Overview

HP Docking Solutions for HP ZBook G3/G4 Mobile Workstations

Models

HP UltraSlim Docking Station	D9Y32AA
HP ZBook Dock with Thunderbolt™ 3 (150W)	P5Q58AA
HP ZBook Dock with Thunderbolt™ 3 (200W)	P5Q61AA
HP Thunderbolt™ Dock 120W G2	2UK37AA
HP Thunderbolt™ Dock 230W G2	2UK38AA
HP TB Dock G2 w/ Combo Cable (230W)	3TR87AA
HP Thunderbolt Dock G2 Audio Module	3AQ21AA
HP Thunderbolt Dock 230W G2 Cable	3XB95AA
HP Thunderbolt Dock G2 Combo Cable	3XB96AA
HP Thunderbolt Dock G2 120W Cable	3XB94AA

Compatiblity

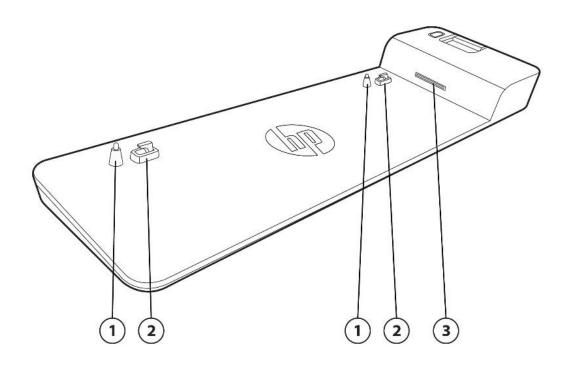| Docking Station	Mobile Workstation
HP UltraSlim Docking Station	HP ZBook 15u G3/G4/G5, HP ZBook 14u G4/G5
HP ZBook Dock with Thunderbolt™ 3 (150W)	HP ZBook 15 G3/G4/G5, HP ZBook Studio G3/G4/G5
HP ZBook Dock with Thunderbolt™ 3 (200W)	HP ZBook 17 G3/G4/G5 , HP ZBook 15 G3/G4/G5, HP ZBook Studio G3/G4/G5
HP Thunderbolt Dock 120W G2	HP ZBook x2, HP ZBook 15u G4/G5, HP ZBook 14u G5
HP Thunderbolt Dock 230W G2	HP ZBook x2, HP ZBook 15u G4/G5, HP ZBook 14u G5, HP ZBook 15 G3/G4/G5, HP ZBook Studio G3/G4/G5, HP ZBook 17 G3/G4/G5, HP ZBook Studio x360 G5
HP Thunderbolt Dock G2 w/ Combo Cable	HP ZBook x2, HP ZBook 15u G4/G5, HP ZBook 14u G5, HP ZBook 15 G3/G4/G5, HP ZBook Studio G3/G4/G5, HP ZBook 17 G3/G4/G5, HP ZBook Studio x360 G5

NOTE: Your mobile workstation, 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.

NOTE: Thunderbolt™ 3 Dock Cable 1m could be ordered as an option with the part number: Z4P20AA.

Overview of HP UltraSlim Docking Station

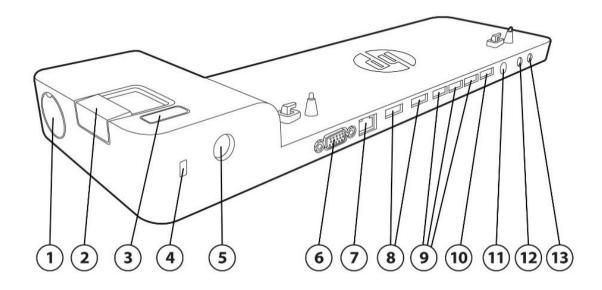**HP UltraSlim Docking Station – Front side**

1. Docking posts
2. Locking mechanism

3. Side docking connector

Overview of HP UltraSlim Docking Station

HP UltraSlim Docking Station – Rear side

1. Docking station cable lock slot (lock not included)
2. Connection button
3. Power on/off
4. Lock slot (lock not included)
5. Docking station cable lock slot (lock not included)
6. VGA port
7. LAN/Ethernet port
8. DisplayPort 1.2 (2)
9. USB 3.0 ports (3)
10. USB 3.0 charging port (1)
11. Power connector
12. Line in jack
13. Line out jack

Technical Specifications of HP UltraSlim Docking Station

HP UltraSlim Docking Station   D9Y32AA

Front Components	
Docking posts (2)	Align and secure the computer for proper connection to the docking station
Computer connect/ release mechanisms (2)	Connect and release the computer when you press the connection button
Docking connector	Docking connector for mobile workstation
Connect button	Secures and releases the computer Slide in to secure the computer Slide out to release the computer
LEDs	AC present: aqua white; Dock connected: white; two RJ45 LEDs: amber/green

Rear Components	
AC power port	Energy-efficient 65W Smart AC adapter features integrated surge protection to help against power fluctuations.
Integrated cable lock slot	Supports the HP Docking Station Cable Lock with a simplified locking mechanism. Gives you two security options: lock the docking station only (which also prevents access to the Station drive bay); or lock both the docking station and your mobile workstation for additional security. Also supports an industry standard mobile workstation lock.
Network connectors	RJ-45 / Ethernet pass through
USB ports	3 USB 3.0 ports, 1 USB 3.0 charging port
Audio connectors	Line-In; Line-Out
Other connectors	VGA, DisplayPort 1.1a (DP 1.2 capable)

NOTE: Your mobile workstation, 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 of HP UltraSlim Docking Station

HP UltraSlim Docking Station

Dimensions (H x W x D)	1.7 x 14.5 x 4.2 in (4.4 x 36.8x 10.7 cm)
Weight	1.69 lb (0.76 kg)

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	0.75 grms
Non-operating	1.50 grms

Option Kit Contents	2013 HP UltraSlim Docking Station, AC power adapter, documentation

Overview of HP ZBook Thunderbolt 3 Dock - 150W and 200W
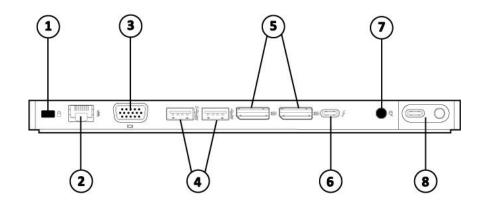
HP ZBook Thunderbolt™ 3 Dock– Front side

1. Power button
2. USB 3.0 ports (2)

3. Headphone/microphone combo jack

HP ZBook Thunderbolt™ 3 Dock – Back side

1. Security lock slot
2. Ethernet port
3. VGA port
4. USB 3.0 ports (2 total, 1 charging)
5. DisplayPort 1.2 (2)

6. Thunderbolt™3 port
7. Power connector
8. Thunderbolt™3 / power cable connector

Technical Specifications of HP ZBook Thunderbolt 3 Dock – 150W and 200W

HP ZBook 150W Thunderbolt™ 3 Dock	**P5Q58AA**
HP ZBook 200W Thunderbolt™ 3 Dock	**P5Q61AA**

Front Components	
Power button	Turns on the power to the computer
Computer power light	Light on: docked computer is turned on Light blinking: docked computer is in standby mode
Connect light	Light on: computer is fully docked Light blinking: computer is in standby mode
Audio connector	Combo audio mic/headphones
USB 3.0 ports	(2) Two USB 3.0 ports allow you to connect to standard USB devices.

Rear/Right-Side Components	
AC power port	Energy-efficient 150W or 200W Smart AC adapter features integrated surge protection to help against power fluctuations.
Powered USB 3.0 port	(1) One powered USB 3.0 port allows you to connect to select USB devices
USB 3.0 ports	(1) One USB 3.0 port allows you to connect to standard USB devices.
Thunderbolt™ 3 Port	(1) One Thunderbolt™3 port provides external device charging up to 15 watts;
Video Connectors	(2) Two DisplayPort 1.2 ports, (1) one VGA port
Power Connectors	(1) One Thunderbolt™/Power combination cable connector to connect to ZBook system (1) One 4.5mm power connector for 150W or 200W AC Adapter.
Integrated cable lock slot	Supports HP Cable Locks. Also supports HP Dual Head Cable Lock.
Network connectors	(1) Ethernet port; Broadcom NetXtreme Gigabit Ethernet
Docking Cable	Thunderbolt™ 3 power cable connects the computer to the docking station

NOTE: Your mobile workstation must support Thunderbolt™ 3 to enable the docking station. Docking station, and monitor must all support USB-C™, 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 of HP ZBook Thunderbolt 3 Dock - 150W and 200W

HP ZBook 150W Thunderbolt™3 Dock

Dimensions (H x W x D)
230 x 57 x 16mm (w/o feet), 9.05 x 2.24 x 0.63 in
230 x 57 x 17.5mm(w/ feet), 9.05 x 2.24 x 0.69 in

Weight
227g (0.5 lb)

Stand-alone power requirements

Normal Operating Voltage	19.5V
Average Operating Power	0.29W
Max Operating Power	150W

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	0.75 grms
Non-operating	1.50 grms

Option Kit Contents	HP ZBook 150W Thunderbolt™3 Dock, Thunderbolt™/AC power cable, 150W A/C power adapter, documentation

Technical Specifications of HP ZBook Thunderbolt 3 Dock - 150W and 200W

HP ZBook 200W Thunderbolt™ 3 Dock

Dimensions (H x W x D)
230 x 57 x 16mm (w/o feet), 9.05 x 2.24 x 0.63 in
230 x 57 x 17.5mm(w/ feet), 9.05 x 2.24 x 0.69 in

Weight
227g (0.5 lb)

Stand-alone power requirements

Normal Operating Voltage	19.5V
Average Operating Power	0.368W
Max Operating Power	200W

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	0.75 grms
Non-operating	1.50 grms

Option Kit Contents	HP ZBook 200W Thunderbolt™ 3 Dock, Thunderbolt/AC power cable, 200W A/C power adapter, documentation

Overview of HP Thunderbolt Docks G2

HP Thunderbolt™ Dock G2– Left Angle

1. Power button
2. 1 USB-C port with data and power out (15W)
3. Headphone/microphone combo jack
4. 1 powered USB 3.0 port
5. Kensington lock slot

Overview of HP Thunderbolt Docks G2

HP Thunderbolt™ Dock G2 – Back side

1. 2 USB 3.0 ports
2. 1 VGA port
3. 2 DisplayPort™ ports
4. 1 USB-C DisplayPort™, data and power out (15W) port
5. Ethernet port
6. AC Adapter connector
7. 1 Thunderbolt™ port

Technical Specifications of HP Thunderbolt Docks G2

HP Thunderbolt Dock 120W G2	**2UK37AA**
HP Thunderbolt Dock 230W G2	**2UK38AA**
HP Thunderbolt Dock G2 w/Combo Cable	**3TR87AA**

Top Components	
Power button and LED	LED and power button to power or wake host system[1]

Front Components	
USB-C port	(1) One USB-C port with data and power out (15W)
USB-C cable	(1) One USB-C cable to connect to host system (0.7 meter cable length)

Side Components	
Powered USB 3.0 port	(1) One powered USB 3.0 port allows you to connect to select USB devices
combo Audio Jack	(1) One combo Audio Jack
Kensington lock slot	(1) One Kensington lock slot

Back Components	
Thunderbolt™ port	(1) One Thunderbolt port
USB-C DisplayPort	(1) One USB-C DisplayPort, data and power out (15W) port
DisplayPort ports	(2) Two DisplayPort ports
VGA port	(1) One VGA port
USB 3.0 ports	(2) Two USB 3.0 ports
Network connectors	(1) Ethernet port
AC power port	AC Adapter connector

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

HP Thunderbolt™ Dock G2 video resolution specifications when the dock is connected to a USB-C™ alt-mode system[1]:

Host Specification	# of monitors	
DP 1.2 USB-C™ host	1	2560x1440 @ 60Hz
	2	1920x1200 @ 60Hz
HP EliteBook 840r G4 HP ProBook 600 G4, 400 G5 HP Pro x2 612 G2	3	(1) 1920x1200 @ 60Hz (2) 1280x768 @ 60Hz
DP 1.3 USB-C™ host	1	3840x2160 @ 60hz
	2	2560x1600 @ 60Hz
HP EliteBook 700 G5 HP ProBook 645 G4, 455 G5	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

Technical Specifications of HP Thunderbolt Docks G2

NOTE 1: Requires host mobile workstation to support in its BIOS
NOTE 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.
NOTE 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
NOTE 4: WLAN – LAN switching is supported only on select computers running Windows 10 operating system

NOTE: Your mobile workstation must support Thunderbolt™ 3 to enable the docking station. Docking station and monitor must all support USB-C™, 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 of HP Thunderbolt Docks G2

HP Thunderbolt Dock G2 (120W & 230W)

Dimensions (H x W x D)
3.9 x 3.9 x 2.7 in (98 x 98 x 69 mm)
Weight
1.76 lbs (0.800 Kg)

Power delivery (PD) Profiles
5V/5A, 9V/5A, 12V/5A, 15V/5A, 20V/5A

Power to system
Up to 100W via USB-C™and up to 200W through 230W power barrel

Operating voltage and current
- 19.7 V dc @ 6.1 A – 120W
- 19.7 V dc @ 11.8 A – 230W

Temperature

Operating   32° to 95° F (0° to 35° C)

Relative humidity

Operating   10% to 90%, non-condensing

Maximum altitude unpressurized

Operating   -50 to 10,000 ft (-15 to 3,048 m)

Technical Specifications of HP Thunderbolt Docks G2

Service and Support

HP Docking Stations for HP ZBook G3/G4/G5 Mobile Workstations 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.
http://h20565.www2.hp.com/portal/site/hpsc/public/psi/home/

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

Summary of Changes

Date of change	Version History		Description of change
	From v1 to v2		Stand-alone power requirements from 19.7V to 19.5V
July 1, 2016	From v2 to v3	Added	Link in Service and Support Section
		Changed	Network Connector type for 150/200W Dock
May 1, 2017	From v3 to v4	Added	Compatibility with G4 Mobile Workstations
August 14, 2017	From v4 to v5	Added	Footnote about the Thunderbolt 3 Dock Cable 1m
February 7, 2018	From v5 to v6	Added	HP Thunderbolt Dock G2 (120W), HP Thunderbolt Dock G2 (230W), HP Thunderbolt 230W 1m cable, HP Thunderbolt 1m combo cable & HP Thunderbolt Dock Audio
July 24, 2018	From v6 to v7	Update	General re-arrange