

#### **SUMMARY**

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#### **Product notice**

This guide describes features that are common to most models. Some features may not be available on your product.

Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows is automatically updated, which is always enabled. High-speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com If your product ships with Windows in S Mode: Windows in S Mode works exclusively with apps from the Microsoft Store within Windows. Certain default settings, features, and apps cannot be changed. Some accessories and apps that are compatible with Windows may not work (including some antivirus, PDF writers, driver utilities, and accessibility apps), and performance may vary, even if you switch out of S Mode. If you switch to Windows, you cannot switch back to S Mode. Learn more at Windows.com/ SmodeFAQ.

To access the latest user guide, go to <a href="http://www.hp.com/support">http://www.hp.com/support</a>, and follow the instructions to find your product. Then select **Manuals**.

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For any further information or to request a full refund of the price of the computer, please contact your seller.

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# **Getting started**

After identifying the components of the docking station, you can connect a computer, monitor, and other devices.

# Identifying components

This section identifies the visible hardware features of the docking station and provides setup instructions.



NOTE: Your computer might not be equipped to take advantage of all the features available on the docking station.

### Top

This illustration and table describe the components on the top of the docking station.



Table 1-1 Component descriptions

Component	Description
Power button and light	Button:
	<ul> <li>When the computer is off, press the button to turn on the computer.</li> </ul>
	<ul> <li>When the computer is on, press the button briefly to initiate Sleep.</li> </ul>
	<ul> <li>When the computer is in the Sleep state, press the button briefly to exit Sleep (select products only).</li> </ul>
	<ul> <li>When the computer is in Hibernation, press the button briefly to exit Hibernation.</li> </ul>
	<b>CAUTION:</b> Pressing and holding down the power button results in the loss of unsaved information.
	If the computer has stopped responding and shutdown procedures are ineffective, press and hold the power button for at least 5 seconds to turn off the computer.
	Light:
	On: The docking station is connected to the computer.

### **Front**

This illustration and table describe the components on the front of the docking station.

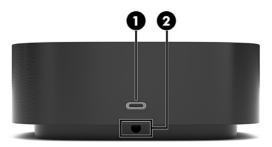


Table 1-2 Component descriptions

Component		Description
(1)	USB Type-C® SuperSpeed port with HP Sleep and Charge	Connects a USB device that has a Type-C connector, provides data transfer, and charges most products such as a cell phone, camera, activity tracker, or smartwatch.  NOTE: Cables and/or adapters (purchased separately) might be required.

Table 1-2 Component descriptions (continued)

Component		Description
(2)	USB Type-C cable	Connects the docking station to a notebook or tablet computer.
		NOTE: If a computer does not support power over USB Type-C connections or requires more than 65 W of power, you must use the AC adapter included with the computer to power or charge the computer.

### Left

This illustration and table describe the components on the left side of the docking station.



Table 1-3 Component descriptions

Component			Description
(1)	O	Audio-out (headphone)/Audio-in (microphone) combo jack	Connects optional powered stereo speakers, headphones, earbuds, a headset, or a television audio cable. Also connects an optional headset microphone. This jack does not support optional standalone microphones.
			WARNING! To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the <i>Regulatory, Safety, and Environmental Notices</i> .
			To access this guide:
			On your computer, select the <b>Start</b> button, select <b>HP Help and Support</b> , and then select <b>HP Documentation</b> .
			<b>NOTE:</b> When a device is connected to the jack, the computer speakers are disabled.
(2)	ssc. 4	USB SuperSpeed ports with HP Sleep and Charge (2)	Connect a USB device, provides data transfer, and charges most products such as a cell phone, camera, activity tracker, or smartwatch.

### Rear

This illustration and table describe the components on the rear of the docking station.

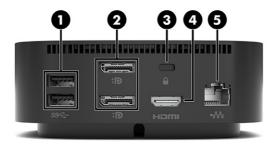


Table 1-4 Component descriptions

Component			Description
(1)	ss←	USB SuperSpeed ports (2)	Connect a USB device, such as a cell phone, camera, activity tracker, or smartwatch, and provide high-speed data transfer.
(2)	₽	Dual-mode DisplayPort ™ connectors (2)	Connect an optional digital display device, such as a high-performance monitor or projector.
(3)	<u> </u>	Security cable slot	Attaches an optional security cable to the docking station.  NOTE: The security cable is designed to act as a deterrent, but it may not prevent the docking station from being mishandled or stolen.
(4)	нәті	HDMI* port	Connects an optional video or audio device, such as a high-definition television, any compatible digital or audio component, or a high-speed High Definition Multimedia Interface (HDMI) device.
(5)	***	RJ-45 (network) jack/status lights	Connects a network cable.  Green (right): The network is connected.  Amber (left): Activity is occurring on the network.

### **Bottom**

This illustration and table describe the components on the bottom of the docking station.



Table 1-5 Component descriptions

Component	Description
AC adapter light	On: AC power is connected to the docking station.

# Setting up the docking station

Connect the docking station to the computer using AC power. After connecting the computer, prevent the Sleep and Hibernation states to be sure that your work is uninterrupted.

### Connecting to AC power

Connect the docking station to an AC power source. When connected to power, the docking station provides up to 65 W of power through the USB Type-C connector to the computer.

▲ WARNING! To reduce the risk of electric shock or damage to the equipment:

- Plug the power cord into an AC outlet that is easily accessible at all times.
- Disconnect power from the equipment by unplugging the power cord from the AC outlet.
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.

To ensure the correct performance of all docking station features, connect the docking station to an AC power source using the docking station power cord.

 Connect one end of the power cord to the AC adapter (1), and connect the other end of the power cord to an AC outlet (2). 2. Lower the AC adapter connector into the power-in connector slot on the docking station (3), press the connector to the side until it is firmly seated (4), and then rotate the connector so that the cable is routed through the channel on the side of the docking station chassis (5).



### Connecting to a computer

Connect the USB Type-C cable to a USB Type-C port on your computer.

NOTE: If the computer does not support power over USB Type-C connections or requires more than 65 W of power, you must use the AC adapter included with the computer to power or charge the computer.



## Turning on the docking station

Press the power button to turn on the docking station.



#### **Preventing Sleep or Hibernation**

When using an external monitor, you might want to close the computer.

- 1. Type control panel in the taskbar search box, and then select Control Panel. For more information about configuring an external monitor, see Configuring the monitor on page 8.
- Select Power Options.
- 3. Select Choose what closing the lid does.
- 4. Next to When I close the lid, under On battery, select Do nothing.
- 5. Next to When I close the lid, under Plugged in, select Do nothing.
- 6. Select Save changes.

## Setting up the software

This section describes how to install the docking station software on a computer running Windows® 11 or Windows 10 operating systems.

- With the computer on, Windows running, and the Internet connected, connect the docking station to the computer.
- 2. Go to http://www.hp.com/support.
- 3. Select Get software and drivers, and follow the on-screen instructions to find your docking station.
- Follow the on-screen instructions to select and download the latest firmware update and each driver.
- 5. Complete the installation wizard.
- Choose to restart now or later. The docking station might not work until the next restart. If you choose to restart the computer, first remove any discs from the computer drives. Click Finish.

## Updating the software

To update the software on the docking station, follow the instructions in this section.

You can update the docking station while connected to your computer.

Download HP Firmware Installer from http://www.hp.com/support.

- 2. Open Windows Explorer and navigate to where you saved HP Firmware Installer.
- Double-click HPFirmwareInstaller.exe.
- 4. Verify that updates are available, and then select which updates to install.
- NOTE: You must be connected to the internet for new updates to download to HP Firmware Installer.
- Select Install.

## Using an external monitor

You can connect an external monitor to the docking station.

#### Configuring the monitor

After connecting a monitor to the docking station, configure the monitor settings to customize the screen image.

Use Windows to configure the display of a monitor attached to the docking station.

- 1. Select **Start**, select **Settings**, and then select **System**.
- To view the screen image on the monitor only, select Show desktop only on 2.

- or -

To view the screen image extended across both the computer and the monitor, select **Extend these displays**.

- or -

To view the screen image simultaneously on both the computer and the monitor, select **Duplicate these displays**.

You can also access the following display settings by pressing the Windows® key + p:

- To view the screen image on the monitor only, select Second screen only.
- To view the screen image extended across both the computer and the monitor, select Extend.
- To view the screen image simultaneously on both the computer and the monitor, select Duplicate.

If a monitor is connected to your computer HDMI or USB Type-C port, the number of monitors you can connect to the docking station might be fewer than four.

Depending on your screen resolution, the number of monitors you can connect to the docking station might be fewer than four.

#### Sleep, Hibernation, shutdown, and restart

If the computer initiates Sleep or Hibernation, the monitor turns off. When the computer exits Sleep or Hibernation, the connected monitor returns to the previous monitor settings.

If you restart or shut down the computer and then turn it back on, the connected monitor returns to the previous monitor settings.

# 2 Using the docking station

You can use the docking station to connect external devices to your system.

## **Docking station guidelines**

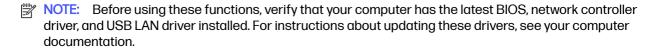
Follow the guidelines in this section when using the docking station.

- Operating systems
   –For optimal performance, use the docking station with a computer running either the Windows 11, version 22H2, or Windows 10, version 21H2 or higher operating system.
- Power—To use docking station features, AC power must be connected to the docking station.
- Connecting and disconnecting—The docking station can be connected to or disconnected from the computer whether the computer is on or off (see <u>Connecting to a computer on page 6</u> and <u>Disconnecting the docking station on page 14</u>).
- NOTE: HP does not recommend connecting or disconnecting from a computer that is in either Sleep or Hibernation.
- External devices—When the docking station is connected to the computer, external devices can be connected to the ports on the docking station or to the ports on the computer.

## Connecting to a network

You can connect the computer to a network through the docking station. This action requires a network cable (purchased separately).

The docking station supports the following computer functions over the network connection:



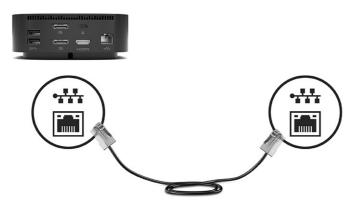
- PXE boot
- MAC Address Pass Through
- Wake on LAN (WOL)
- TIP: Your computer might support MAC Address Pass Through from the On, Off, Sleep, or Hibernation states, or only when the computer is on or in Sleep mode. WLAN/LAN switching is supported only on select computers running the Windows 11 or Windows 10 operating system.

Mac Address Pass Through is supported for UEFI PXE boot.

To connect to the network, follow these steps:

Connect the docking station to the computer.

Connect one end of the network cable to the RJ-45 (network) jack on the docking station and connect the other end to an RJ-45 wall jack or router.



- Download the HP USB-C G5 Essential Dock Firmware version 01.00.06.00 Rev.A (released Jan 10, 2023) or a later version from https://support.hp.com/us-en/drivers/selfservice/hp-usb-c-g5-essential-dock/2101469887.
- 4. If your operating system is not automatically detected, select **Try manually selecting your operating system**, and then select your operating system from the list.
- 5. Select the HP USB-C G5 Essential Dock Firmware for your operating system.

## Connecting USB devices

The docking station has five USB ports: one USB Type-C port with HP Sleep and Charge on the front panel, two USB SuperSpeed ports with HP Sleep and Charge on the middle panel, and two USB SuperSpeed ports on the rear panel. Use the USB ports to connect optional external USB devices, such as a keyboard or mouse.

NOTE: Be sure that the external device is compliant with the docking station power specifications. Using a noncompliant device might disable the port to which the device is attached. To reset the port, see Troubleshooting on page 15.

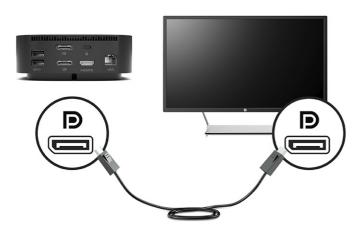


## Connecting a DisplayPort device

The docking station can also be connected to an external video device, such as a monitor or a projector, through the DisplayPort connectors. The docking station supports video connections to both DisplayPort connectors simultaneously. A single DisplayPort can support a screen resolution up to 5120 × 2880 @ 60 Hz, depending on your computer, cable, and monitor capabilities.

NOTE: To transmit video signals through the DisplayPort connection, you need a DisplayPort cable (purchased separately).

You can connect the docking station to an external device also, such as a monitor or a projector, through the DisplayPort.



## Connecting to an HDMI device

You can connect the docking station to an external video or audio device, such as a high-definition television, or to any digital audio components, through the HDMI port.

The docking station supports simultaneous video connections to the HDMI port and a DisplayPort connector.



🛱 NOTE: To transmit video signals through the HDMI port, you need an HDMI cable (purchased separately).



## Connecting audio

You can connect headphones or speakers directly into the audio-out (headphone)/audio-in (microphone) combo jack on the docking station. You can also connect analog audio devices.



NOTE: If the audio does not automatically switch to the docking station, set the docking station as the default audio device in your computer settings.

## Connecting analog audio devices

Use this procedure to connect to analog audio devices.

- Connect one end of an audio Y-cable (purchased separately) to the audio-out (headphone)/audio-in 1. (microphone) combo jack on the docking station.
- Connect the other end to the red and white audio-in jacks on your television or stereo equipment. See your television or stereo equipment user guide for the jack names and locations.

## Connecting an optional security cable

To install a security cable, follow these steps.



NOTE: The security cable is designed to act as a deterrent, but it might not prevent the docking station from being mishandled or stolen.

- 1. Loop the security cable around a secured object.
- 2. Insert the key into the cable lock.
- 3. Insert the cable lock into the security cable slot on the docking station, and then turn the key.

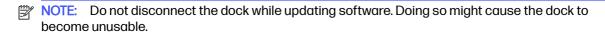


4. Remove the key.

# 3 Disconnecting the docking station

Use this procedure to disconnect the docking station from the computer.

- 1. Select the **Safely Remove Hardware** icon in the notification area, at the far right of the taskbar.
- Select Safely Remove USB Docking Station. The "Safe to Remove Hardware" message is displayed.
- 3. Disconnect the attached USB Type-C cable from the computer.



# 4 Troubleshooting

If you are experiencing issues with your docking station, you can attempt to resolve them using the provided solutions before contacting HP Support.

## Solving common problems

The troubleshooting tables list possible problems and the recommended solutions.

### General use and connection problems

Use the table to search for possible causes and solutions for general use and connection problems.

Table 4-1 General use and connection problems, causes, and solutions

Problem	Possible cause	Solution
The power light is off.	The docking station is not connected to AC power.	Connect the power cord to the docking station and to an AC outlet.
		<b>NOTE:</b> Be sure that you are using the power cord that was included with the docking station.
No devices connected to the docking station are working.	The docking station is not connected to AC power.	Connect the power cord to the docking station and to an AC outlet.
	The docking station is not connected to the computer correctly.	Disconnect the docking station cable from the computer, and then reconnect it.
When a device is connected to a USB port on the docking station, the device does not work.	The USB device might not be compliant with the docking station power specifications and is using too	Reset the port:
does not work.	much power.	1. Disconnect the device.
		Disconnect the power cord from the docking station, and then reconnect it.
		<ol><li>Disconnect the docking station from the computer, and then reconnect it.</li></ol>
		<ol> <li>Reconnect the device. If the device still does not work, it cannot be used with the port.</li> </ol>

Table 4-1 General use and connection problems, causes, and solutions (continued)

Problem	Possible cause	Solution
A device connected to a USB port on the docking station stops working.	The port might need to be reset.	Reset the port:
		<ol> <li>Disconnect the device that disabled the port.</li> </ol>
		<ol><li>Disconnect the power cord from the docking station, and then reconnect it.</li></ol>
		<ol> <li>Disconnect the docking station from the computer, and then reconnect it.</li> </ol>
		If this procedure does not resolve the problem, restart your computer.
		If restarting the computer does not resolve the problem, you might need to reset your computer. See your computer documentation for instructions about creating recovery media and performing a factory reset.
When the docking station is connected to the computer, both the WLAN and the	Switching from the WLAN connection to the LAN connection might not be	Disable the WLAN connection:
LAN are connected.	supported on your computer.  NOTE: WLAN-LAN switching is	Right-click <b>Start</b> , and then select <b>Network Connections</b> .
	supported only on select computers running the Windows 11 or Windows 10 operating system.	<ol><li>Right-click WI-FI, and then select Disable.</li></ol>
A device that is connected to the docking station is not working on the computer.	The device is not ready to use.	There might be a slight delay before devices connected to the docking station are ready to use.
	The port might need to be reset.	Reset the port:
		<ol> <li>Disconnect the device that disabled the port.</li> </ol>
		<ol><li>Disconnect the power cord from the docking station, and then reconnect it.</li></ol>
		<ol><li>Disconnect the docking station from the computer, and then reconnect it.</li></ol>
		If this procedure does not resolve the problem, restart your computer.
		If restarting the computer does not resolve the problem, you might need to reset your computer. See your computer documentation for instructions about creating recovery media and performing a factory reset.

### Audio problems

Use the table to search for possible causes and solutions for audio problems.

Table 4-2 Audio problem causes and solutions

Problem	Possible cause	Solution
Audio does not play.	The drivers are not installed.	Install the drivers. See <u>Updating the</u> software on page 7.
Headphones or other audio device connected to the docking station do not produce sound.	An audio device is connected to the headphone jack on the docking station, but the docking station is not the default audio device.	Set the docking station as the default audio device in the computer settings, or connect the audio device to the computer.
A microphone connected to the docking station does not work.	A microphone is connected to the docking station, but the docking station is not the default audio device.	Set the docking station as the default audio device in the computer settings, or connect the microphone to the computer.
A connected home entertainment system does not have audio.	Audio is not connected properly.	Be sure that the docking station is properly connected to the home entertainment system.

## Video problems

Use the table to search for possible causes and solutions for video problems.

Table 4-3 Video problem causes and solutions

Problem	Possible cause	Solution
A video does not play.	The drivers are not installed.	Install the drivers. See <u>Updating the</u> software on page 7.
Fonts and other characters on the external monitor appear large.	The screen resolution is configured higher than the maximum limit of the external monitor.	Set the screen resolution equal to or lower than the maximum limits of the external monitor.
The graphics application does not detect the external monitor.	Some graphics applications do not detect external monitors that are connected to the docking station.	Configure the external monitor. See Using an external monitor on page 8.
The external monitor cannot be set as the primary monitor when using some Intel® graphics applications.	Older Intel graphics applications do not support setting the external monitor as the primary monitor.	Download the latest Intel drivers from http://www.hp.com/support.
The computer monitor does not work.	An external monitor was disconnected from the docking station before the docking station was disconnected from the computer.	Disconnect the docking station from the computer, and then disconnect the external monitor from the docking station.

Table 4-3 Video problem causes and solutions (continued)

Problem	Possible cause	Solution
An external monitor does not work.	There is a problem with the connection.	Disconnect the docking station from the computer, and then disconnect the external monitor from the docking station.
		<ol><li>Reconnect the docking station to the computer, and then reconnect the external monitor to the docking station.</li></ol>
		If this procedure does not resolve the problem, restart your computer.
		If restarting the computer does not resolve the problem and your computer has NVIDIA® graphics, see the following item and try the solution. If the external monitor still does not work, you might need to reset your computer. See your computer documentation for instructions on creating recovery media and performing a factory reset.
	If your computer has NVIDIA graphics, you might need to configure the external monitors in NVIDIA Control Panel.	Configure your displays in the NVIDIA Control Panel:
		<ol> <li>Select Start, select Control Panel, select Appearance and Personalization, and then select NVIDIA Control Panel.</li> </ol>
		2. If either <b>Digital Display</b> is listed or an external monitor is listed twice, disconnect the docking station from the computer, and then disconnect the external monitor from the docking station. Reconnect the external monitor, and then reconnect the computer.
		<ol><li>If the external monitor is listed but not selected, select it, and then select Apply.</li></ol>
A video is distorted.	The display settings might be incorrect.	Change the display settings:
		Select <b>Start</b> , select <b>Settings</b> , and then select <b>System</b> .
		2. Under Scale and layout, select a value of 225% or lower from the Change the size of text, apps, and other items drop-down list.
A video device connected to the external monitor port displays a black screen when playing Blu-ray or other protected content.	The docking station does not support viewing Blu-ray or other protected content on an external monitor connected to the external monitor port on the docking station.	Use the computer's display or connect the external monitor to the computer.

Table 4-3 Video problem causes and solutions (continued)

Problem	Possible cause	Solution
The display state changes after restarting the computer, or deactivating	The display state needs to be configured.	Press fn + f4 to alternate the screen image between 4 display states:
Sleep or Hibernation.		<ul> <li>PC screen only: View the screen image on the computer only.</li> </ul>
		Duplicate: View the screen image simultaneously on both the computer and the external monitor.
		Extend: View the screen image extended across both the computer and the external monitor.
		Second screen only: View the screen image on the external monitor only.
		Each time you press fn + f4, the display state changes.
		NOTE: For best results, especially if you choose the Extend option, increase the screen resolution of the external device as follows. Select the <b>Start</b> button, select <b>Settings</b> , and then select <b>System</b> . Under <b>Display</b> , select the appropriate resolution, and then select <b>Keep changes</b> .
The external monitor connected to the	The current BIOS default settings do not support the maximum USB Type-C video throughput.	Enable high resolution mode.
dock exhibits reduced resolution.		1. While the computer is restarting, press f10.
		2. Select <b>Advanced</b> , and then select <b>System Options</b> .
		3. On the System Options screen, select Enable high resolution mode when connected to a USB Type-C DisplayPort mode dock.
		NOTE: Selecting this option reduces the USB 3.0 speed to USB 2.0 speed. This solution applies to Windows operating stystems only.

# **Getting more information**

For comprehensive information about the docking station, as well as governmental agency and safety information about the use of the docking station, access HP Help and Support.

- Select Start, and then select HP Help and Support.
- The HP website (<a href="http://www.hp.com">http://www.hp.com</a>) provides product news and software updates.

## Contacting support

If you cannot solve a problem using the troubleshooting tips in this chapter, you might need to contact support.

For the fastest possible resolution of your problem, have the following information available when you contact support:



NOTE: The serial number and other information for the docking station are on the bottom of the docking station.

- Model name and number for the computer and for the docking station
- Serial numbers for the computer and docking station
- Dates the computer and docking station were purchased
- Conditions under which the problem occurred
- Error messages that have been displayed
- Hardware and software you are using
- The manufacturer and model of components connected to the computer and docking station

To contact support using your HP computer, select Start and then select HP Help and Support. Select Contact support to start a chat session with a support specialist.

For U.S. support, go to http://www.hp.com/go/contactHP. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact\_us.html.

Choose from the following types of support:

Chat online with an HP technician.



NOTE: When chat is not available in a particular language, it is available in English.

- Find HP Support worldwide telephone numbers.
- Locate an HP service center.

# 5 Specifications

This section contains technical specifications for the physical aspects of your product, such as the weight and dimensions, as well as required environmental operating conditions and power source ranges.

## Input power

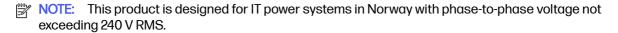
The power information in this section can be helpful if you plan to travel internationally with the docking station.

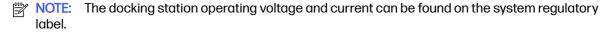
The docking station operates on DC power, which can be supplied by an AC or a DC power source. The AC power source must be rated at 100 V to 240 V and 50 Hz to 60 Hz. Although the docking station can be powered from a standalone DC power source, it should be powered only with an AC adapter or a DC power source supplied and approved by HP for use with this docking station.

The docking station can operate on DC power within the following specifications.

#### Table 5-1 Input power ratings

Input Power	Rating
Operating voltage and current	19.5 V dc @ 6.15 A-120 W
	NOTE: The docking station cannot be used with a DC power source lower than 120 W.





## **Operating environment**

This section provides information about the recommended operating environment for your docking station.

Table 5-2 Operating environment specifications

Metric	U.S.	
0°C to 35°C	32°F to 95°F	
-40°C to 70°C	-40°F to 158°F	
Relative humidity (noncondensing)		
5% to 95%	5% to 95%	
	0°C to 35°C -40°C to 70°C	

Table 5-2 Operating environment specifications (continued)

Factor	Metric	U.S.
Nonoperating	5% to 90%	5% to 90%
Maximum altitude (unpressurized)		
Operating	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating	-15 m to 9,144 m	-50 ft to 30,000 ft

# 6 Electrostatic discharge

Electrostatic discharge is the release of static electricity when two objects come into contact—for example, the shock you receive when you walk across the carpet and touch a metal door knob.

A discharge of static electricity from fingers or other electrostatic conductors might damage electronic components.

- IMPORTANT: To prevent damage to the computer, damage to a drive, or loss of information, observe these precautions:
  - If removal or installation instructions direct you to unplug the computer, first be sure that it is correctly grounded.
  - Keep the components in their electrostatic-safe containers until you are ready to install them.
  - Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
  - Use nonmagnetic tools.
  - Before handling components, discharge static electricity by touching an unpainted metal surface.
  - If you remove a component, place it in an electrostatic-safe container.

# 7 Accessibility

HP's goal is to design, produce, and market products, services, and information that everyone everywhere can use, either on a standalone basis or with appropriate third-party assistive technology (AT) devices or applications.

## HP and accessibility

Because HP works to weave diversity, inclusion, and work/life into the fabric of the company, it is reflected in everything HP does. HP strives to create an inclusive environment focused on connecting people to the power of technology throughout the world.

#### Finding the technology tools you need

Technology can unleash your human potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology helps increase, maintain, and improve the functional capabilities of electronic and information technology.

For more information, see Finding the best assistive technology on page 25.

#### The HP commitment

HP is committed to providing products and services that are accessible for people with disabilities. This commitment supports the company's diversity objectives and helps ensure that the benefits of technology are available to all.

The HP accessibility goal is to design, produce, and market products and services that can be effectively used by everyone, including people with disabilities, either on a standalone basis or with appropriate assistive devices.

To achieve that goal, this Accessibility Policy establishes seven key objectives to guide HP actions. All HP managers and employees are expected to support these objectives and their implementation in accordance with their roles and responsibilities:

- Raise the level of awareness of accessibility issues within HP, and provide employees with the training they need to design, produce, market, and deliver accessible products and services.
- Develop accessibility guidelines for products and services, and hold product development groups accountable for implementing these guidelines where competitively, technically, and economically feasible.
- Involve people with disabilities in the development of accessibility guidelines and in the design and testing of products and services.
- Document accessibility features, and make information about HP products and services publicly available in an accessible form.
- Establish relationships with leading assistive technology and solution providers.
- Support internal and external research and development that improves assistive technology relevant to HP products and services.

Support and contribute to industry standards and guidelines for accessibility.

#### International Association of Accessibility Professionals (IAAP)

IAAP is a not-for-profit association focused on advancing the accessibility profession through networking, education, and certification. The objective is to help accessibility professionals develop and advance their careers and to better enable organizations to integrate accessibility into their products and infrastructure.

As a founding member, HP joined to participate with other organizations to advance the field of accessibility. This commitment supports HP's accessibility goal of designing, producing, and marketing products and services that people with disabilities can effectively use.

IAAP will make the profession strong by globally connecting individuals, students, and organizations to learn from one another. If you are interested in learning more, go to <a href="http://www.accessibilityassociation.org">http://www.accessibilityassociation.org</a> to join the online community, sign up for newsletters, and learn about membership options.

#### Finding the best assistive technology

Everyone, including people with disabilities or age-related limitations, should be able to communicate, express themselves, and connect with the world using technology. HP is committed to increasing accessibility awareness within HP and with our customers and partners.

Whether it's large fonts that are easy on the eyes, voice recognition that lets you give your hands a rest, or any other assistive technology to help with your specific situation—a variety of assistive technologies make HP products easier to use. How do you choose?

#### Assessing your needs

Technology can unleash your potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology (AT) helps increase, maintain, and improve the functional capabilities of electronic and information technology.

You can choose from many AT products. Your AT assessment should allow you to evaluate several products, answer your questions, and facilitate your selection of the best solution for your situation. You will find that professionals qualified to do AT assessments come from many fields, including those licensed or certified in physical therapy, occupational therapy, speech/language pathology, and other areas of expertise. Others, while not certified or licensed, can also provide evaluation information. You will want to ask about the individual's experience, expertise, and fees to determine if they are appropriate for your needs.

#### Accessibility for HP products

These links provide information about accessibility features and assistive technology, if applicable and available in your country or region, that are included in various HP products. These resources will help you select the specific assistive technology features and products most appropriate for your situation.

- HP Aging & Accessibility: Go to <a href="http://www.hp.com">http://www.hp.com</a>, type Accessibility in the search box. Select
  Office of Aging and Accessibility.
- HP computers: For Windows products, go to <a href="http://www.hp.com/support">http://www.hp.com/support</a>, type Windows
  Accessibility Options in the Search our knowledge search box. Select the appropriate operating system in the results.
- HP Shopping, peripherals for HP products: Go to <a href="http://store.hp.com">http://store.hp.com</a>, select Shop, and then select Monitors or Accessories.

If you need additional support with the accessibility features on your HP product, see <u>Contacting</u> support on page 28.

Additional links to external partners and suppliers that may provide additional assistance:

- Microsoft Accessibility information (Windows and Microsoft Office)
- Google Products accessibility information (Android, Chrome, Google Apps)

## Standards and legislation

Countries worldwide are enacting regulations to improve access to products and services for persons with disabilities. These regulations are historically applicable to telecommunications products and services, PCs and printers with certain communications and video playback features, their associated user documentation, and their customer support.

#### **Standards**

The US Access Board created Section 508 of the Federal Acquisition Regulation (FAR) standards to address access to information and communication technology (ICT) for people with physical, sensory, or cognitive disabilities.

The standards contain technical criteria specific to various types of technologies, as well as performance-based requirements which focus on functional capabilities of covered products. Specific criteria cover software applications and operating systems, web-based information and applications, computers, telecommunications products, video and multimedia, and self-contained closed products.

#### Mandate 376 - EN 301 549

The European Union created the EN 301549 standard within Mandate 376 as an online toolkit for public procurement of ICT products. The standard specifies the accessibility requirements applicable to ICT products and services, with a description of the test procedures and evaluation methodology for each requirement.

#### Web Content Accessibility Guidelines (WCAG)

Web Content Accessibility Guidelines (WCAG) from the W3C's Web Accessibility Initiative (WAI) helps web designers and developers create sites that better meet the needs of people with disabilities or age-related limitations.

WCAG advances accessibility across the full range of web content (text, images, audio, and video) and web applications. WCAG can be precisely tested, is easy to understand and use, and allows web developers flexibility for innovation. WCAG 2.0 has also been approved as <a href="ISO/IEC 40500:2012">ISO/IEC 40500:2012</a>.

WCAG specifically addresses barriers to accessing the web experienced by people with visual, auditory, physical, cognitive, and neurological disabilities, and by older web users with accessibility needs. WCAG 2.0 provides characteristics of accessible content:

- Perceivable (for instance, by addressing text alternatives for images, captions for audio, adaptability
  of presentation, and color contrast)
- Operable (by addressing keyboard access, color contrast, timing of input, seizure avoidance, and navigability)
- **Understandable** (by addressing readability, predictability, and input assistance)
- Robust (for instance, by addressing compatibility with assistive technologies)

#### Legislation and regulations

Accessibility of IT and information has become an area of increasing legislative importance. These links provide information about key legislation, regulations, and standards.

- United States
- Canada
- Europe
- Australia

## Useful accessibility resources and links

These organizations, institutions, and resources might be good sources of information about disabilities and age-related limitations.

NOTE: This is not an exhaustive list. These organizations are provided for informational purposes only. HP assumes no responsibility for information or contacts you encounter on the internet. Listing on this page does not imply endorsement by HP.

#### **Organizations**

These organizations are a few of the many that provide information about disabilities and age-related limitations.

- American Association of People with Disabilities (AAPD)
- The Association of Assistive Technology Act Programs (ATAP)
- Hearing Loss Association of America (HLAA)
- Information Technology Technical Assistance and Training Center (ITTATC)
- Lighthouse International
- National Association of the Deaf
- National Federation of the Blind
- Rehabilitation Engineering & Assistive Technology Society of North America (RESNA)
- Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI)
- W3C Web Accessibility Initiative (WAI)

#### **Educational institutions**

Many educational institutions, including these examples, provide information about disabilities and age-related limitations.

- California State University, Northridge, Center on Disabilities (CSUN)
- University of Wisconsin Madison, Trace Center
- University of Minnesota computer accommodations program

### Other disability resources

Many resources, including these examples, provide information about disabilities and age-related limitations.

- ADA (Americans with Disabilities Act) Technical Assistance Program
- ILO Global Business and Disability network
- EnableMart
- European Disability Forum
- Job Accommodation Network
- Microsoft Enable

#### **HP links**

These HP-specific links provide information that relates to disabilities and age-related limitations.

HP comfort and safety guide

HP public sector sales

## **Contacting support**

HP offers technical support and assistance with accessibility options for customers with disabilities.



- Customers who are deaf or hard of hearing who have questions about technical support or accessibility of HP products:
  - Use TRS/VRS/WebCapTel to call (877) 656-7058 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.
- Customers with other disabilities or age-related limitations who have questions about technical support or accessibility of HP products:
  - Call (888) 259-5707 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.

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