



Hardware Reference Guide

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About This Book

 **WARNING!** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

 **CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.


 **NOTE:** Text set off in this manner provides important supplemental information.

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1 Product features

Standard features



Thank you for purchasing an HP thin client. We hope you have years of use from our thin clients. Our goal is to provide you with award-winning clients that are easy to deploy and manage with the power and reliability you expect.

The next sections describe the features of the thin client. For a complete list of the hardware and software installed on a specific model, go to <http://www.hp.com> and search for your specific thin client model.

The following features are common to all HP thin clients:

- no hard drives or optical drives
- 5 minutes or less hardware setup time
- central deployment and management using HP management solutions

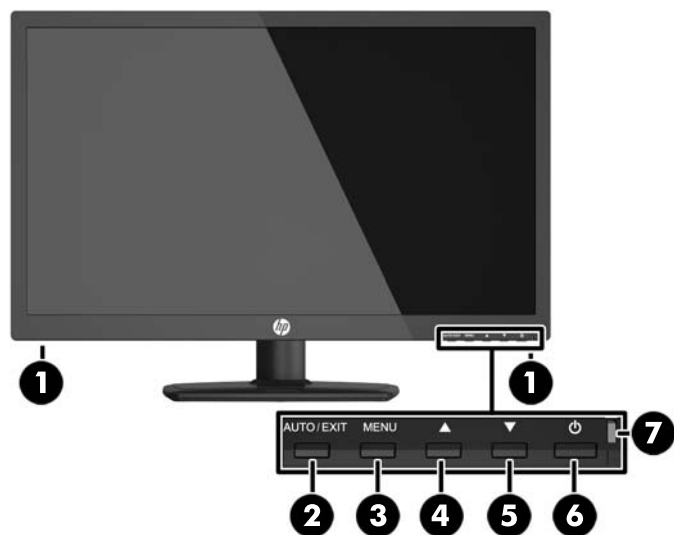
Various options are available for your thin client. For more information about available options, go to <http://www.hp.com> and search for your specific thin client model.



NOTE: Your computer model may look different from the model in the following illustrations.

Front panel components

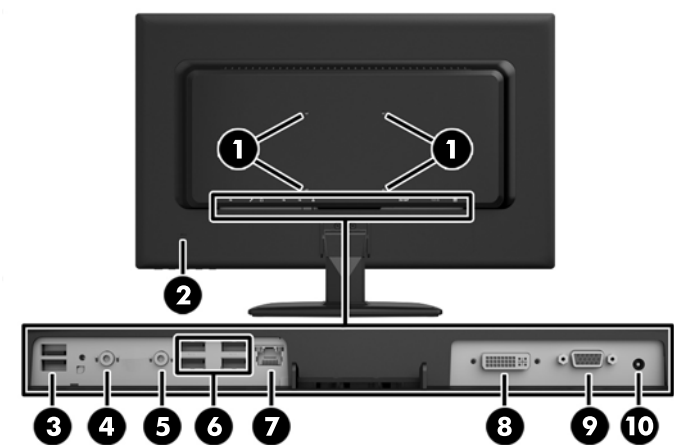
For more information, go to <http://www.hp.com> and search for your specific thin client model to find the model-specific QuickSpecs.



(1)	Speakers	(5)	Volume down, when the on-screen display is not visible
(2)	Auto/Exit	(6)	Power
(3)	Menu	(7)	Power LED
(4)	Volume up, when the on-screen display is not visible		

Rear panel components

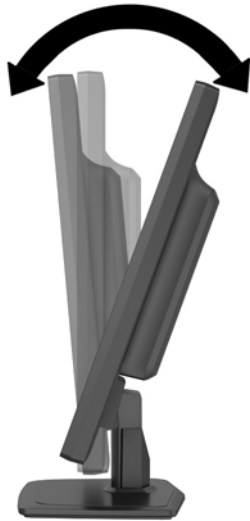
For more information, go to <http://www.hp.com> and search for your specific thin client model to find the model-specific QuickSpecs.



(1)	VESA mounting points 100 mm x 100 mm	(6)	USB 2.0 ports (4)
(2)	Security lock slot	(7)	RJ-45 Ethernet port
(3)	USB 2.0 ports (2)	(8)	DVI-I-out port
(4)	Microphone port	(9)	VGA-in port
(5)	Headphones port	(10)	DC power connector

2 Tilt adjustment

Tilt the computer up to 5 degrees forward or up to 15 degrees backward to set it to a comfortable viewing angle.



3 Serial number location

The thin client includes a unique serial number located on the back of the thin client. Have this number available when contacting HP customer service for assistance.



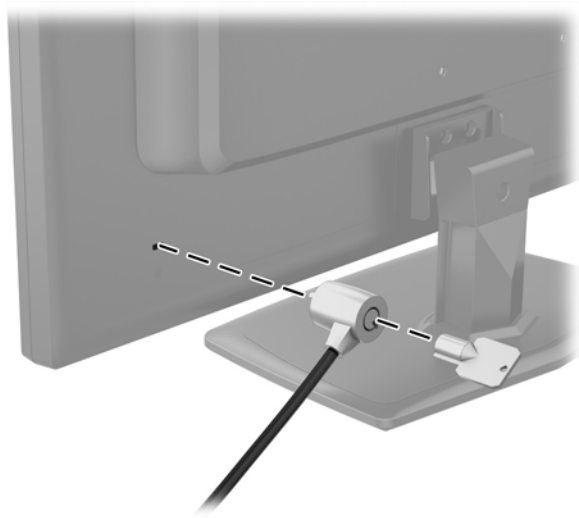
A Specifications

Dimensions		
Width (side to side)	55.68 cm	21.92 in
Height (with stand)	39.95 cm	15.73 in
Height (without stand)	33.97 cm	13.37 in
Depth (front to back) (with stand)	16.38 cm	6.45 in
Depth (front to back) (without stand)	5.65 cm	2.22 in
Approximate Weight		
With stand	3.99 kg	8.78 lb
Without stand	3.67 kg	8.07 lb
Temperature Range *		
Operating**	10° to 40 °C	50° to 104 °F
(max. rate of change is 10 °C per hour or 18 °F per hour)		
Nonoperating	-30° to 60 °C	-22° to 140 °F
(max. rate of change is 20 °C per hour or 36 °F per hour)		
*Specifications are at sea level with altitude derating of 1 °C/300 m (1.8 °F/1000 ft) to a maximum of 3K m (10,000 ft), with no direct, sustained sunlight. Upper limit may be limited by the type and number of options installed.		
Relative Humidity (non-condensing)		
Operating		10–90%
(max. wet bulb temperature is 28 °C or 84.2 °F)		
Nonoperating		5–95%
(max. wet bulb temperature is 38.7 °C or 101.6 °F)		
Maximum Altitude (unpressurized)		
Operating	3,048 m	10,000 ft
(max. allowed rate of change is 457 m per minute or 1500 ft per minute)		
Nonoperating	9,144 m	30,000 ft
(max. allowed rate of change is 457 m per minute or 1500 ft per minute)		

B Security provisions

The thin client can be secured with a cable lock. This cable lock prevents unauthorized removal of the thin client, as well as locking the secure compartment. To order this option, go to <http://www.hp.com> and search for your specific thin client model.

1. Locate the cable lock slot on the back panel.
2. Insert the cable lock into the slot, and then use the key to lock the cable.

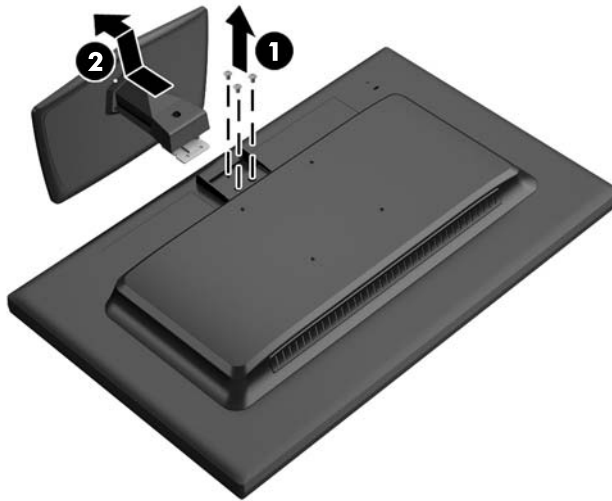


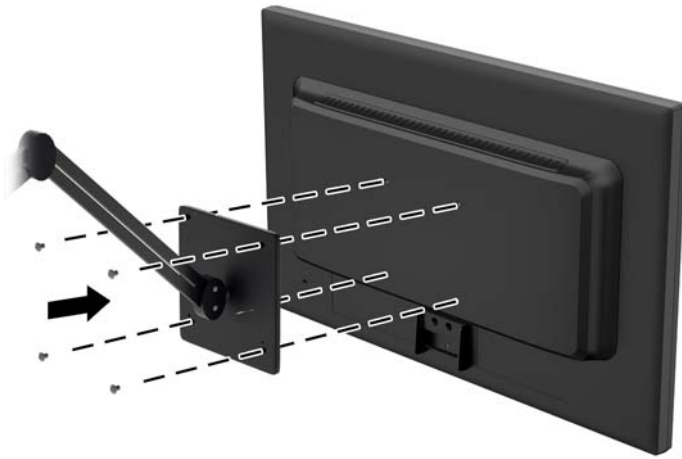
C Mounting the thin client

This thin client incorporates four mounting points on the back of the computer. These mounting points follow the Video Electronics Standards Association (VESA) standard, which provides industry-standard mounting interfaces for Flat Displays (FDs), such as flat panel monitors, flat displays, and flat TVs.


The stand must be removed to prepare the computer for mounting.

1. Remove all USB flash drives from the computer.
2. Turn off the computer properly through the operating system, then turn off any external devices.
3. Disconnect the power cord from the power outlet and disconnect any external devices.
4. Remove/disengage any security devices that prohibit opening the computer.
5. Place the computer face down on a soft flat surface. HP recommends that you set down a blanket, towel, or other soft cloth to protect the bezel and screen surface from scratches or other damage.
6. Unscrew the three screws securing the stand to the computer, and then remove the stand.





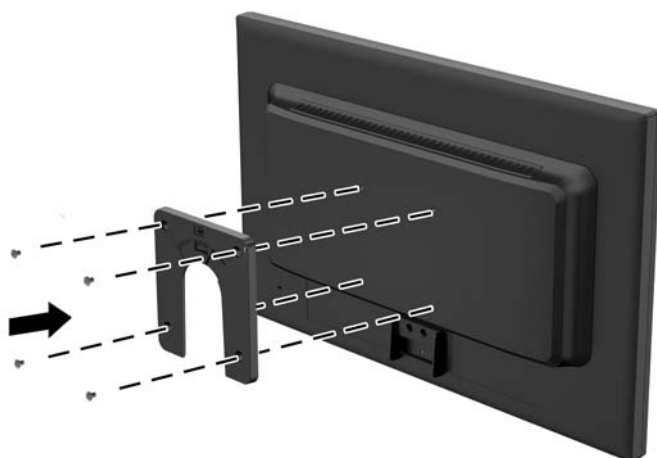
The HP Quick Release connects to the VESA-standard mounting points, allowing you to mount the thin client in a variety of orientations.

 **NOTE:** When mounting to a thin client, use the 10 mm screws supplied with the HP Quick Release.

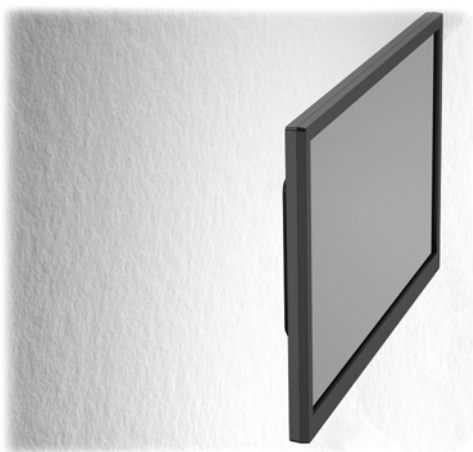



To use the HP Quick Release:


1. Using four 10 mm screws included in the mounting device kit, attach one side of the HP Quick Release to the thin client as shown in the following illustration.



2. Using four screws included in the mounting device kit, attach the other side of the HP Quick Release to the device to which you will mount the thin client. Make sure the release lever points upward.
3. Slide the side of the mounting device attached to the thin client over the other side of the mounting device on the device or wall on which you want to mount the thin client. An audible 'click' indicates a secure connection.



 **NOTE:** When attached, the HP Quick Release automatically locks in position. You only need to slide the lever to one side to remove the thin client.

 **CAUTION:** To ensure proper function of the HP Quick Release and a secure connection of all components, make sure both the release lever on one side of the mounting device and the rounded opening on the other side face upward.

D Routine thin client care

Use the following information to properly care for the thin client:

- Keep the computer away from excessive moisture, direct sunlight, and extremes of heat and cold.
- Operate the computer on a sturdy, level surface. Leave a 10.2-cm (4-inch) clearance on all vented sides of the computer to permit the required airflow.
- Never restrict the airflow into the computer by blocking any vents or air intakes.
- Never operate the computer with any of the access panels removed.
- Do not place computers so near each other that they are subject to each other's recirculated or preheated air.
- If the computer is to be operated within a separate enclosure, intake and exhaust ventilation must be provided on the enclosure, and the same operating guidelines listed above will still apply.
- Keep liquids away from the computer and keyboard.
- Never cover the ventilation slots with any type of material.
- Install or enable power management functions of the operating system or other software, including sleep states.
- When cleaning the computer turn off power to the computer and unplug the power cord before you do any of the following:
 - Wipe the exterior of the computer with a soft, damp cloth as needed. Using cleaning products may discolor or damage the finish.
 - Do not use cleaners that contain any petroleum based materials such as benzene, thinner, or any volatile substance to clean the screen or cabinet. These chemicals may damage the computer.
 - Wipe the screen with a soft, clean antistatic cloth. For more difficult cleaning situations, use a 50/50 mix of water and Isopropyl alcohol. Spray the cleaner onto a cloth and use the damp cloth to gently wipe the screen surface. Never spray the cleaner directly on the screen surface. It may run behind the bezel and damage the electronics.
 - Occasionally clean the air vents on all vented sides of the computer. Lint, dust, and other foreign matter can block the vents and limit the airflow.

E Shipping information

Shipping preparation

Follow these suggestions when preparing to ship the thin client:

1. Turn off external devices connected to the thin client.
2. Disconnect the system components and external devices from their power sources, then from the thin client.
3. Pack the system components and external devices in their original packing boxes or similar packaging with sufficient packing material to protect them.



NOTE: For environmental nonoperating ranges, see [Specifications on page 6](#).

Important service repair information

In all cases, remove and safeguard all external options before returning the thin client to HP for repair or exchange.

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