Technical Specifications

HP Dock Solutions

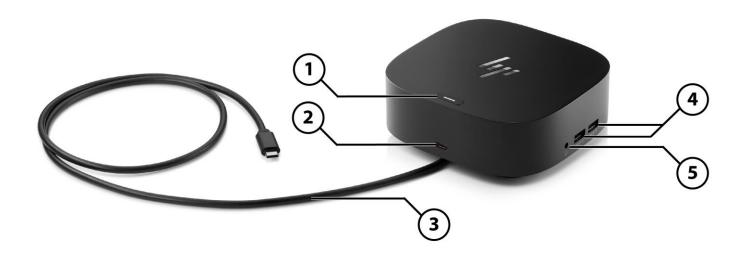
Models

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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 Non-flash Version	3DV65AA
HP USB-C® Universal Dock	1MK33AA
HP 4.5mm and USB Dock Adapter	2NA11AA
HP USB-C® Mini Dock	1PM64AA
HP USB Travel Dock	TOK30AA
HP UltraSlim Docking Station	D9Y32AA



HP USB-C Dock G5



Front and Side View

- 1. 1 LED power button
- 2. 1 USB-C® 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
Dimensions (L x W x H)	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)
Weight	1.49 lb (0.68 kg)
Top components	LED and power button to power or wake host system ¹
	One USB-C® 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
	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	Up to 3.
Power to system	Up to 100W via USB-C®
Power to host (USB-C PD)	5V , 9V, 10V, 12V, 15V, 20V all at 5A MAX
	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.

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

Display Configurations	Output ports
(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
(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) 2.5k Display (1) 4k Display (1) 5K single cable* (1) 5K dual cable (1) 8K dual cable (1) 8K single cable* (2) FHD Displays (2) 2.5k Displays



	(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

^{*}Single cable 5K and 8K displays are not available in the market today (1Q 2019)

		Video I	Resolution				
				I	lost		
	Display Configurations ¹	High Res m	ode DP Alt Mo	de (DP x4)	Multi-F	unction (defaul	lt)(DP x2)
	Display Configurations	DP 1.2	DP 1.3/1.4	DP 1.4	DP 1.2 MF	DP1.3/1.4MF	DP1.4 MF w/DSC**
Single Display	(1) 2.5K Display	Υ	Υ	Υ	Υ	Υ	Υ
	(1) 4K Display	Υ	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	Υ	Υ	Υ	Υ
	(3) FHD Displays	Υ	Υ	Υ		Υ	Υ
	(2) 2.5K and (1) FHD	Υ	Υ	Υ			Υ
	(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	_		Υ			



Technical Specifications

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

*single cable 5K and 8K displays are not available in the market today (10 2019)

** 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

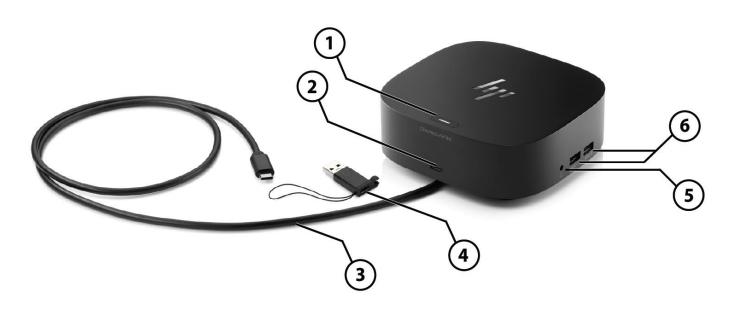
2.5K = 2560 x 1600 or 2560 x 1440

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 USB-C® 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 achiev	ve the resolutions provided in the previous table. Please refer to the notes at the bottom of the table.
Part number	5TW13AA
Dimensions (L x W x H)	4.80 x 4.80 x 1.77 in (122 x 122 x 45 mm)
Weight	1.53 lb (0.695 kg)
Top components	LED and power button to power or wake host system ¹
Front components	One USB-C® 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	3 external monitors plus notebook screen (please refer to the resolution tables below)
Power to system	Up to 100W via USB-C®
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	DP2	нрмі	Multi-Function (default)(x2 DP)		
	Display configurations	5 1 1	5.12		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 p	Both DP ports for 5K and 2.5K on HDMI		Y	Y	Υ
	(1) 5K dual cable + (1) 4K	Both DP por	ts for 5K and	4K on HDMI	Y (D2)	Y (D1)	Υ
Triple Displays	(3) 2.5K Displays		All 3 ports		Υ	Υ	Υ
	(2) 4K Displays + (1) 2.5K	4K on DP ¡	oorts *D1, 2.5	k on HDMI	Υ	Υ	Υ
	(3) 4K Displays	4K on DP p	orts *D1 and 4	4K on HDMI	Y (D2)	Y (D1)	Υ

		High Res V	ideo Resolutio	n			
	Display					Host	
	Configurations/High	DP1	DP2	HDMI	High Res mo	de DP Alt Mod	le (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; D	Any 2 ports; DP ports limited to UHD 4K ²		Υ	Υ	Υ
Triple Displays	(3) 4K Displays	4K on both DF	ports (D1) and	d 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. 1 USB-C® port to your HP USB-C/A Universal Dock G2
- 2. 1 4.5 mm barrel AC adapter (65 W)
- 3. 1 USB-A connection



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 x USB-A 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 USB-C® 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 powered USB 3.0 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)



- 6. 2 USB 3.0 ports
- 7. 1 VGA port
- 8. 2 DisplayPort™ ports
- 9. 1 USB-C[®] DisplayPort[™], data and power out (15W) port
- 10. 1 Ethernet port

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

	Components
Part Number	2UK37AA
Ports	1 USB-C® data and charging port (15W) 1 USB-C® DisplayPort™ – data and charging (15W) 1 USB-C® Thunderbolt™ port 2 USB 3.0 ports 1 USB 3.0 charging port 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)	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 USB-C® port with data and power out (15W) One USB-C® cable to connect to host system (0.7meter cable length)
Side components	One powered USB 3.0 port One combo audio Jack One standard lock slot
Back components	One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ 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
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.
- 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 \$4/\$5.

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

	HP Thunderboli	t™ Dock G2 Video resolutio	n specifications
HP Thunderbolt™ Dock G			ock 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 @ 60Hz	1 DP + 1 TB port or
			1 USB-C® Alt mode port + 1 TB port
	3	(1) 4096 x 2160 @ 60Hz	(1) 4096 x 2160 @ 60Hz from TB port
DP 1.2 Thunderbolt™ host		+	(2) 2560x1440 @ 60Hz from DP ports or DP +
		(2) 2560 x 1440 @ 60Hz	USB-C® Alt
	4	(1) 4096 x 2160 @ 60Hz	(1) 4096 x 2160 @ 60Hz from TB port
		+	(2) 2560x1440 @ 60Hz from DP ports or DP +
		(2) 2560 x 1440 @	USB-C® alt
		60Hz+	(1) 1920 x 1080 @ 60Hz from DP or USB-C® Alt
		(1) 1920 x 1080 @ 60Hz	mode
Host Specification	# of displays on dock	Resolution	Supported configuration
	1	(1) 5120 × 2880 @	1 DP or
	•	(1) 3 1 2 2 2 2 2 2	
		60Hz	1 TB or
		60Hz	1 TB or 1 USB-C® alt mode
	2		1 USB-C® alt mode
	2	60Hz (2) 4096 x 2160 @ 60Hz	
	2		1 USB-C® alt mode 1 DP + 1 TB port or
		(2) 4096 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port
		(2) 4096 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 2 DP ports or 1 DP + 1 USB-C® Alt mode port or 1 DP + 1 TB port or
	2	(2) 4096 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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
DP 1.3 Thunderbolt™ host		(2) 4096 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 2 DP ports or 1 DP + 1 USB-C® Alt mode port or 1 DP + 1 TB port or
DP 1.3 Thunderbolt™ host	2	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP +
DP 1.3 Thunderbolt™ host	2	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt
DP 1.3 Thunderbolt™ host	3	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt (1) 1920x1200 @ 60Hz from TB port
DP 1.3 Thunderbolt™ host	3	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @ 60Hz (3) 2560 x 1600 @ 60hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt (1) 1920x1200 @ 60Hz from TB port 2 DP ports + USB-C® Alt mode (1) 3840x2160 @ 60Hz from DP or USB-C® Alt mode
DP 1.3 Thunderbolt™ host	3	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @ 60Hz (3) 2560 x 1600 @ 60Hz (1) 3840 x 2160 @ 60Hz	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt (1) 1920x1200 @ 60Hz from TB port 2 DP ports + USB-C® Alt mode (1) 3840x2160 @ 60Hz from DP or USB-C® Alt mode (2) 2560x1440 @ 60Hz from DP ports or DP +
DP 1.3 Thunderbolt™ host	3	(2) 4096 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz (2) 3840 x 2160 @ 60Hz + (1) 1920 x 12000 @ 60Hz (3) 2560 x 1600 @ 60Hz (1) 3840 x 2160 @ 60Hz +	1 USB-C® alt mode 1 DP + 1 TB port or 1 USB-C® alt mode + 1 TB port 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 (2) 3840 x 2160@60Hz from DP ports or DP + USB-C® alt (1) 1920x1200 @ 60Hz from TB port 2 DP ports + USB-C® Alt mode (1) 3840x2160 @ 60Hz from DP or USB-C® Alt mode

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.

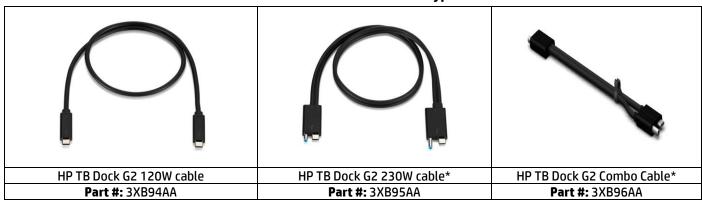


Technical Specifications

HP Thunderbolt™ Dock G2 video resolution specifications when the dock is connected to a USB-C® alt-mode system¹:		
Host Specification	# of monitors	
DP 1.2 USB-C® host	1	2560x1440 @ 60Hz
	2	1920x1200 @ 60Hz
DF 1.2 U3B-C 11USC	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

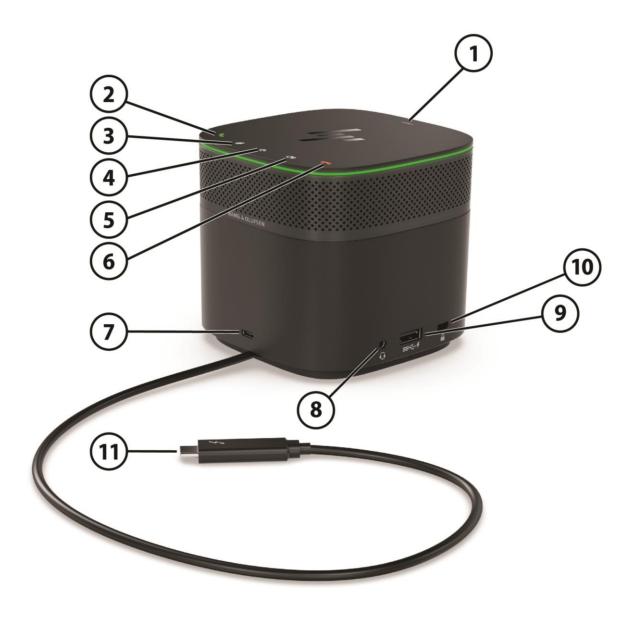
HP Thunderbolt™ Dock G2 cable types



*NOTE: Requires 230W AC adapter



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



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

- 6. Hang up / decline call
- 7. 1 USB-C® port with data and power out (15W)
- 8. 1 headphone/microphone combo jack
- 9. 1 powered USB 3.0 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™ ports
- 14.1 USB-C® DisplayPort™, data and power out (15W) port
- 15. 1 Ethernet port
- 16. 1 AC adapter connector (7.4mm)
- 17. 1 Thunderbolt™ port

Ports 1 USB-C® port with data and power out (15W) 1 USB-C® cable to connect to host system (0.7m cable length) 1 powered USB 3.0 port 1 combo audio jack 1 standard lock slot 1 Thunderbolt™ port 1 USB-C® DisplayPort™, data and power out port (15W) 2 DisplayPort™ 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 LED indicator (power button to power¹, wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call Front components One USB-C® cable to connect to host system (0.7m cable length) Side components One powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports		Components
1 USB-C® cable to connect to host system (0.7m cable length) 1 powered USB 3.0 port 1 combo audio jack 1 standard lock slot 1 Thunderbolt™ port 1 USB-C® DisplayPort™, data and power out port (15W) 2 DisplayPort™ 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 LED indicator (power button to power¹, wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call 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 powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Part Number	
Weight Z lb (0.91 kg) Top components LED indicator (power button to power¹, wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call 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 powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Ports	1 USB-C® cable to connect to host system (0.7m cable length) 1 powered USB 3.0 port 1 combo audio jack 1 standard lock slot 1 Thunderbolt™ port 1 USB-C® DisplayPort™, data and power out port (15W) 2 DisplayPort™ ports 1 VGA port 2 USB 3.0 ports 1 RJ45 port
LED indicator (power button to power¹, wake, sleep host system) Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call 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 powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Dimensions (H x W x D)	3.9 x 3.9 x 4.5 in (98 x 98 x 114 mm)
Pick up / accept / hold call Mic mute Volume up Volume down Hang up / decline call 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 powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Weight	2 lb (0.91 kg)
One USB-C® cable to connect to host system (0.7m cable length) Side components One powered USB 3.0 port One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Top components	Pick up / accept / hold call Mic mute Volume up Volume down
One combo audio jack One standard lock slot Back components One Thunderbolt™ port One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Front components	
One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports	Side components	One combo audio jack
One VGA port Two USB 3.0 ports One RJ45 port One AC adapter	Back components	One USB-C® DisplayPort™, data and power out port (15W) Two DisplayPort™ ports One VGA port Two USB 3.0 ports One RJ45 port
PXE Boot Wake on Lan (from the Off, Sleep or Hibernation States²) MAC Address Pass-Through (from the On, Off, Sleep or Hibernation States³) WLAN-LAN Switching⁴	Network manageability features	Wake on Lan (from the Off, Sleep or Hibernation States²) MAC Address Pass-Through (from the On, Off, Sleep or Hibernation States³)
External monitor support Up to 4 ⁵ (please refer to video resolution tables above for details)	External monitor support	Up to 45 (please refer to video resolution tables above for details)
Power delivery (PD) profiles PD 3.0: 5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A	Power delivery (PD) profiles	PD 3.0: 5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A
Speaker rated power 2W	Speaker rated power	2W
19.7 V dc @ 11.8 A – 230W	Operating voltage and current	19.7 V dc @ 11.8 A – 230W
Temperature (operating) 0° C to 35° C (32° F to 95° F)	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)



Technical Specifications

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®

- 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 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

- 4. 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.

	Components
Part Number	3AQ21AA
Dimensions (H x W x 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
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

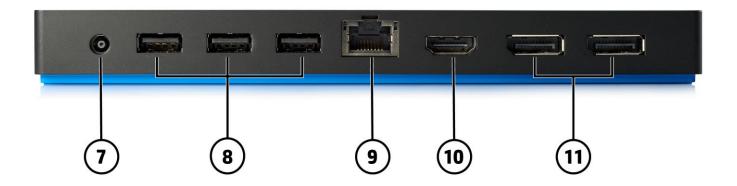


HP USB-C® Dock G4 - Front View



- 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 system ⁴ 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 ³ 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.

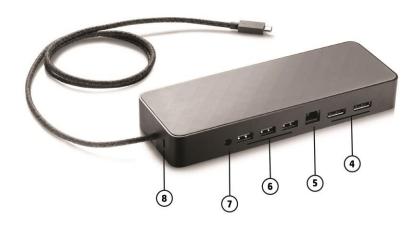
HP USB-C® Universal Dock - Front View



- 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

Components



Technical Specifications

Part Number	1MK33AA
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), 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

- 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-alone	Dower red	mirements
Julia atolic	POWCI ICE	an cincing

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

Temperature

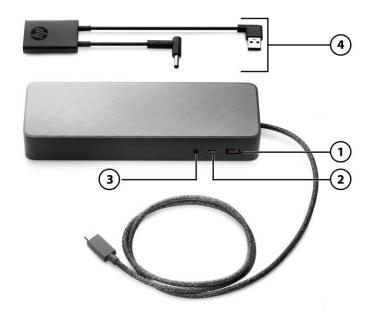
Operating 32~104 °F (0~40 °C) Non-operating -4~140 °F (-20~+60 °C)



Technical Specifications

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)

HP USB-C® Universal Dock Non-flash Version- 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 Non-flash Version- 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
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 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
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, 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 \$4/\$5.

MAC Address Pass-Through SO, 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)
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
Contents	HP USB-C® Universal Dock with no Flash Drive, 4.5mm and USB Dock Adapter, AC power cord, 90W A/C adapter and documentation
Drivers	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
Option Kit Contents	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, 90W A/C adapter and documentation



HP USB-C® Universal Dock Cables and Adapters

HP 4.5mm and USB Dock Adapter (2NA11AA)



NOTE: Included only with non-flash and 4.5mm adapter SKU, this component is not compatible with any other dock or platform.

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
Pert 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 requiremen	nts
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



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

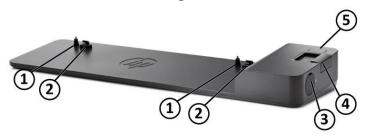
4. 1 HDMI port

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)			
Ontion Kit Contents	HP USR Travel Dock documentation			

Components

Technical Specifications

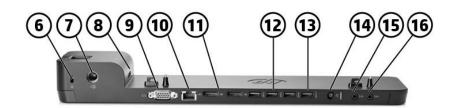
HP UltraSlim Docking Station - Front side



- 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 \times W \times 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			

Technical Specifications

Two Computer connect/ release mechanisms

One Docking connector
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	0.75g			
Non-operating	1.50g			
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
HP Thunderbolt Dock 120W G2 HP Elite Dragonfly HP EliteBook x360 440 G2 HP EliteBook 830 x360 HP ZHAN 66 Pro 14 G2 HP ZHAN 66 Pro 15 G2 HP ZHANN Pro 13 G2	HP Elite x2 1012 G1, G2, Elite x2 1013 G4 HP Pro x2 612 G2 HP EliteBook Folio G1 HP EliteBook x360 1030 & 1020 G2, G3, G4 HP EliteBook 1040 G4 HP EliteBook 800, 700 G5, G6 HP ProBook 600 G4, 400 G5, G6 ZBook 14u/15u G5, G6
HP Thunderbolt Dock 230W G2 HP ZHAN 99 Mobile Workstation	HP ZBook 17, 15 G3, G4, G5; Studio G3, G4, G5 HP ZBook x2 G4 ZBook 14u/15u G5, G6 HP EliteBook 800, 700 G5, G6
HP Thunderbolt Dock w/Combo Cable	Compatible with all notebooks listed for 120W and 230W models
Hp Thunderbolt Dock w/Audio	Compatible with all devices listed above.
HP Thunderbolt Dock Audio Module	HP Thunderbolt Dock G2 required
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 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 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.



Technical Specifications

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

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