>	Win 7 Win 10 MacOS
<b>Power Supply</b>	120W
<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. 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.

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

**This table shows which ports to use to achieve the display configuration. You must refer to the next table to see the limitations and requirements to achieve these resolutions.**

**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**

	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

### Technical Specifications

	(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

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

### 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

### Technical Specifications

(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

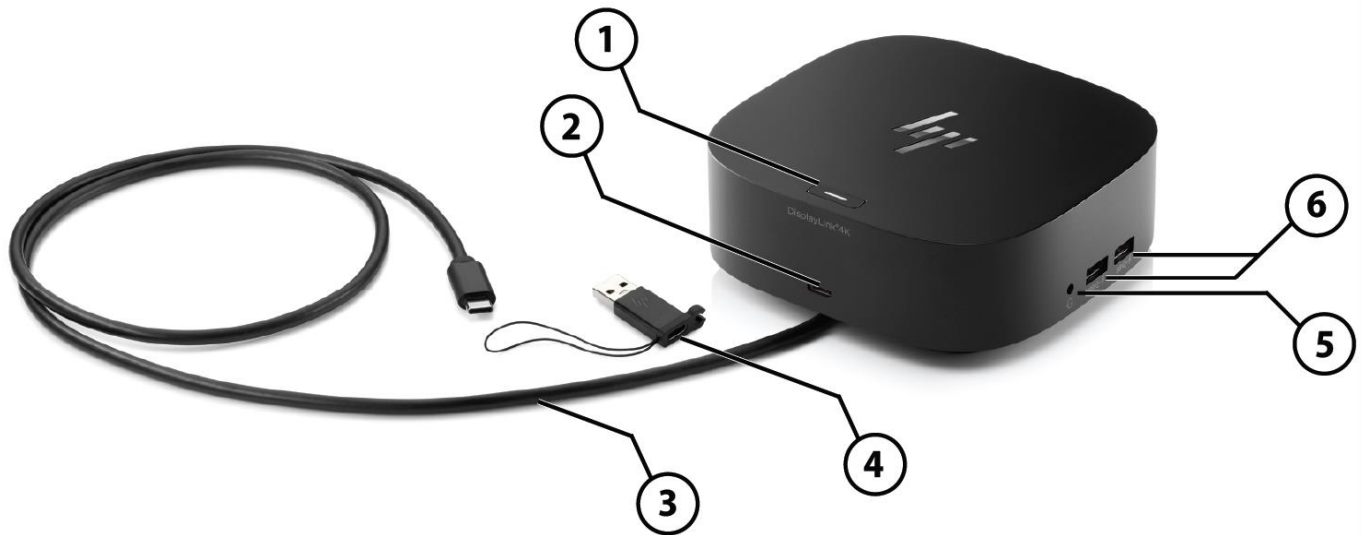
FHD = 1920 x 1200 or 1920 x 1080

2.5K = 2560 x 1600 or 2560 x 1440

4K = 4096 x 2160 or 3840 x 2160

5K = 5120 x 2880

#### 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 3.0 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 3.0 charging ports |

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



#### Back View

- |    |                          |    |                 |
|----|--------------------------|----|-----------------|
| 1. | 2 USB 3.0 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.



### Technical Specifications

#### 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
<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>	LED and power button to power or wake host system <sup>1</sup>
<b>Front components</b>	One Type-C® USB 3.0 port with data and power out (15W) One USB-C® cable to connect to host system (1 meter cable length)
<b>Side components</b>	Two USB 3.0 charging ports One combo audio jack
<b>Back components</b>	Two USB 3.0 charging ports Two DisplayPort™ 1.2 ports One RJ45 port One HDMI 2.0 port One standard lock slot
<b>External monitor support</b>	Maximum resolution is triple 4K displays, depending on the capabilities of the host machine (see below tables for configurations required).
<b>Power to system</b>	Up to 100W via USB-C® (up to 75W on non HP machines)
<b>Power to host (USB-C PD)</b>	5V, 9V, 10V, 12V, 15V, 20V all at 5A MAX
<b>Operating systems</b>	Win 7 Win 10 Chrome OS MacOS
<b>Drivers</b>	DisplayLink drivers must be downloaded either through the HP support site or via Microsoft Windows updates.
<b>Power Supply</b>	120W
<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.

### Technical Specifications

Video Resolution							
	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

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



1. 1 Type-C® USB 3.0 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 3.0 Plug Port



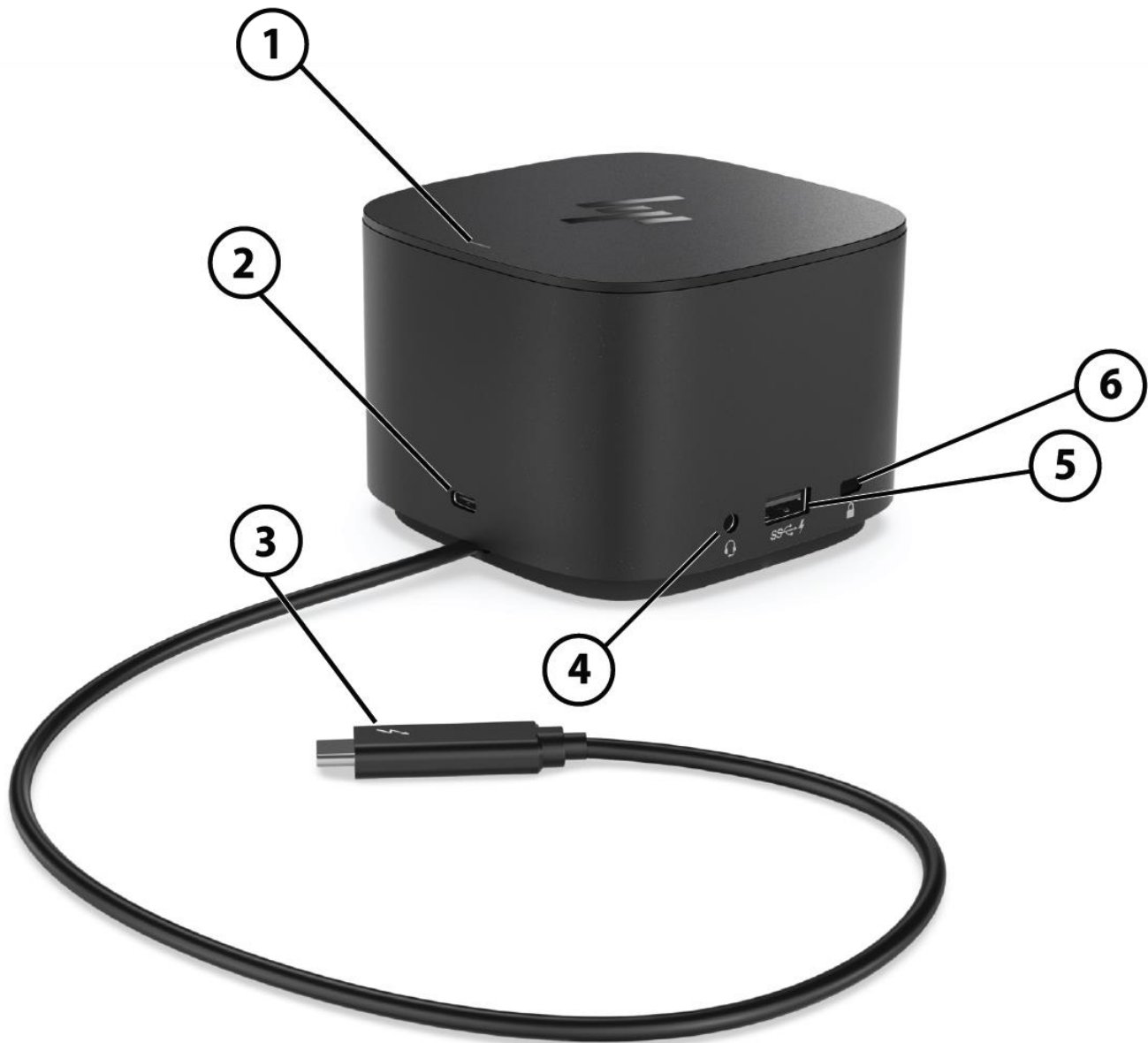
HP 4.5 mm and USB-C Dock Adapter G2 shown with the HP USB-C/A Universal Dock G2

### Technical Specifications

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 Type-A USB 3.0 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>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>Dock compatibility</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.

## HP Thunderbolt™ Dock G2– Left View (120W/230W)



- |   |                                      |
|---|--------------------------------------|
| 1. 1 power button <sup>1</sup>                                  | 4. 1 headphone/microphone combo jack |
| 2. 1 Type-C® USB 3.1 Gen 2 port with data and power out (15W)   | 5. 1 USB 3.0 charging port           |
| 3. 1 USB-C® cable to connect to host system (0.7m cable length) | 6. 1 standard lock slot              |

1. The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks.

**HP Thunderbolt™ Dock G2 – Back side (120W/230W)**

- 7. 2 USB 3.0 ports
- 8. 1 VGA port
- 9. 2 DisplayPort™ 1.4 ports
- 10. 1 Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W)

- 11. 1 Ethernet port
- 12. 1 AC Adapter connector (7.4mm)
- 13. 1 Thunderbolt™ port

### Technical Specifications

Components	
<b>Part Number</b>	2UK37AA
<b>Ports</b>	1 Type-C® USB 3.1 Gen 2 port with data and power out (15W) 1 Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W) 1 USB-C® Thunderbolt™ port 2 USB 3.0 ports 1 USB 3.0 charging port 1 power adapter port 2 DisplayPort™ 1.4 ports 1 Ethernet port (10/100/1000) 1 combo audio port 1 standard lock slot
<b>Dimensions (H x W x D)</b>	3.9 x 3.9 x 2.7 in (98 x 98 x 69 mm)
<b>Weight</b>	1.76 lb (0.8 kg)
<b>Top components</b>	LED and power button to power or wake host system <sup>1</sup>
<b>Front components</b>	One Type-C® USB 3.1 Gen 2 port with data and power out (15W) One USB-C® cable to connect to host system (0.7meter cable length)
<b>Side components</b>	One USB 3.0 charging port One combo audio Jack One standard lock slot
<b>Back components</b>	One Thunderbolt™ port One Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W) Two DisplayPort™ 1.4 ports One VGA port Two USB 3.0 ports One RJ45 port AC adapter connector (7.4mm)
<b>Network manageability features</b>	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 <sup>4</sup>
<b>External monitor support</b>	Up to 4
<b>Power delivery (PD) Profiles</b>	5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A
<b>Power to system</b>	Up to 100W (up to 75W on non HP machines)
<b>Operating voltage and current</b>	19.7 V dc @ 6.1 A – 120W 19.7 V dc @ 11.8 A – 230W
<b>Temperature (operating)</b>	0 C to 35 C (32 F to 95 F)
<b>Relative humidity noncondensing (operating)</b>	10 % to 90 %
<b>Maximum altitude unpressurized (operating)</b>	15 m to 3,048 m (- 50 ft to 10,000 ft)
<b>Operating Systems<sup>5</sup></b>	Win 7, Win 10 and MacOS

1. Requires host notebook to support in its BIOS.

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. WLAN – LAN switching is supported only on select computers running Windows 10 operating system.

5. The HP Thunderbolt™ Dock G2 is designed to USB-C®/Thunderbolt™ Industry specs and will support charging and port replication for



### Technical Specifications

notebooks that have implemented USB-C® and Thunderbolt™ industry specifications.

Thunderbolt™ host systems require Thunderbolt™ software (minimum SW17.x).

Ethernet and audio drivers need to be installed separately on non-HP Windows systems for headset auto switching functionality. Drivers available on HP Support website.

For MacOS PCs, HP does not provide Ethernet and audio drivers.

Firmware updates on Window-based host systems only.

Certain features are not functional on non-HP supported nor non-HP notebooks (see points below):

Power button to turn on or wake the system.

Wake on LAN from warm and cold dock.

Wake on LAN from S4/S5.

MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock.

#### HP Thunderbolt™ Dock G2 Video resolution specifications

HP Thunderbolt™ Dock G2 video resolution specifications when the dock is connected to a Thunderbolt™ system:

Host Specification	# of displays	Resolution	Supported configuration
DP 1.2 Thunderbolt™ host	1	(1) 4096x2160 @ 60Hz	1 DP or 1 TB or 1 USB-C® alt mode
	2	(2) 4096 x 2160 @ 60Hz	1 DP + 1 TB port or 1 USB-C® Alt mode port + 1 TB port
	3	(1) 4096 x 2160 @ 60Hz + (2) 2560 x 1440 @ 60Hz	(1) 4096 x 2160 @ 60Hz from TB port (2) 2560x1440 @ 60Hz from DP ports or DP + USB-C® Alt
	4	(1) 4096 x 2160 @ 60Hz + (2) 2560 x 1440 @ 60Hz+ (1) 1920 x 1080 @ 60Hz	(1) 4096 x 2160 @ 60Hz from TB port (2) 2560x1440 @ 60Hz from DP ports or DP + USB-C® alt (1) 1920 x 1080 @ 60Hz from DP or USB-C® Alt mode
Host Specification	# of displays on dock	Resolution	Supported configuration
DP 1.3 Thunderbolt™ host	1	(1) 5120 x 2880 @ 60Hz	1 DP or 1 TB or 1 USB-C® alt mode
	2	(2) 4096 x 2160 @ 60Hz	1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port
	2	(2) 3840 x 2160 @ 60Hz	2 DP ports or 1 DP + 1 USB-C® Alt mode port or 1 DP + 1 TB port or 1 TB + 1 USB-C® alt mode
	3	(2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @ 60Hz	(2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt (1) 1920x1200 @ 60Hz from TB port
	3	(3) 2560 x 1600 @ 60hz	2 DP ports + USB-C® Alt mode
	4	(1) 3840 x 2160 @ 60Hz + (2) 2560 x 1440 @ 60Hz+ (1)1920 x 1200 @ 60Hz	(1) 3840x2160 @ 60Hz from DP or USB-C® Alt mode (2) 2560x1440 @ 60Hz from DP ports or DP + USB-C® alt (1) 1920 x 1200@ 60Hz from TB port





### Technical Specifications

**NOTE:** Chart is based on 8bit DP1.2 displays (except for 5120x2880 single cable display)

**NOTE:** with a DP1.3 Thunderbolt™ host, when 3 or more displays are attached, the Thunderbolt™ port is limited to a 1920x1200 @ 60hz DP1.2 display, or a 2560x1440@60hz DP1.3 display.




HP Thunderbolt™ Dock G2 video resolution specifications when the dock is connected to a USB-C® alt-mode system<sup>1</sup>:

Host Specification	# of monitors	
DP 1.2 USB-C® host	1	2560x1440 @ 60Hz
	2	1920x1200 @ 60Hz
	3	(1) 1920x1200 @ 60Hz (2) 1280x768 @ 60Hz
DP 1.3 USB-C® host	1	3840x2160 @ 60hz
	2	2560x1600 @ 60Hz
	3	(1) 2560x1600 @ 60Hz (2) 1680x1050 @ 60Hz
	4	1680 x 1050 @ 60Hz (requires MST)

1. USB-C® systems will perform at USB 3.0 Gen1 speeds

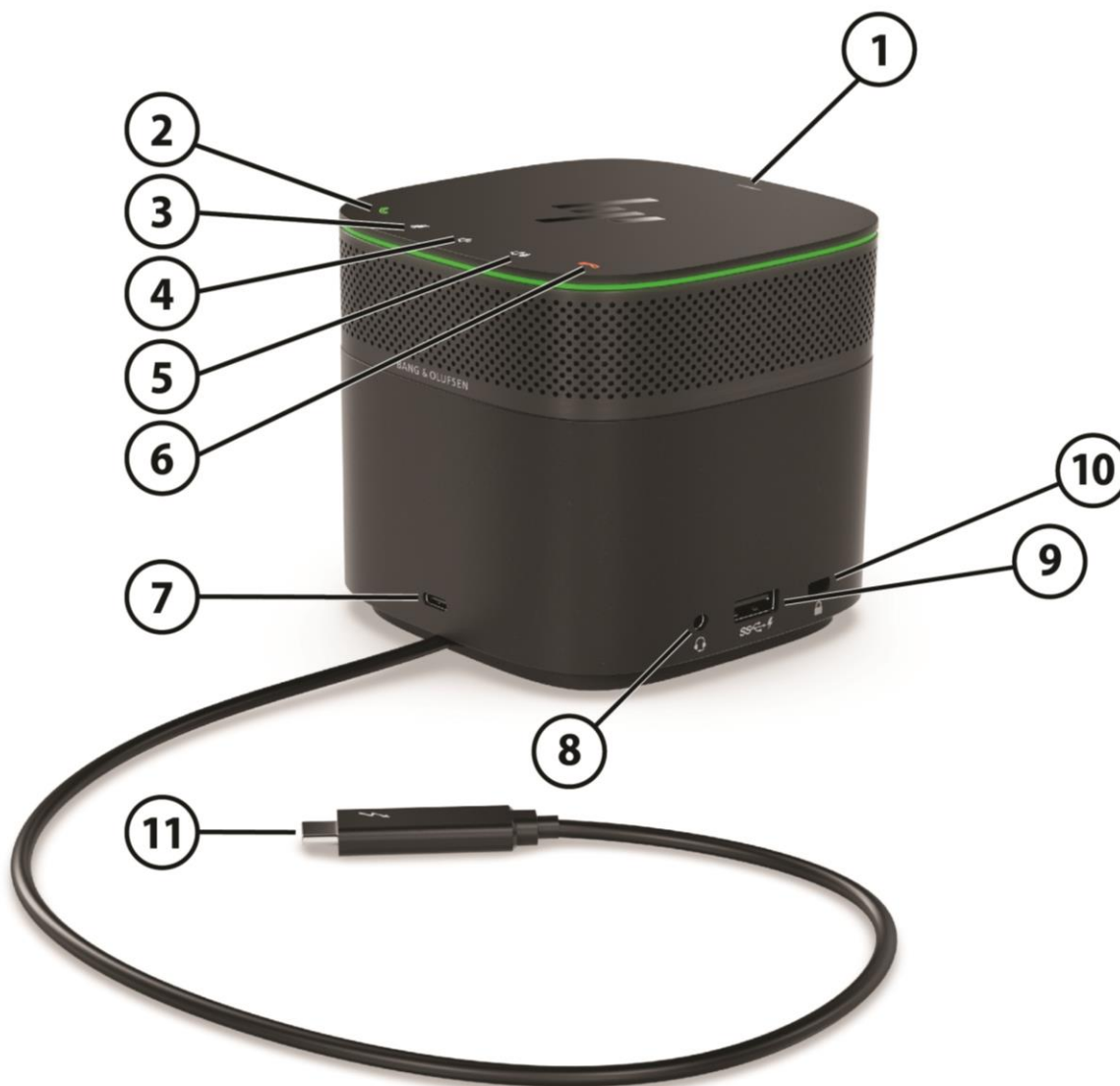
Thunderbolt™ port will function as a USB 2.0 port with only data and power out (15W); no video

#### HP Thunderbolt™ Dock G2 cable types

		
HP TB Dock G2 120W cable	HP TB Dock G2 230W cable*	HP TB Dock G2 Combo Cable*
<b>Part #: 3XB94AA</b>	<b>Part #: 3XB95AA</b>	<b>Part #: 3XB96AA</b>

**\*NOTE:** Requires 230W AC adapter

#### HP Thunderbolt™ Dock 120W G2 w/Audio– Left View



- |  |  |
|--|--|
| 1. LED indicator (power button to power, wake, sleep host system) <sup>1</sup> | 6. Hang up / decline call  |
| 2. Pick up / accept / hold call  | 7. 1 Type-C(R) USB 3.1 Gen 2 port with data and power out (15W)  |
| 3. Mic Mute  | 8. 1 headphone/microphone combo jack                             |
| 4. Volume down   | 9. 1 USB 3.0 charging port                                       |
| 5. Volume up   | 10. 1 standard lock slot   |
|  | 11. 1 USB-C® cable to connect to host system (0.7m cable length) |

1. The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks.

#### HP Thunderbolt™ Dock 120W G2 w/Audio – Back View



- |   |                                    |
|---|------------------------------------|
| 11. 2 USB 3.0 ports   | 15. 1 Ethernet port                |
| 12. 1 VGA port  | 16. 1 AC adapter connector (7.4mm) |
| 13. 2 DisplayPort™ 1.4 ports  | 17. 1 Thunderbolt™ port            |
| 14. Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W) |                                    |

### Technical Specifications

Components	
<b>Part Number</b>	3YE87AA
<b>Ports</b>	1 Type-C® USB 3.1 Gen 2 port with data and power out (15W) 1 USB-C® cable to connect to host system (0.7m cable length) 1 USB 3.0 charging port 1 combo audio jack 1 standard lock slot 1 Thunderbolt™ port 1 Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W) 2 DisplayPort™ 1.4 ports 1 VGA port 2 USB 3.0 ports 1 RJ45 port 1 AC adapter
<b>Dimensions (H x W x D)</b>	3.9 x 3.9 x 4.5 in (98 x 98 x 114 mm)
<b>Weight</b>	2 lb (0.91 kg)
<b>Top components</b>	LED indicator (power button to power <sup>1</sup> , wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call
<b>Front components</b>	One USB-C® port with data and power out (15W) One USB-C® cable to connect to host system (0.7m cable length)
<b>Side components</b>	One USB 3.0 charging port One combo audio jack One standard lock slot
<b>Back components</b>	One Thunderbolt™ port One Type-C® USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W) Two DisplayPort™ 1.4 ports One VGA port Two USB 3.0 ports One RJ45 port One AC adapter
<b>Network manageability features</b>	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 <sup>4</sup>
<b>External monitor support</b>	Maximum resolution is triple 4K <sup>5</sup> displays, depending on the capabilities of the host machine (see below tables for configurations required).
<b>Power delivery (PD) profiles</b>	PD 3.0: 5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A
<b>Speaker rated power</b>	2W
<b>Operating voltage and current</b>	19.7 V dc @ 6.1 A – 120W 19.7 V dc @ 11.8 A – 230W
<b>Temperature (operating)</b>	0° C to 35° C (32° F to 95° F)
<b>Relative humidity noncondensing (operating)</b>	10 % to 90 %
<b>Maximum altitude unpressurized</b>	15 m to 3,048 m (~ 50 ft to 10,000 ft)



### Technical Specifications

<b>(operating)</b>	
<b>Operating systems</b>	Win 7, Win 10 and MacOS <sup>5</sup>
<b>LED colored ring</b>	Incoming call (blinking green) On call (solid green) On muted call (solid red) Hold (blinking green)
<b>Speakers/mics</b>	Two side-firing speakers and two microphones
<b>Microphone type</b>	Omni-directional
<b>Analog audio</b>	Yes
<b>Number of channels</b>	Stereo (left and right channels)
<b>Power to system</b>	Up to 100W via USB-C® (up to 75W on non HP machines)

1. The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks.
  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. WLAN – LAN switching is supported only on select computers running Windows 10 operating system.
  5. The HP Thunderbolt™ Dock G2 is designed to USB-C®/Thunderbolt™ Industry specs and will support charging and port replication for notebooks that have implemented USB-C® and Thunderbolt™ industry specifications.
- Thunderbolt™ host systems require Thunderbolt™ software (minimum SW17.x).
- Ethernet and audio drivers need to be installed separately on non-HP Windows systems for headset auto switching functionality. Drivers available on HP website.
- For MacOS PCs, HP does not provide Ethernet and audio drivers.
- Firmware updates on Window-based host systems only.
- Certain features are not functional on non-HP supported nor non-HP notebooks:
- Power button to turn on or wake the system.
  - Wake on LAN from warm and cold dock.
  - Wake on LAN from S4/S5.
  - MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock.
- NOTE:** For video specifications, please refer to page 16 of this quick specs

## HP Thunderbolt™ Dock G2 Audio Module



- |  |                           |
|--|---------------------------|
| 1. LED indicator (power button to power, wake, sleep host system) <sup>1</sup> | 4. Volume down            |
| 2. Pick up / accept / hold call  | 5. Volume up              |
| 3. Mic Mute  | 6. Hang up / decline call |

<sup>1</sup> The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks.

### Technical Specifications

Components	
<b>Part Number</b>	3AQ21AA
<b>Dimensions</b> (H x W x D)	3.9 x 3.9 x 1.28 in (98 x 98 x 32.5 mm)
<b>Weight</b>	0.66 lb (0.30 kg)
<b>Top cover buttons</b>	LED indicator (power button to power, wake, sleep host system) Pick up / accept / hold call Mic Mute Volume up Volume down Hang up / decline call
<b>LED colored ring</b>	Incoming call (blinking green) On call (solid green) On muted call (solid red) Hold (blinking green)
<b>Speakers/mics</b>	Two side-firing speakers and two microphones
<b>Microphone type</b>	Omni-directional
<b>Analog audio</b>	Yes
<b>Number of channels</b>	Stereo (left and right channels)
<b>Speaker rated power</b>	2W



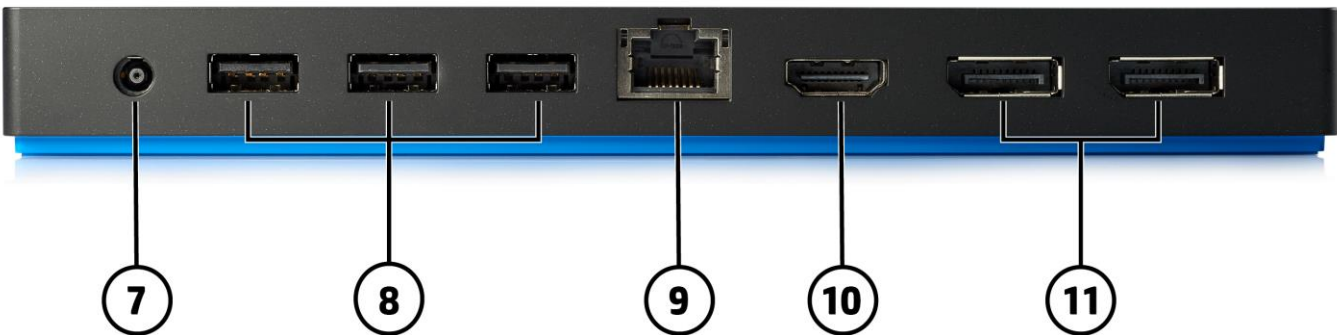
#### HP USB-C® Dock G4 - Front View



- |   |  |
|---|--|
| 1. 1 power button                             | 4. 1 USB 3.0 port with data and power out only |
| 2. 1 combo audio jack                         | 5. 1 USB-C® port connects to computers         |
| 3. 1 USB-C® port with power and data out only | 6. 1 standard lock slot                        |



HP USB-C® Dock G4- Rear View



7.

1 Smart AC adapter
8.

1 powered USB 3.0 port, 2 USB 2.0 ports
9.

1 Gigabit Ethernet port
10.

1 HDMI 2.0 port
11.

2 DisplayPort™ ports

Components	
Part Number	3FF69AA
Ports	1 USB 3.0 port with data and power out only 1 USB-C® port with data and power out only 1 Combo audio jack connects to headphone 1 power button to power and wake host system <sup>4</sup> 1 Smart AC adapter 1 powered USB 3.0 port 2 USB 2.0 ports 1 Gigabit Ethernet port 1 HDMI 2.0 port 2 DisplayPort™ ports 1 USB-C® port <sup>3</sup> connects to computers 1 standard lock slot
Dimensions (H x W x D)	7.79 x 2.71 x 0.87 in (198 x 69 x 22 mm)
Weight	0.77 lb (0.36 kg)
Resolution	Single display: up to 3840 x 1440 @ 60Hz Dual display: up to 1920 x 1200 @ 60Hz Triple display: up to 1680 x 1050 @ 60Hz
Front components	One USB 3.0 port with data and power out only USB-C® port with power and data out only Combo audio jack connects to headphone Power button to power and wake host system <sup>4</sup>
Side / rear components	Smart AC adapter One powered USB 3.0 port Two USB 2.0 ports Gigabit Ethernet port

### Technical Specifications

One HDMI 2.0 port  
Two DisplayPort™ ports  
One USB-C® port<sup>3</sup> connects to computers  
One standard lock slot

<b>Normal operating power</b>	90W
<b>Average operation power 65W</b>	Average operation power 65W
<b>Max operating power 100W</b>	Max operating power 100W
<b>Power Delivery (PD) profile</b>	USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12V/3A, 15V/3A and 20V/3A
<b>USB-C® power to Host</b>	Up to 60W
<b>Temperature (operating)</b>	32 to 104 F (0 to +40C)
<b>Relative humidity (operating)</b>	0%~90%RH
<b>Altitude (operating)</b>	10000 ft (3048m)
<b>Shock (operating)</b>	40G, 2ms duration, half-sine wave shock
<b>Random vibration (operating)</b>	1.043g
<b>Operating Systems</b>	Windows 10, Windows 10 mobile
<b>Option kit contents</b>	HP USB-C® Dock G4, AC power cable, 90W A/C Adapter, USB-C® (1m) cable, documentation

1. Supports DisplayPort™ Alt Mode (video, charging and USB 3.1) over the USB-C® connector. Also compatible with USB Type-C® Thunderbolt™ enabled ports.

2. The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks. Power button is not functional with Chromebooks.

### Technical Specifications

#### HP USB-C® Universal Dock - Front View



- 1. 1 USB 3.0 charging/data port
- 2. 1 USB-C® charging/data port

- 3. 1 Combo audio port

#### HP USB-C® Universal Dock - Rear View



- 4. 2 Dual DisplayPort™ ports
- 5. 1 Ethernet port
- 6. 3 USB 2.0 ports

- 7. 1 power adapter port
- 8. 1 standard lock slot

### Technical Specifications

Components	
<b>Part Number</b>	1MK33AA
<b>Ports</b>	1 USB-C® charging/data port 4 USB ports (1 USB 3.0, 3 USB 2.0) 1 power adapter port 2 DisplayPort™ ports 1 Ethernet port (10/100/1000) 1 combo audio port 1 standard lock slot
<b>Dimensions (H x W x D)</b>	7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm)
<b>Weight</b>	0.77 lb (0.35 kg)
<b>Video resolution</b>	Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz
<b>Front components</b>	One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack
<b>Rear components</b>	Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector
<b>Side components</b>	One standard lock slot, One USB-C® cable that connects to computers
<b>Network manageability features</b>	PXE Boot Wake On Lan (WoL)  <b>NOTE:</b> your computer might support WoL from the Off, Sleep or Hibernation States, or only when the computer is On or in Sleep.  MAC Address Pass Through <sup>1</sup> WLAN – LAN switching <sup>2</sup>
<b>Power Delivery (PD) profile</b>	USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A
<b>USB-C® power to Host</b>	Up to 60W
<b>Operating systems</b>	Windows 7 and above, Windows10 S <sup>3</sup> , Chrome <sup>4</sup> , MacOS <sup>5</sup>

1. Your computer might support MAC Address Pass Through from the On, Off, Sleep or Hibernation States, or only when the computer is On or in Sleep; supported for UEFI PXE Boot);

2. Supported only on select computers running Windows 10 operating system.

3. To install the dock drivers on computers running Windows 10 S operating system, run Windows Update.

4. Chrome PCs: native DisplayLink Driver into the OS. Realtek Ethernet drivers not available on Chrome PCs

5. MacOS PCs: DisplayLink drivers for MacOS PCs must be downloaded separately from DisplayLink website. Realtek driver for Ethernet must also be installed (drivers not provided by HP)

**NOTE:** The HP USB-C® Universal Dock is designed to USB-C® Industry specs and will support charging and port replication for notebooks that have implemented

USB-C® and Thunderbolt™ industry specifications.

Certain features are not functional on non-HP supported nor non-HP notebooks (see points below):

Wake on LAN from warm and cold dock.

Wake on LAN from S4/S5.

MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock.

#### Stand-alone power requirements

Normal Operating Voltage 19.5V

Average Operating Power 77W

Max Operating Power 88W

#### Temperature

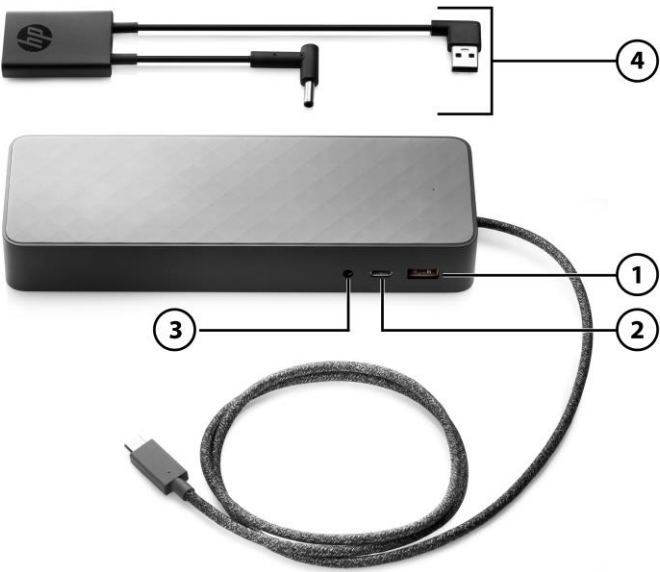
Operating 32~104 °F (0~40 °C)



## Technical Specifications

Non-operating	-4~140 °F (-20~+60 °C)
<b>Relative humidity</b>	
Operating	5%~90% RH, non-condensing
Non-operating	5%~95% RH, non-condensing
<b>Altitude</b>	
Operating	10000 ft (3048 m)
Non-operating	30000 ft (9144 m)
<b>Shock</b>	
Operating	40G, 2ms, half-sine
Non-operating	240G, 2ms, half-sine
<b>Random vibration</b>	
Operating	~0.21g, 5~500 Hz
Non-operating	~2.09g, 5-500 Hz, Non-Operating
<b>Option Kit Contents</b>	HP USB-C® Universal Dock, AC power cord, 90W A/C adapter, USB-A to USB-C® adapter, and documentation
<b>Part Number</b>	1MK33AA

HP USB-C® Universal Dock w/4.5mm Adapter- Front View



- |                                 |                       |
|---------------------------------|-----------------------|
| 1. 1 USB 3.0 charging/data port | 3. 1 Combo audio port |
| 2. 1 USB-C® charging/data port  | 4. 1 Adapter (4.5mm)  |

### Technical Specifications

Components	
<b>Part Number</b>	See Option Kit Contents for part numbers below
<b>Ports</b>	1 USB-C® charging/data port 4 USB ports (1 USB 3.0, 3 USB 2.0) 1 power adapter port 2 DisplayPort™ ports 1 Ethernet port (10/100/1000) 1 combo audio port 1 standard lock slot
<b>Dimensions (H x W x D)</b>	7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm)
<b>Weight</b>	0.77 lb (0.35 kg)
<b>Video resolution</b>	Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz
<b>Front components</b>	One powered USB 3.0 port One USB-C® port (data) One combo audio jack
<b>Rear components</b>	Two DisplayPort™ ports One Gigabit Ethernet port Three USB 2.0 ports One AC adapter power connector
<b>Side components</b>	One standard lock slot, One USB-C® cable that connects to computers
<b>Network manageability features</b>	PXE Boot Wake On Lan (WoL) MAC Address Pass Through <sup>1</sup> WLAN – LAN switching <sup>2</sup>  <b>NOTE:</b> Your computer might support WoL from the Off, Sleep or Hibernation States, or only when the computer is On or in Sleep
<b>Power Delivery (PD) profile</b>	USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A
<b>Operating systems</b>	Windows 7, Windows 10 S <sup>3</sup> , Chrome <sup>4</sup> , MacOS <sup>5</sup>

1. Your computer might support MAC Address Pass-Through from the On, Off, Sleep or Hibernation States, or only when the computer is On or in Sleep; supported for UEFI PXE Boot);

2. Supported only on select computers running Windows 10 operating system.

3. To install the dock drivers on computers running Windows 10 S operating system, run Windows Update.

4. Chrome PCs: native DisplayLink Driver into the OS. Realtek Ethernet drivers not available on Chrome PCs

5. MacOS PCs: DisplayLink drivers for MacOS PCs must be downloaded separately from DisplayLink website. Realtek driver for Ethernet must also be installed (drivers not provided by HP)

**NOTE:** The HP USB-C® Universal Dock is designed to USB-C® Industry specs and will support charging and port replication for notebooks that have implemented USB-C® and Thunderbolt™ industry specifications.

Certain features are not functional on non-HP supported nor non-HP notebooks (see points below):

Wake on LAN from warm and cold dock.

Wake on LAN from S4/S5.

MAC Address Pass-Through S0, S3, S4, S5 warm and cold dock.

### Technical Specifications

<b>Stand-alone power requirements</b>	
Normal Operating Voltage	19.5V
Average Operating Power	77W
Max Operating Power	88W
<b>Temperature</b>	
Operating	32~104 °F (0~40 °C)
Non-operating	-4~140 °F (-20~+60 °C)
<b>Relative humidity</b>	
Operating	5%~90% RH, non-condensing
Non-operating	5%~95% RH, non-condensing
<b>Altitude</b>	
Operating	10000 ft (3048 m)
Non-operating	30000 ft (9144 m)
<b>Shock</b>	
Operating	40G, 2ms, half-sine
Non-operating	240G, 2ms, half-sine
<b>Random vibration</b>	
Operating	~0.21g, 5~500 Hz
Non-operating	~2.09g, 5~500 Hz, Non-Operating
<b>Contents</b>	HP USB-C® Universal Dock with no Flash Drive, 4.5mm and USB Dock Adapter, AC power cord, 90W A/C adapter and documentation
<b>Drivers</b>	<p><b>HP USB-C® Universal Dock (1MK33AA)</b> Drivers are on the dock</p> <p><b>HP USB-C® Universal Dock with USB &amp; 4.5mm Adapter (2UF95AA)</b> Drivers are on the dock.</p> <p><b>HP USB-C® Universal Dock Non-Flash with USB &amp; 4.5mm Adapter (3DV65AA)</b> Dock drivers need to be downloaded via the web:</p> <ol style="list-style-type: none"> <li>1. Go to <a href="http://www.hp.com/support">http://www.hp.com/support</a></li> <li>2. Follow the online instructions to get software and drivers</li> </ol>
<b>Option Kit Contents</b>	<p><b>HP USB-C® Universal Dock (1MK33AA)</b> HP USB-C® Universal Dock, AC power cord, 90W A/C adapter, USB-A to USB-C® adapter, and documentation</p> <p><b>HP USB-C® Universal Dock with USB &amp; 4.5mm Adapter (2UF95AA)</b> HP USB-C® Universal Dock, AC power cord, 90W A/C adapter, USB-A to USB-C® adapter, and documentation</p> <p><b>HP USB-C® Universal Dock Non-Flash with USB &amp; 4.5mm Adapter (3DV65AA)</b> HP USB-C® Universal Dock with no Flash Drive, 4.5mm and USB Dock Adapter, AC power cord, 90W A/C adapter and documentation</p>

## Technical Specifications

### HP USB-C® Universal Dock Cables and Adapters

#### HP USB-A to USB-C® Adapter (3RV49AA)



**NOTE:** Included with HP USB-C® Universal Dock (1MK33AA)



### Technical Specifications

#### HP USB-C® Mini Dock - Front View



1. 1 USB-C® charging/data port

#### HP USB-C® Mini Dock - Rear View



2. 1 HDMI port
3. 1 VGA port
4. 1 Ethernet port
5. 2 USB-A ports (1 USB 3.0, 1 USB 2.0)

### Technical Specifications

Components	
<b>Part Number</b>	1PM64AA
	1 USB-C® charging/data port 2 USB ports (1 USB 3.0, 1 USB 2.0) 1 Ethernet port (10/100/1000) 1 VGA port 1 HDMI
<b>Dimensions (H x W x D)</b>	5.7 x 2.17 x 0.69 in (145x55x17.5 mm)
<b>Weight</b>	0.29 lb (0.132 kg)
<b>Video resolution</b>	Only single display supported HDMI: 4096 x 2160 @ 30Hz VGA: 1920 x 1080
<b>Network manageability features</b>	PXE Boot Wake On Lan (WoL) <b>NOTE:</b> Your computer might support WoL from the Off, Sleep or Hibernation States, or only when the computer is On or in Sleep. MAC Address Pass Through <b>NOTE:</b> Your computer might support MAC Address Pass-Through from the On, Off, Sleep or Hibernation States, or only when the computer is On or in Sleep; supported for UEFI PXE Boot) WLAN – LAN switching <b>NOTE:</b> Supported only on select computers running Windows 10 operating system.
<b>Power Delivery (PD) profiles</b>	USB-C® PD 3.0 supporting 90W, 65W, 45W, 15W and 10W USB-C® AC Adapters (not included) 90W USB-C® AC Adapter supports 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/3A 65W USB-C® AC Adapter supports 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/2.25A 45W USB-C® AC Adapter supports 5V/3A, 9V/3A, 12V/2.3A, 15V/2A 15W USB-C® AC Adapter supports 5V/1A 10W USB-C® AC Adapter supports 5V/0.5A
<b>Option Kit Contents</b>	HP USB-C® Mini Dock, Documentation
<b>Maximum power provided to the notebook</b>	60W (requires 90W power supply)
<b>Stand-alone power requirements</b>	
Normal Operating Voltage	5V
Average Operating Power	12W
Max Operating Power	15W
<b>Temperature</b>	
Operating	32~104 °F (0~40 °C)
Non-operating	-4~140 °F (-20~+60 °C)
<b>Relative humidity</b>	
Operating	5%~90% RH, non-condensing
Non-operating	5%~95% RH, non-condensing
<b>Altitude</b>	
Operating	10000 ft (3048 m) @2 hours
Non-operating	30000 ft (9144 m) @ 2 hours
<b>Shock</b>	
Operating	40G, 2ms, half-sine
Non-operating	240G, 2ms, half-sine
<b>Random vibration</b>	



Technical Specifications

Operating	~0.21g, 5~500 Hz
Non-operating	~2.09g, 5-500 Hz, Non-Operating

HP USB Travel Dock - Front View



- 1. USB ports (2)

HP USB Travel Dock - Rear View



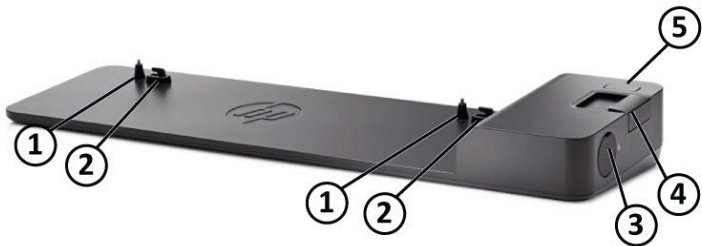
- 2. 1 Ethernet port
  - 3. 1 VGA port
- 4. 1 HDMI port

Components	
Ports	2 USB ports (1 USB 3.0, 1 USB 2.0) 1 Ethernet port (10/100/1000) 1 VGA port 1 HDMI
Dimensions (W x D x H)	5.0 x 1.5 x 0.75 in (127 x 38.1 x 19 mm)
Weight	0.21 lb (0.095 kg)
Power requirements	
Powered from VBUS	5 Volts/3 Amps
Operating Systems Supported	Microsoft-Windows XP/Vista/Win7/Win8.1/Win10 (install updated driver)
Option Kit Contents	HP USB Travel Dock, documentation



Technical Specifications

HP UltraSlim Docking Station – Front side

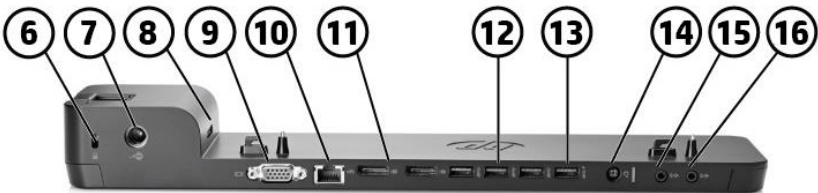


1. 2 docking posts

2. 2 locking mechanism

3. 1 docking station cable lock slot
4. 1 connection button

5. 1 power on/off



HP UltraSlim Docking Station – Rear side

6. 1 standard lock slot

7. 1 docking station cable lock slot

8. 1 side docking connector

9. 1 VGA port

10. 1 LAN/Ethernet port

11. 2 DisplayPort™
12. 3 USB 3.0 ports

13. 1 USB 3.0 charging port

14. 1 power connector

15. 1 line in jack

16. 1 line out jack

Components

Part Number	D9Y32AA
Ports	1 standard lock slot 1 docking station cable lock slot 1 side docking connector 1 VGA port 1 LAN/Ethernet port 1 1Gb LAN/Ethernet port (10/100/1000) 3 USB 3.0 ports 1 USB 3.0 charging port 1 power connector 1 line in jack 1 line out jack
Dimensions (H x W x D)	1.7 x 14.5 x 4.2 in (44 x 368x 107 mm)
Weight	1.69 lb (0.76 kg)
Front components	Two Docking posts Two Computer connect/ release mechanisms One Docking connector



### Technical Specifications

	One Connect button
	One Power on/off button
<b>Rear components</b>	One standard lock slot
	One docking station cable lock slot
	One Side docking connector
	One VGA port
	One LAN/Ethernet port
	One 1Gb LAN/Ethernet port (10/100/1000)
	Three USB 3.0 ports
	One USB 3.0 charging port
	One Power connector
	One Line in jack
	One Line out jack

**NOTE:** Your computer, docking station, and monitor must all support USB 3.0 and DisplayPort™ 1.2 to benefit from the advanced speeds or features that these technologies provide. If one of the devices does not support these technologies, you will still have USB 2.0 and DisplayPort™ 1.1 functionality.

#### Stand-alone power requirements

Normal Operating Voltage	18.5 V
Average Operating Power	18.5 W
Max Operating Power	< 65 W

#### Temperature

Operating	32° to 95° F (0° to 35° C)
Non-operating	4° to 140° F (-20° to 60° C)

#### Relative humidity

Operating	10% to 90%, non-condensing
Non-operating	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature

#### Altitude

Operating	-50 to 10,000 ft (-15.24 to 3,048 m)
Non-operating	-50 to 40,000 ft (-15.24 to 12,192 m)

#### Shock

Operating	125 G, 2 ms, half-sine
Non-operating	200 G, 2 ms, half-sine

#### Random vibration

Operating	0.75g
Non-operating	1.50g

<b>Option Kit Contents</b>	HP UltraSlim Docking Station, AC power adapter, documentation
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<b>Part Number</b>	D9Y32AA
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### Technical Specifications

#### COMPATIBILITY

HP Dock Solutions are compatible with HP notebooks as follows:

Docking Station	Compatible Notebooks
HP USB-C® Dock G5	<p>Check your notebook power requirements. If your HP notebook requires more than 100W of power, you must use your notebook power supply in addition to the USB-C dock connection. This is true for most workstations and notebooks that have discreet graphics cards, including models listed below with *.</p> <p>HP Elite x2 1012 G2, G4            HP Elite x2 1013 G1, G3, G4            HP EliteBook Folio G1            HP Elite Dragonfly            HP EliteBook 1030 G4            HP EliteBook x360 1030 G2, G3, G4, G7            HP EliteBook x360 1040 G4, G5, G6, G7            HP EliteBook 1050 G1            HP EliteBook 800 series G5, G6, G7            HP EliteBook 800 HC series G5, G6            HP EliteBook 840r G4            HP EliteBook 700 series G5, G6            HP ProBook 600 series G4, G5, G7            HP ProBook 400 series G5, G6, G7, G8            HP Probook x360 435 G7            HP ProBook x360 440 G1            HP Pro x2 612 G2            HP ZBook x2 G4            HP ZBook Firefly 14 G7            HP ZBook Firefly 15 G8            HP ZBook 14u/15u G5            HP ZBook 15/17 G5*            HP ZBook Power G7            HP ZBook Fury 15/17 G7*            HP ZBook Create G7*            HP ZBook Studio G7*            HP ZBook Studio x360 G5*            HP ZHAN 66 Pro 13/14/15 G2            HP ZHAN 66 Pro 14 G4            HP ZHAN 66 Pro 14/A14/15 G3            HP ZHAN 66 AMD Pro 14 G3</p>
HP USB-C/A Universal Dock G2	<p>HP Elite x2 1012 G2, G4            HP Elite x2 1013 G1, G3, G4            HP EliteBook Folio G1            HP Elite Dragonfly            HP EliteBook 1030 G4            HP Elitebook 1040 G4            HP EliteBook x360 1020 G2            HP EliteBook x360 1030 G2, G3, G4, G7            HP EliteBook x360 1040 G4, G5, G6, G7            HP EliteBook 1050 G1            HP EliteBook 800 series G5, G6, G7            HP EliteBook 820 G5            HP EliteBook 840 G3<sup>2</sup>            HP EliteBook 800 HC series G5, G6            HP EliteBook 840/820 G3</p>

### Technical Specifications

	HP EliteBook 850 G4 <sup>2</sup> HP EliteBook 840r G4 HP EliteBook 700 series G5, G6 HP ProBook 600 series G4, G5, G7 HP ProBook 640 G2 <sup>2</sup> HP ProBook 400 series G5, G6, G7, G8 HP ProBook 430 G4 HP ProBook 470 G7 HP Probook x360 435 G7 HP ProBook x360 440 G1 HP Pro x2 612 G2 HP ProBook x360 11 EE G3, G4 G5, G6 <sup>1</sup> HP 340/340S/348 G7, G8 <sup>1</sup> HP 240/245/255 G7, G8 <sup>2</sup> HP Chromebook 11/11a EE G6, G7 HP Chromebook 14 G5 HP Chromebook x360 11 G1, G2 HP Chromebox G3 HP ZBook x2 G4 HP ZBook Firefly 14 G7 HP ZBook Firefly 15 G8 HP ZBook 14u/15u G5 HP ZBook 15/17 G5* HP ZBook Power G7 HP ZBook Fury 15/17 G7* HP ZBook Create G7* HP ZBook Studio G7* HP ZBook Studio x360 G5* HP ZHAN 66 Pro 13/14/15 G2 HP ZHAN 66 Pro 14 G4 HP ZHAN 66 Pro 14/A14/15 G3 HP ZHAN 66 AMD Pro 14 G3
<u>HP Thunderbolt™ Dock 120W G2</u>	HP Elite x2 1012 G1, G2, G4 HP Elite x2 1013 G1, G4 HP Pro x2 612 G2 HP EliteBook Folio G1 HP EliteBook x360 1030 G2, G3, G4, G7 HP EliteBook x360 1040 G5, G6, G7 HP Elitebook 1020 G2 HP EliteBook 1040 G4 HP EliteBook 1030 G4 HP EliteBook 800 series G5, G6, G7, G8 HP EliteBook HC G5, G6 HP EliteBook x360 830 G6, G7 HP EliteBook 700 series G5, G6 HP ProBook 640 G4, G5, G7, HP ProBook 645 G4 HP ProBook 650 G5, G7, G8 HP ProBook 400 series G5, G6, G7 HP ProBook x360 435 G7 HP ZBook x2 G4 HP ZBook 14u G1, G5 HP ZBook 15u G3, G5, G7 HP ZBook Firefly 14 G7, G8

### Technical Specifications

	HP ZBook Firefly 15 G7, G8 HP Zbook 17 G3 HP ZHAN 66 Pro series G1, G2, G3, G4 HP ZHAN Pro 13, 14, 15 G2 HP ZAHN X13 G2
HP Thunderbolt™ Dock 230W G2	HP ZBook 15/17 G3, G4, G5, HP ZBook Studio G3, G4, G5, G7 HP ZBook x2 G4 HP ZBook 14u/15u G5, G6 HP ZBook Create G7 HP ZBook Fury15/17 G7 HP ZBook Power G7 HP EliteBook 800/700 G5, G6, G7, G8 HP ZHAN 99 G2 Mobile Workstation
HP Thunderbolt™ Dock w/Combo Cable (This dock comes with 230W power)	HP Elite x2 1012 G1, G2, G4 HP Elite x2 1013 G1, G4 HP Pro x2 612 G2 HP EliteBook Folio G1 HP EliteBook x360 1030 G2, G3, G4, G7 HP EliteBook x360 1040 G5, G6, G7 HP Elitebook 1020 G2 HP EliteBook 1040 G4 HP EliteBook 1030 G4 HP EliteBook 800 series G5, G6, G7, G8 HP EliteBook HC G5, G6 HP EliteBook x360 830 G6, G7 HP EliteBook 700 series G5, G6 HP ProBook 640 G4, G5, G7 HP ProBook 645 G4 HP ProBook 650 G5, G7, G8 HP ProBook 400 series G5, G6, G7 HP ProBook x360 435 G7 HP ZBook x2 G4 HP ZBook 14u G1, G5 HP ZBook 15u G3, G5, G7 HP ZBook Firefly 14 G7, G8 HP ZBook Firefly 15 G7, G8 HP Zbook 17 G3 HP ZHAN 66 Pro series G1, G2, G3, G4 HP ZHAN Pro 13, 14, 15 G2 HP ZAHN X13 G2 HP ZBook 15 G3, G4, G5, G6 HP ZBook 17 G4, G5, G6 HP ZBook Power G7 HP ZBook Fury 15 G7 HP ZBook Fury 17 G7 HP ZBook Studio x360 G5 HP ZBook Studio G3, G4, G7 HP ZBook X2 G4 HP ZBook Create G7 HP ZHAN 99 G2 Mobile Workstation
HP Thunderbolt™ Dock 120W G2 w/Audio	HP Elite x2 1012 G1, G2, G4 HP Elite x2 1013 G1, G4 HP Pro x2 612 G2





### Technical Specifications

	HP EliteBook Folio G1 HP EliteBook x360 1030 G2, G3, G4, G7 HP EliteBook x360 1040 G6, G7 HP Elitebook 1020 G2 HP EliteBook 1040 G4 HP EliteBook 1030 G4 HP EliteBook 800 series G5, G6, G7, G8 HP EliteBook HC G5, G6 HP EliteBook x360 830 G6, G7 HP EliteBook 700 series G5, G6 HP Elite Dragonfly HP ProBook 640 G4, G5, G7 HP ProBook 645 G4 HP ProBook 650 G5, G8 HP ProBook 400 series G5, G6, G7 HP ProBook x360 435 G7 HP ZBook x2 G4 HP ZBook 14u G1, G5 HP ZBook 15u G5, G7 HP Zbook 17 G3 HP ZBook Firefly 14 G7, G8 HP ZBook Firefly 15 G7, G8 HP ZBook Power G7 HP ZBook Fury 17 G7 HP ZBook Studio G3 HP ZHAN 66 Pro series G1, G2, G3, G4 HP ZHAN Pro 14, 15 G2
HP Thunderbolt™ Dock G2 Audio Module	HP Thunderbolt™ Dock G2 required HP Elite x2 1012 G1, G2, G4 HP Elite x2 1013 G1, G4 HP Pro x2 612 G2 HP EliteBook Folio G1 HP EliteBook x360 1030 G2, G3, G4, G7 HP EliteBook x360 1040 G6, G7 HP Elitebook 1020 G2 HP EliteBook 1040 G4 HP EliteBook 1030 G4 HP EliteBook 800 series G5, G6, G7, G8 HP EliteBook HC G5, G6 HP EliteBook x360 830 G6, G7 HP EliteBook 700 series G5, G6 HP ProBook 640 G4, G5, G7 HP ProBook 645 G4 HP ProBook 650 G5, G8 HP ProBook 430, 440, 450, 470 G5 HP ProBook 430, 440, 445R, 70 G6 HP ProBook 430, 435, 440, 445, 470 G7 HP ProBook x360 435 G7 HP ProBook 430, 440, 450 G8 HP ZBook x2 G4 HP ZBook 14u G1, G5 HP ZBook 15u G5, G7 HP Zbook 17 G3 HP ZBook Firefly 14 G7, G8

### Technical Specifications

	HP ZBook Firefly 15 G7, G8 HP ZBook Power G7 HP ZBook Fury 17 G7 HP ZBook Studio G3 HP ZHAN 66 Pro series G1, G2, G3, G4 HP ZHAN Pro 14, 15 G2
HP USB-C® Dock G4	HP ProBook 600 G4, 400 G5, G6 HP EliteBook 800 G5, 700 G5 HP EliteBook x360 1030 G6 & 1020 G2, G3, G4 HP EliteBook 1040 G4 ChromeBook x360 HP Elite x2 1012 G2 HP Elite x2 1013 G3, G4 HP Pro x2 612 G2 HP ChromeBook 13 HP Spectre Pro 13 G1 Notebook PC HP EliteBook Folio G1; HP Elite x2 1012 G1
HP USB Travel Dock	All HP notebooks with a powered USB-A port
HP UltraSlim Docking Station	HP EliteBook Folio 1020 G1 HP EliteBook Folio 1040 G1, G3 HP EliteBook 1040 G2 HP EliteBook Revolve 810 G1, G3 HP EliteBook 800 G7 HP EliteBook 820 G1, G2, G3, G4 HP EliteBook 840 & 850 G1, G2, G3, G4, G5, G6 HP EliteBook 830 G5, G6 HP EliteBook 720, 740, 750 G1, G2 HP EliteBook 725 G3, G4, G5 HP EliteBook 745, 755 G3, G4, G5, G6 HP EliteBook 735 G5, G6 HP ProBook 640, 650 G2, G3, G4, G5 HP ProBook 645 G2, G3, G4, G5 HP ProBook 655 G2, G3, G4 HP EliteBook Folio 9480m, 9470m HP ZBook 14u G4, G5, G6 HP ZBook 15u G3, G4, G5, G6

1. Limited support: USB-C data and power is not supported.

2. Notebook AC Adapter or HP 4.5mm and USB-C Dock Adapter G2 (part number: 6LX61AA) required for charging.

\*Notebook AC Adapter connection required.

**NOTE:** Your computer, docking station, and monitor must all support USB 3.0 and DisplayPort™ 1.2 at minimum to benefit from the advanced speeds or features that these technologies provide. If one of the devices does not support these technologies, you will still benefit from USB 2.0 and DisplayPort™ 1.1 functionality.

### Service and Support

HP Dock Solutions are supported by a one-year limited warranty. Additional support is available 24 hours a day, seven days a week by phone as well as online support forums.

**NOTE:** Certain restrictions and exclusions apply. Consult the [HP Customer Support Center](#) for details.

### Summary of Changes

Date of change	Version 1 to 2		Description of change
	V1 to V2	Launch	
July 6, 2018	V1 to V2	Update	Typo corrected on “LED colored ring” specs
October 5, 2018	V2 to V3	Update	1050 G1 added to HP Thunderbolt Dock 230W G2 (2UK38AA) and HP Thunderbolt Dock 230W G2 cable (3XB95AA) compatibility
May 7, 2019	V3 to V4	Update	HP USB-C Dock G5, HP USB-C/A Universal Dock G2 and HP 4.5 mm and USB-C Dock Adapter G2 added
June 25, 2019	V4 to V5	Update	General update
September, 2019	V5 to V6	Update	General Update
March 10, 2020	V6 to V7	Update	HP UltraSlim Docking Station – Rear side image call out #11 corrected
May 27, 2020	V7 to V8	Update	HP USB-C Dock G5 operating systems updated
July 29, 2020	V8 to V9	Update	Image call outs and call outs section corrected for Thunderbolt Dock G2 Typo in HP ZHANN Pro 13 G2 corrected ZBook Firefly 14/15 G7 added to Thunderbolt Dock 120W G2 HP ZHAN 99 Mobile Workstation added to HP ZHAN 99 G1, G2, added G7 to Studio, added ZBook Create G7, added ZBook Firefly 14/ 15 G7 into compatibility table.
October 16, 2020	V9 to V10	Update	General update
January 5, 2020	V10 to V11	Update	HP ZBook Firefly 14/15 G7, G8 from HP Thunderbolt™ Dock 230W G2 compatible notebooks
January 19, 2020	V11 to V12	Update	ZBook 15u G7 removed Reference footnote sign removed from Firefly 14/15 G7 and G8 HP 4.5mm and USB Dock Adapter and HP USB-C® Universal Dock Non-Flash with USB & 4.5mm Adapter removed
March 2, 2021	V12 to V13	Update	Video Resolution table updated (p5 and p6)

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