Introduction

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 (discontinued)	3FF69AA
HP USB-C® Universal Dock w/4.5mm Adapter (discontinued)	2UF95AA
HP USB-C® Universal Dock (discontinued)	1MK33AA
HP USB-C® Mini Dock	1PM64AA
HP USB Travel Dock (discontinued)	TOK30AA
HP UltraSlim Docking Station	D9Y32AA



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.

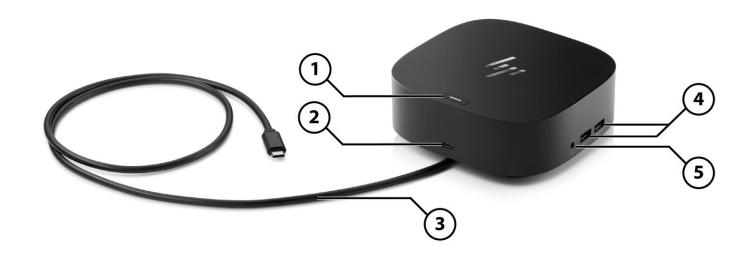
There are many reasons to use a lock with your computer and your dock. The currently shipping docks:

HP USB-C Dock G5	5TW10AA
HP USB-C/A Universal Dock G2	5TW13AA
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

are compatible with the following HP locks:

HP Dual Head Keyed Cable Lock	T1A64AA
HP Keyed Cable Lock 10mm	T1A62AA
HP Combination Lock	TOY15AA





Front and Side View

- 1. 1 LED power button
- 2. 1 Type-C[®] USB 3.0 port with data and power out (15W)
- 3. 1 USB-C® cable to connect to host system (1 meter length)
- 4. 2 USB 3.0 charging ports
- 5. 1 Combo audio jack



HP USB-C Dock G5



Back View

- 1. 2 USB 3.0 charging ports
- 2. 2 DisplayPort[™] 1.4 ports
- 3. 1 Standard lock slot

- 4. 1 HDMI 2.0 port
- 5. 1 RJ45 port



Bottom View

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



Technical Specifications

Components				
Part number	5TW10AA			
Product dimensions (L x W x H)	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)			
Package dimensions (L x W x H)	7.63 x 6.18 x 6.57 in (194 x 157 x 167 mm)			
Weight	1.49 lb (0.68 kg)			
Top components	LED and power button to power or wake host system ¹			
Front components	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)			
Side components	Two USB 3.0 charging ports One combo audio jack			
Back components	Two USB 3.0 charging ports Two DisplayPort™ 1.4 ports One RJ45 port One HDMI 2.0 port One standard lock slot			
External monitor support	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 ² in high res mode.			
Power to system	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.			
Power to host (USB-C PD)	5V , 9V, 10V, 12V, 15V, 20V all at 5A MAX			
Operating systems ¹	Win 7 Win 10 MacOS			
Power Supply	120W			
Power Barrel Connector	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
Single Display	(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
Dual Displays	(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
Triple Displays	(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								
		Host						
	Display Configurations ¹	High Re	s mode DP A	lt Mode (DP x4)	Multi-	Function (defa	ult)(DP x2)	
	Display comigurations	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**	
Single Display	(1) 2.5K Display	Υ	Υ	Υ	Y	Υ	Υ	
	(1) 4K Display	Υ	Υ	Υ		Υ	Υ	
	(1) 5K single cable*		Υ	Υ			Υ	
	(1) 5K dual cable	Y (D5)	Y (D5)	Y (D5)			Y (D5)	
	(1) 8K dual cable			Y (D5)				
	(1) 8K single cable*			Υ				
Dual Displays	(2) FHD Displays	Υ	Υ	Υ	Υ	Υ	Υ	
	(2) 2.5K Displays	Υ	Υ	Υ		Υ	Υ	
	(1) 4K and (1) FHD	Υ	Υ	Υ		Y (D3)	Υ	
	(2) 4K Displays		Y (D1)	Υ			Υ	
	(1) 5K single* + 1 FHD		Y (D4)	Υ			Υ	
	(1) 5K dual cable + 1 FHD			Y (D5)			Y (D5)	
Triple Displays	(3) 1680 x 1050 Displays	Υ	Υ	Y	Υ	Υ	Υ	
	(3) FHD Displays	Υ	Υ	Υ		Υ	Υ	
	(2) 2.5K and (1) FHD	Υ	Υ	Y			Υ	



Technical Specifications

(3) 2.5K	Υ	Υ		Υ
(1) 4K + (1) 2.5K + (1) FHD	Υ	Υ		Υ
(1) 4K and (2) 2.5K Displays	Y (D1)	Υ		Υ
(2) 4K and (1) FHD		Υ		Y (D2)
(3) 4K		Υ		
(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 x1200 or 1920 x 1080

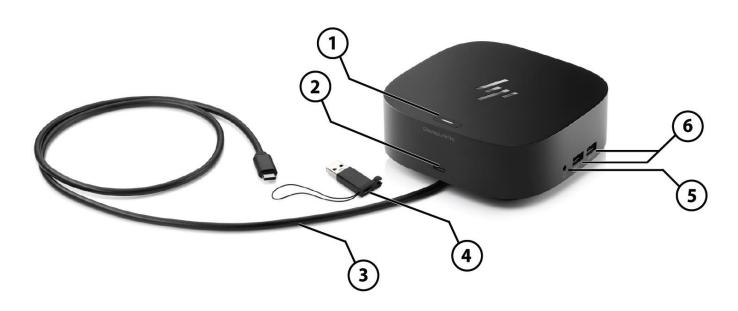
2.5K = 2560 x 1600 or 2560 x 1440

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
- 2. 1 Type-C® USB 3.0 port with data and power out (15W)
- 3. 1 USB-C® cable to connect to host system (1 meter length)
- 4. USB-A Adapter
- 5. 1 Combo audio jack
- 6. 2 USB 3.0 charging ports

HP USB-C/A Universal Dock G2



Back View

- 1. 2 USB 3.0 charging ports
- 2. 2 DisplayPort[™] 1.2 ports
- 3. 1 Standard lock slot

- 4. 1 HDMI 2.0 port
- 5. 1 RJ45 port



Bottom View

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



	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.				
Part number	5TW13AA			
Product dimensions (L \times W \times H)	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)			
Package dimensions (L \times W \times H)	7.63 x 6.18 x 6.57 in (194 x 157 x 167 mm)			
Weight	1.53 lb (0.695 kg)			
Top components	LED and power button to power or wake host system ¹			
Front components	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)			
Side components	Two USB 3.0 charging ports One combo audio jack			
Back components	Two USB 3.0 charging ports Two DisplayPort™ 1.2 ports One RJ45 port One HDMI 2.0 port One standard lock slot			
External monitor support	Maximum resolution is triple 4K displays, depending on the capabilities of the host machine (see below tables for configurations required).			
Power to system	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.			
Power to host (USB-C PD)	5V, 9V, 10V, 12V, 15V, 20V all at 5A MAX			
Operating systems	Win 7 Win 10 Chrome OS MacOS			
Drivers	DisplayLink drivers must be downloaded either through the HP support site or via Microsoft Windows updates.			
Power Supply	120W			
Power Barrel Connector	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							
					Host			
	Display Configurations ¹	DP1	DP2	нрмі	Multi-Function (default)(x2 DP)			
	Display configurations	DF1 DF2		115111	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	5				
Dual Displays	(2) 4K Displays	P	ny 2 ports *D	11				
	(1) 5K dual cable + (1) 2.5K	Both DP p	Both DP ports for 5K and 2.5K on HDMI		Y	Y	Y	
	(1) 5K dual cable + (1) 4K	Both DP po	Both DP ports for 5K and 4K on HDMI			Y (D1)	Υ	
Triple Displays	(3) 2.5K Displays	All 3 ports		Υ	Υ	Υ		
	(2) 4K Displays + (1) 2.5K	4K on DP ports *D1, 2.5k on HDMI		Υ	Υ	Υ		
	(3) 4K Displays	4K on DP p	orts *D1 and	4K on HDMI	Y (D2)	Y (D1)	Υ	

	High Res Video Resolution							
	Display	DP1	DP1 DP2		Host			
	Configurations/High			DP1	DP1 DP2	DP2	HDMI	High Res mode DP Alt Mode (DP x4) **
	Resolution Mode ¹				DP 1.2	DP1.3/1.4	DP1.4 w/DSC	
Single Display	(1) 4K Display	Any port ²			Υ	Υ	Υ	
Dual Displays	(2) 4k Displays	Any 2 ports; DP ports limited to UHD 4K ²			Υ	Υ	Υ	
Triple Displays		4K on both DP ports (D1) and 4K on HDMI ²			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 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
Part number	6LX61AA
Model Number	HSA-Q001
Dimensions	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)
Weight	0.053 lb (0.024 kg)
Front components	1 Type-A USB 3.0 Plug Port (USB signal only) 1 x 4.5 mm DC Barrel Plug Connector (Power only)
Rear components	USB-C Receptacle (USB signal + PD power)
Input power	20V/3.3A (66W) max
Output power	20V/3.25A (65W) max
Operating systems	Windows 7 and above, Windows10 S4, Chrome
Normal operation voltage	20V
Average operation power	0.7W
Max operation power	1W
Temperature (operation)	32~104 F (0~°C)
Temperature (non-operation)	-4~140 F (-20~+60°C)
Relative humidity (operation)	20%~90% RH, non-condensing
Relative humidity (non-operation)	20%~95% RH, non-condensing
Altitude (operation)	10000ft (3048m)
Altitude (non-operation)	30000ft (9144m)
Shock (operation)	40G, 2 ms, half-sine
Shock (non-operation)	240G, 2 ms, half-sine
Random vibration (operation)	~0.21Grms, 50~2000 Hz
Random vibration (non-operation)	~2.09Grms, 50~2000, non-operating
Option kit contents	HP 4.5mm and USB-C Dock Adapter G2
Dock compatibility	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 button¹
- 2. 1 Type-C® USB 3.1 Gen 2 port with data and power out (15W)
- 3. 1 USB-C® cable to connect to host system (0.7m cable length)
- 4. 1 headphone/microphone combo jack
- 5. 1 USB 3.0 charging port
- 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

	Components
Part Number	2UK37AA
Ports	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
Dimensions (H \times W \times D)	3.9 x 3.9 x 2.7 in (98 x 98 x 69 mm)
Weight	1.76 lb (0.8 kg)
Top components	LED and power button to power or wake host system ¹
Front components	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)
Side components	One USB 3.0 charging port One combo audio Jack One standard lock slot
Back components	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)
Network manageability features	PXE Boot Wake on LAN (from the Off, Sleep or Hibernation States ²) MAC Address Pass-Through (from the On, Off, Sleep or Hibernation States ³) WLAN-LAN Switching ⁴
External monitor support	Up to 4
Power delivery (PD) Profiles	5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A
Power to system	Up to 100W (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.
Operating voltage and current	19.7 V dc @ 6.1 A – 120W 19.7 V dc @ 11.8 A – 230W
Temperature (operating)	0 C to 35 C (32 F to 95 F)
Relative humidity noncondensing (operating)	10 % to 90 %
Maximum altitude unpressurized (operating)	15 m to 3,048 m (- 50 ft to 10,000 ft)
Operating Systems ⁵	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.



Technical Specifications

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



Technical Specifications

 (1)1920 x 1200 @ 60Hz	(1) 1920 x 1200@ 60Hz from TB port

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

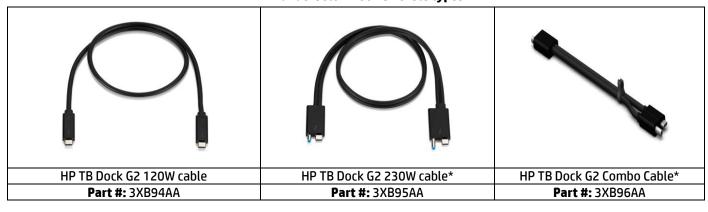
NOTE: with a DP1.3 Thunderbolt™ host, when 3 or more displays are attached, the Thunderbolt™ port is limited to a 1920x1200 @ 60hz DP1.2 display, or a 2560x1440@60hz DP1.3 display.

HP Thunderbolt™ Dock G2 video	resolution specifications when the doc	k is connected to a USB-C® alt-mode system¹:	
Host Specification	# of monitors		
	1	2560x1440 @ 60Hz	
DP 1.2 USB-C® host	2	1920x1200 @ 60Hz	
DP 1.2 USB-C 110St	3	(1) 1920x1200 @ 60Hz	
		(2) 1280x768 @ 60Hz	
	1	3840x2160 @ 60hz	
	2	2560x1600 @ 60Hz	
DP 1.3 USB-C® host	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

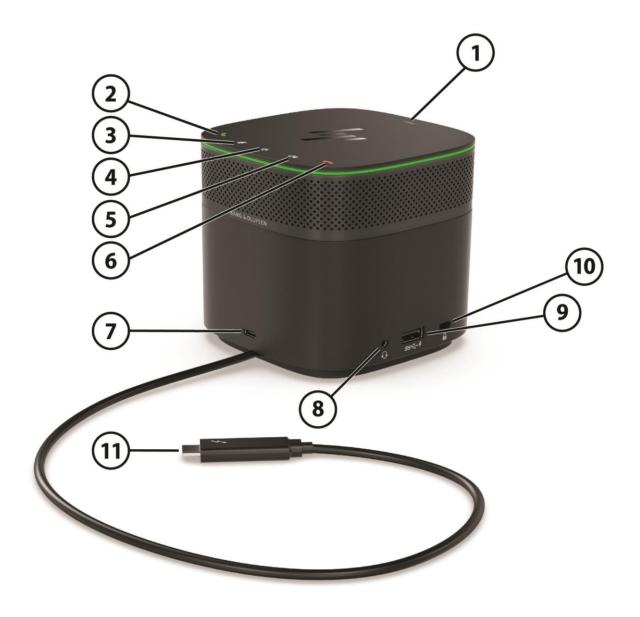
Thunderbolt™ port will function as a USB 2.0 port with only data and power out (15W); no video

HP Thunderbolt™ Dock G2 cable types



*NOTE: Requires 230W AC adapter

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



- LED indicator (power button to power, wake, sleep host system)¹
 7.
- 2. Pick up / accept / hold call
- 3. Mic Mute
- 4. Volume down
- 5. Volume up

- 6. Hang up / decline call
- 7. 1 Type-C(R) USB 3.1 Gen 2 port with data and power out (15W)
- 8. 1 headphone/microphone combo jack
- 9. 1 USB 3.0 charging port
- 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
- 12. 1 VGA port
- 13. 2 DisplayPort™ 1.4 ports
- 14. Type-C[®] USB 3.1 Gen 2 port with DisplayPort™ 1.4 data and power out (15W)
- 15. 1 Ethernet port
- 16. 1 AC adapter connector (7.4mm)
- 17. 1 Thunderbolt™ port



	Components
Part Number	3YE87AA
Ports	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
Dimensions (H x W x D)	3.9 x 3.9 x 4.5 in (98 x 98 x 114 mm)
Weight	2 lb (0.91 kg)
Top components ¹	LED indicator (power button² to power, wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call
	NOTE: This feature requires Skype for Business or Lync 2013 running on Microsoft Exchange or Office 365 servers.
Front components	One USB-C® port with data and power out (15W) One USB-C® cable to connect to host system (0.7m cable length)
Side components	One USB 3.0 charging port One combo audio jack One standard lock slot
Back components	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
Network manageability features	PXE Boot Wake on Lan (from the Off, Sleep or Hibernation States³) MAC Address Pass-Through (from the On, Off, Sleep or Hibernation States⁴) WLAN-LAN Switching⁴
External monitor support	Maximum resolution is triple 4K ⁶ displays, depending on the capabilities of the host machine (see below tables for configurations required).
Power delivery (PD) profiles	PD 3.0: 5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A
Speaker rated power	2W
Operating voltage and current	19.7 V dc @ 6.1 A – 120W 19.7 V dc @ 11.8 A – 230W
Temperature (operating)	0° C to 35° C (32° F to 95° F)



Technical Specifications

Relative humidity noncondensing (operating)	10 % to 90 %
Maximum altitude unpressurized (operating)	15 m to 3,048 m (- 50 ft to 10,000 ft)
Operating systems	Win 7, Win 10 and MacOS⁵
LED colored ring	Incoming call (blinking green) On call (solid green) On muted call (solid red) Hold (blinking green)
Speakers/mics	Two side-firing speakers and two microphones
Microphone type	Omni-directional
Analog audio	Yes
Number of channels	Stereo (left and right channels)
Power to system	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.

- 1. Some audio buttons no longer work with Skype due to Microsoft changes in support. Some do not work with Teams or Zoom.
- 2. The dock power button is not functional when connected to non-supported HP notebooks or non-HP notebooks.
- 3. Your computer might support Wake On Lan from the Off, Sleep or Hibernate States, or only when the computer is On or in Sleep.
- 4. 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.
- 5. WLAN LAN switching is supported only on select computers running Windows 10 operating system.
- 6. 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 \$4/\$5.
- MAC Address Pass-Through SO, 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)¹
- 2. Pick up / accept / hold call
- 3. Mic Mute

- . Volume down
- 5. Volume up
- 6. Hang up / decline call

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

NOTE: Some audio buttons no longer work with Skype due to Microsoft changes in support. Some do not work with Teams or Zoom.

	Components
Part Number	3AQ21AA
Dimensions (H \times W \times D)	3.9 x 3.9 x 1.28 in (98 x 98 x 32.5 mm)
Weight	0.66 lb (0.30 kg)
Top cover buttons	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 NOTE: This feature requires Skype for Business or Lync 2013 running on Microsoft Exchange or Office 365 servers.
LED colored ring	Incoming call (blinking green) On call (solid green) On muted call (solid red) Hold (blinking green)
Speakers/mics	Two side-firing speakers and two microphones
Microphone type	Omni-directional
Analog audio	Yes
Number of channels	Stereo (left and right channels)
Speaker rated power	2W

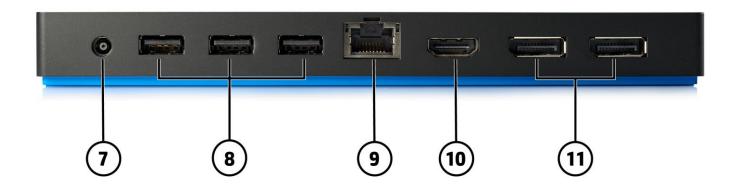


HP USB-C® Dock G4 - Front View



- 1. 1 power button
- 2. 1 combo audio jack
- 3. 1 USB-C® port with power and data out only
- 4. 1 USB 3.0 port with data and power out only
- 5. 1 USB-C® port connects to computers
- 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 system⁴ 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® port³ connects to computers 1 standard lock slot
Dimensions (H \times W \times 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 system4
Side / rear components	Smart AC adapter One powered USB 3.0 port Two USB 2.0 ports Gigabit Ethernet port



	One HDMI 2.0 port Two DisplayPort™ ports One USB-C® port³ connects to computers One standard lock slot
Normal operating power	90W
Average operation power 65W	Average operation power 65W
Max operating power 100W	Max operating power 100W
Power Delivery (PD) profile	USB-C® PD 3.0 supporting 5V/3A, 9V/3A,10V/3A, 12V/3A, 15V/3A and 20V/3A
USB-C® power to Host	Up to 60W
Temperature (operating)	32 to 104 F (0 to +40C)
Relative humidity (operating)	0%~90%RH
Altitude (operating)	10000 ft (3048m)
Shock (operating)	40G, 2ms duration, half-sine wave shock
Random vibration (operating)	1.043g
Operating Systems	Windows 10, Windows 10 mobile
Option kit contents	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.

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

Part Number Ports I USB-C® charging/data port 4 USB 9.07 (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 Dimensions (H x W x D) 7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm) Weight 0.77 lb (0.35 kg) Video resolution Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz Pront components One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack Rear components Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers Network manageability features PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W Windows 7 and above, Windows10 S³, Chrome⁴, MacOS⁵		Components
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 Dimensions (H x W x D) 7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm) Weight 0.77 lb (0.35 kg) Video resolution Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz Pront components One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack Rear components Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers Network manageability features PKE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Part Number	1MK33AA
Weight 0.77 lb (0.35 kg) Video resolution Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz Front components One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack Rear components Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers Network manageability features PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Ports	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
Video resolution Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz Front components One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack Rear components Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers Network manageability features PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN − LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Dimensions (H \times W \times D)	7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm)
Dual display: up to 3840 x 2160 @ 60Hz Front components One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack Rear components Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers Network manageability features PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN − LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Weight	0.77 lb (0.35 kg)
Two DisplayPort™ ports, Gigabit Ethernet port, Three USB 2.0 ports, AC adapter power connector Side components One standard lock slot, One USB-C® cable that connects to computers PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN − LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Video resolution	_ , , , , _ , , , , , , , , , , , , , ,
Connector Side components One standard lock slot, One USB-C® cable that connects to computers PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Front components	One powered USB 3.0 port, One USB-C® port (data), Combo Audio Jack
Network manageability features PXE Boot Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Rear components	
Wake On Lan (WoL) NOTE: 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 Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Side components	One standard lock slot, One USB-C® cable that connects to computers
computer is On or in Sleep. MAC Address Pass Through¹ WLAN – LAN switching² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A USB-C® power to Host Up to 60W	Network manageability features	
WLAN – LAN switching ² Power Delivery (PD) profile USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A Up to 60W		
USB-C® power to Host Up to 60W		
	Power Delivery (PD) profile	USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A
Operating systems Windows 7 and above, Windows 10 S³, Chrome⁴, MacOS⁵	USB-C [®] power to Host	Up to 60W
	Operating systems	Windows 7 and above, Windows10 S³, Chrome⁴, MacOS⁵

- 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 SO, S3, S4, S5 warm and cold dock.

Stand-al	lone	power	reaui	irements
		P		

Normal Operating Voltage 19.5V Average Operating Power 77W Max Operating Power 88W

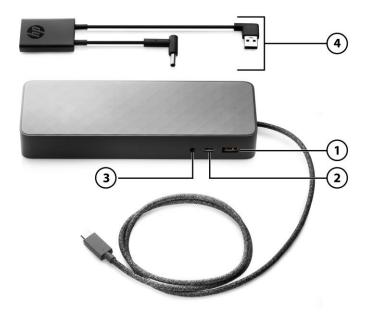
Temperature

Operating 32~104 °F (0~40 °C)



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

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



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

- 3. 1 Combo audio port
- 4. 1 Adapter (4.5mm)

Technical Specifications

Components			
Part Number	See Option Kit Contents for part numbers below		
Ports	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		
Dimensions (H \times W \times D)	7.87 x 2.76 x 1.1 in (200 x 70 x 28 mm)		
Weight	0.77 lb (0.35 kg)		
Video resolution	Single display: up to 5120 x 2880 @ 60Hz, Dual display: up to 3840 x 2160 @ 60Hz		
Front components	One powered USB 3.0 port One USB-C® port (data) One combo audio jack		
Rear components	Two DisplayPort™ ports One Gigabit Ethernet port Three USB 2.0 ports One AC adapter power connector		
Side components	One standard lock slot, One USB-C® cable that connects to computers		
Network manageability features	PXE Boot Wake On Lan (WoL) MAC Address Pass Through ¹ WLAN – LAN switching ²		
	NOTE: Your computer might support WoL from the Off, Sleep or Hibernation States, or only when the computer is On or in Sleep		
Power Delivery (PD) profile	USB-C® PD 3.0 supporting 5V/3A, 9V/3A, 10V/3A, 12/3A, 15V/3A, 20V/3A		
Operating systems	Windows 7, Windows 10 S³, Chrome ⁴ , MacOS ⁵		

- 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 SO, S3, S4, S5 warm and cold dock.



19.5V			
77W			
88W			
32~104 °F (0~40 °C)			
-4~140 °F (-20~+60 °C)			
5%~90% RH, non-condensing			
5%~95% RH, non-condensing			
10000 ft (3048 m)			
30000 ft (9144 m)			
40G, 2ms, half-sine			
240G, 2ms, half-sine			
~0.21g, 5~500 Hz			
~2.09g, 5-500 Hz, Non-Operating			
HP USB-C® Universal Dock with no Flash Drive, 4.5mm and USB Dock Adapter, AC power cord, 90W A/C adapter and documentation			
HP USB-C® Universal Dock (1MK33AA) Drivers are on the dock HP USB-C® Universal Dock with USB & 4.5mm Adapter (2UF95AA) Drivers are on the dock. HP USB-C® Universal Dock Non-Flash with USB & 4.5mm Adapter (3DV65AA) Dock drivers need to be downloaded via the web: 1. Go to http://www.hp.com/support 2. Follow the online instructions to get software and drivers			
HP USB-C® Universal Dock (1MK33AA) HP USB-C® Universal Dock, AC power cord, 90W A/C adapter, USB-A to USB-C® adapter, and documentation HP USB-C® Universal Dock with USB & 4.5mm Adapter (2UF95AA) HP USB-C® Universal Dock, AC power cord, 90W A/C adapter, USB-A to USB-C® adapter, and documentation HP USB-C® Universal Dock Non-Flash with USB & 4.5mm Adapter (3DV65AA) HP USB-C® Universal Dock with no Flash Drive, 4.5mm and USB Dock Adapter, AC power cord,			



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)



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)

	Components		
Part Number	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		
Dimensions (H x W x D)	5.7 x 2.17 x 0.69 in (145x55x17.5 mm)		
Weight	0.29 lb (0.132 kg)		
Video resolution	Only single display supported HDMI: 4096 x 2160 @ 30Hz VGA: 1920 x 1080		
Network manageability features	PXE Boot Wake On Lan (WoL) NOTE: 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 NOTE: 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 NOTE: Supported only on select computers running Windows 10 operating system.		
Power Delivery (PD) profiles	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		
Option Kit Contents	HP USB-C® Mini Dock, Documentation		
Maximum power provided to the notebook	60W (requires 90W power supply)		
Stand-alone power requirements			
Normal Operating Voltage	5V		
Average Operating Power	12W		
Max Operating Power	15W		
Temperature			
Operating	32~104 °F (0~40 °C)		
Non-operating	-4~140 °F (-20~+60 °C)		
Relative humidity			
Operating	5%~90% RH, non-condensing		
Non-operating	5%~95% RH, non-condensing		
Altitude			
Operating	10000 ft (3048 m) @2 hours		
Non-operating	30000 ft (9144 m) @ 2 hours		
Shock			
Operating	40G, 2ms, half-sine		
Non-operating	240G, 2ms, half-sine		
Random vibration			



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 \times D \times 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			
$\textbf{Dimensions} \ (\textbf{H} \times \textbf{W} \times \textbf{D})$	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

Rear components 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 0.75qNon-operating 1.50q

Option Kit Contents HP UltraSlim Docking Station, AC power adapter, documentation

Part Number D9Y32AA



Technical Specifications

COMPATIBILITY

HP Dock Solutions are compatible with HP notebooks as follows:

HP Dock	Solutions are compatible with HP notebooks as follows:
Docking Station	Compatible Notebooks 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 *.
HP USB-C® Dock G5	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 x360 1040 G4, G5, G6, G7 HP EliteBook 800 series G5, G6, G7 HP EliteBook 800 HC series G5, G6 HP EliteBook 800 HC series G5, G6 HP ProBook 600 series G4, G5, G7 HP ProBook 400 series G5, G6 HP ProBook x360 435 G7 HP ProBook x360 435 G7 HP ProBook x360 440 G1 HP Pro x2 612 G2 HP ZBook Firefly 14 G7 HP ZBook Firefly 15 G8 HP ZBook 15/17 G5* HP ZBook Power G7 HP ZBook Fury 15/17 G7* HP ZBook Studio 33/61 G5* HP ZHAN 66 Pro 14/15 G2 HP ZHAN 66 Pro 14/15 G3
HP USB-C/A Universal Dock G2	HP ZHAN 66 AMD Pro 14 G3 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 ² HP EliteBook 800 HC series G5, G6 HP EliteBook 840/820 G3



QuickSpecs HP Dock Solutions

Technical Specifications

HP EliteBook 850 G42 HP EliteBook 840r G4 HP EliteBook 700 series G5, G6 HP ProBook 600 series G4, G5, G7 HP ProBook 640 G22 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, G6¹ HP 340/340S/348 G7, G81 HP 240/245/255 G7, G8² 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 HP Thunderbolt™ Dock 120W G2 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 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 PIO x2 G12 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 1030 G4 HP EliteBook 800 series G5, G6, G7, G8 HP EliteBook 800 series G5, G6 HP EliteBook 700 series G5, G6 HP ProBook 640 G4, G5, G7 HP ProBook 645 G4 HP ProBook 645 G4 HP ProBook 400 series G5, G6, G7 HP ZBook 15u G3, G5, G7 HP ZBook 15u G3, G5, G7 HP ZBook 15u G3, G5, G7 HP ZBook 17G G3, G5, G7 HP ZBook 17G G3, G5, G7 HP ZBook Firefly 15 G7, G8 HP ZBook 17G G3, G5, G7 HP ZBook Firefly 15 G7, G8 HP ZBOOK 17G G3 HP ZHAN 66 Pro series G1, G2, G3, G4 HP ZBOOK 17 G3 HP ZBOOK 17 G3, G5, G6 HP ZBOOK 17 G4, G5, G6 HP ZBOOK 17 G4, G5, G6 HP ZBOOK Furry 17 G7 HP ZBOOK Furry 17 G7 HP ZBOOK Studio x360 G5 HP ZBOOK Studio G3, G4, G7 HP ZBOOK X2 G4 HP ZBOOK Studio G3, G4, G7 HP ZBOOK X2 G4 HP ZBOOK Create G7
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

QuickSpecs HP Dock Solutions

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 ZHAN 66 Pro series G1, G2, G3, G4
HP ZHAN Pro 14, 15 G2
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 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 USB-C® Dock G4

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 ProBook 600 G4, 400 G5, G6
HP EliteBook 800 G5, 700 G5
HP EliteBook x360 1030 G6 & 1020 G2, G3, G4
HP EliteBook x360

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

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.



^{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.

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 G7added 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)
April 26, 2021	V13 to V14	Removal	HP EliteBook 800/700 G7 and G8 from HP Thunderbolt™ Dock 230W G2 compatibility statement.
August 5, 2021	V14 to V15	Update	(discontinued) added to index / Introduction added / Footnote and NOTE added to item listed in the introduction / Footnote arrangement on HP TB 120W G2 w/Audio

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