

Notebook Tour

User Guide

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Table of contents

1 Components

Top components	2
Pointing Devices	2
Lights	3
Buttons, switches, and readers	5
Keys	6
Hotkey quick reference	7
Front components	8
Rear components	9
Right-side components	10
Left-side components	12
Bottom components	13
Display components	15
Wireless antennae (select models only)	16
Additional hardware components	17
Labels	18

2 Specifications

Operating environment	19
Rated input power	20

Index	21
--------------------	-----------

1 Components

This chapter explains the hardware features of the computer.

To see a list of hardware installed in the computer:

1. Select **Start > My Computer**.
2. In the left pane of the System Tasks window, select **View system information**.
3. Select **Hardware** tab > **Device Manager**.

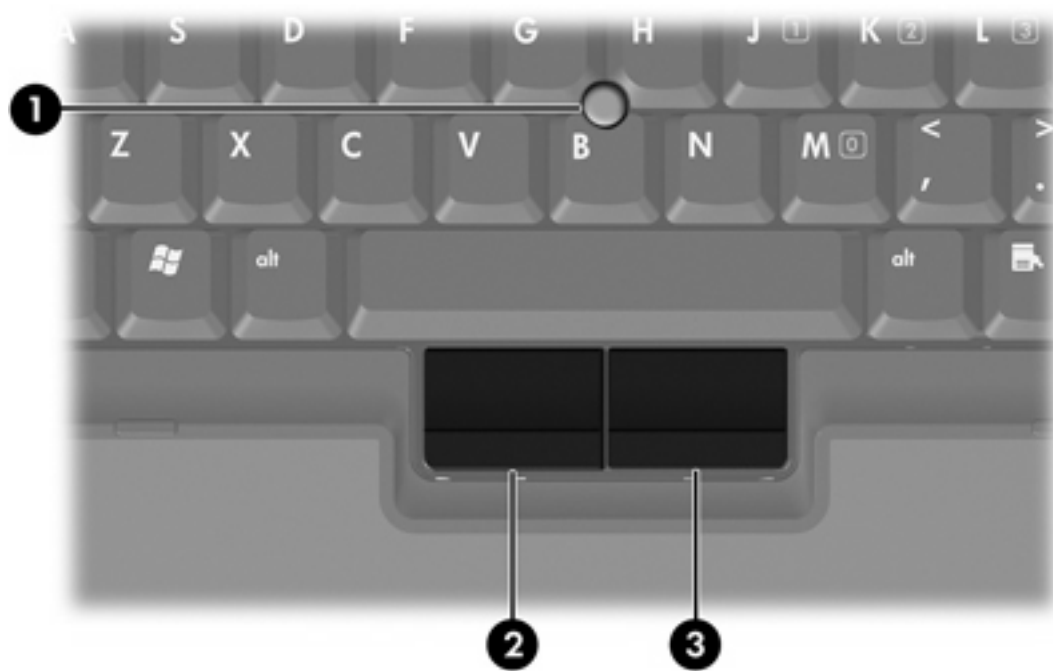
You can also add hardware or modify device configurations using Device Manager.



NOTE Components included with the computer may vary by region and by model. The illustrations in this chapter identify the standard features included in most computer models.

Top components

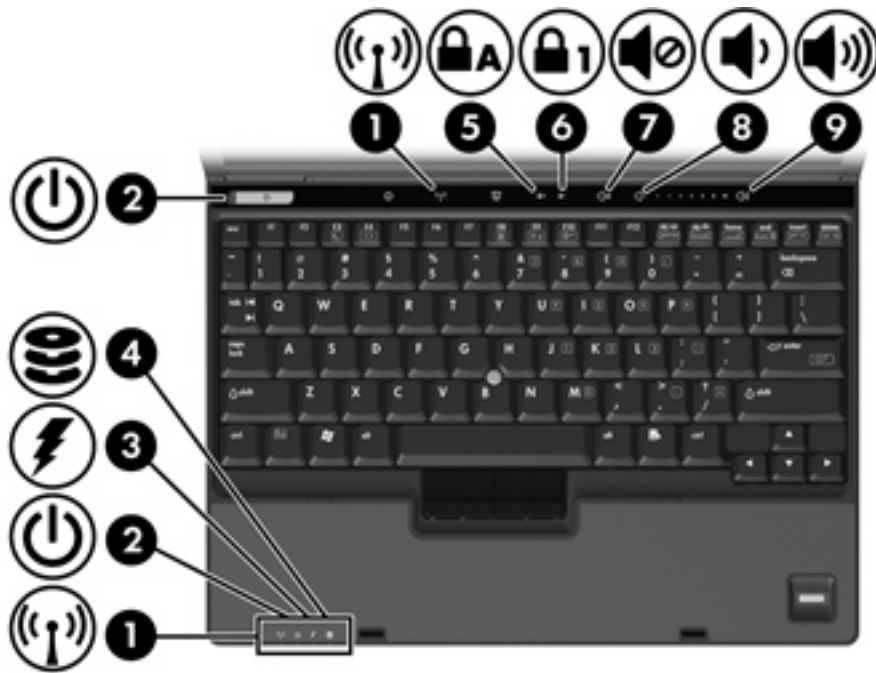
Pointing Devices



Component	Description
(1) Pointing stick	Moves the pointer and selects or activates items on the screen.
(2) Left pointing stick button	Functions like the left button on an external mouse.
(3) Right pointing stick button	Functions like the right button on an external mouse.

*This table describes default settings. To view and change pointing device preferences, select **Start > Control Panel > Printers and Other Hardware > Mouse**.

Lights



Component	Description
(1) Wireless lights (2)*	On: An integrated wireless device, such as a wireless local area network (LAN) device and/or a Bluetooth® device, is turned on.
(2) Power lights † (2)	On: The computer is on. Blinking: The computer is in standby. Blinking rapidly: An AC adapter with a higher power rating should be connected. Off: The computer is off or in hibernation.
(3) Battery light	Amber: A battery pack is charging. Green: A battery pack is close to full charge capacity. Blinking amber: A battery pack that is the only available power source has reached a low-battery condition. When the battery reaches a <i>critical</i> low-battery condition, the battery light begins blinking rapidly. Off: If the computer is plugged into an external power source, the light is turned off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light stays off until the battery reaches a low-battery condition.
(4) Drive light	<ul style="list-style-type: none"> Blinking green: The hard drive or optical drive is being accessed. Amber: HP Mobile Data Protection with accelerometer software has temporarily parked the internal hard drive.
(5) Caps lock light	On: Caps lock is on.
(6) Num lock light	On: Num lock is on or the embedded numeric keypad is enabled.


Component	Description
(7) Volume mute light	On: Computer sound is turned off.
(8) Volume down light	On: The volume scroll zone is being used to decrease computer sound.
(9) Volume up light	On: The volume scroll zone is being used to increase computer sound.

*There are 2 wireless lights. Both display the same information. The light on the wireless button is visible only when the computer is open; the other wireless light is always visible on the front of the computer.

†There are 2 power lights. Both display the same information. The light on the power button is visible only when the computer is open; the other power light is always visible on the front of the computer.

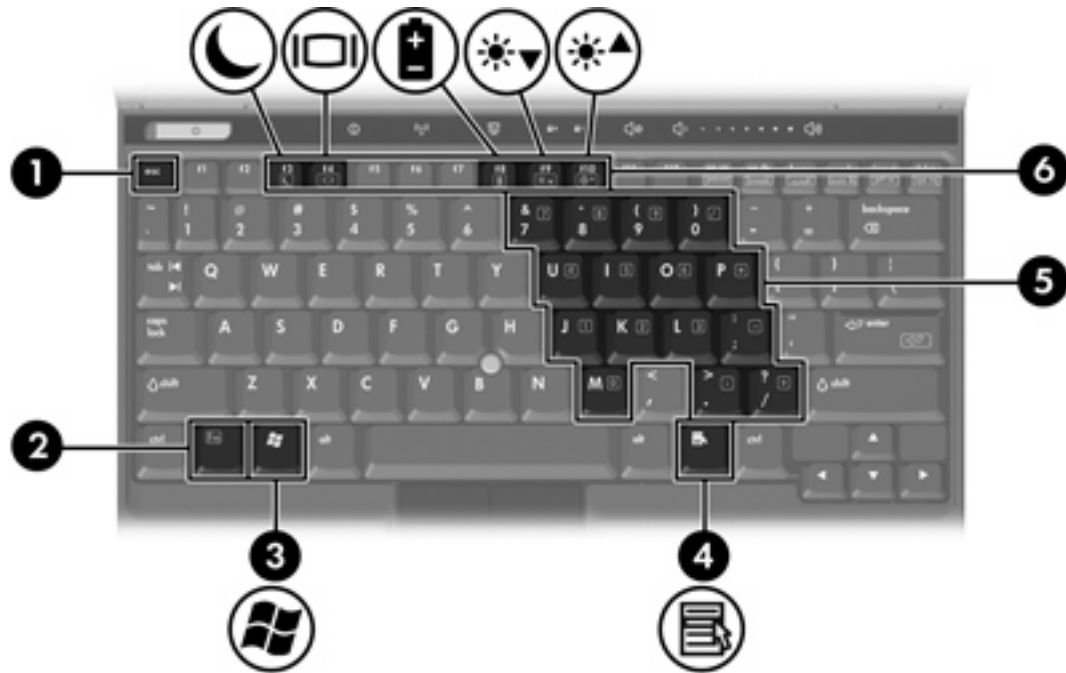
Buttons, switches, and readers




Component	Description
(1) Power button*	<p>When the computer is</p> <ul style="list-style-type: none"> • Off, press to turn on the computer. • On, press to enter hibernation. • In standby, briefly press to exit standby. • In hibernation, briefly press to exit hibernation. <p>If the computer has stopped responding and Microsoft® Windows® shutdown procedures cannot be used, press and hold the power button for at least 5 seconds to turn off the computer.</p>
(2) Info Center button	Launches Info Center, which enables you to open various software solutions.
(3) Wireless button*	<p>Turns the wireless feature on or off, but does not create a wireless connection.</p> <p> NOTE To establish a wireless connection, a wireless network must already be set up.</p>
(4) Presentation button	Starts the Presentation feature.
(5) Volume mute button	Mutes and restores computer sound.
(6) Volume scroll zone	Adjusts volume. Slide your finger to the left to decrease volume and to the right to increase volume.
(7) Fingerprint reader	Allows a fingerprint logon to Windows, instead of a password logon.

*This table describes default settings. For information about changing default settings, refer to the user guides located in the Help and Support Center.

Keys



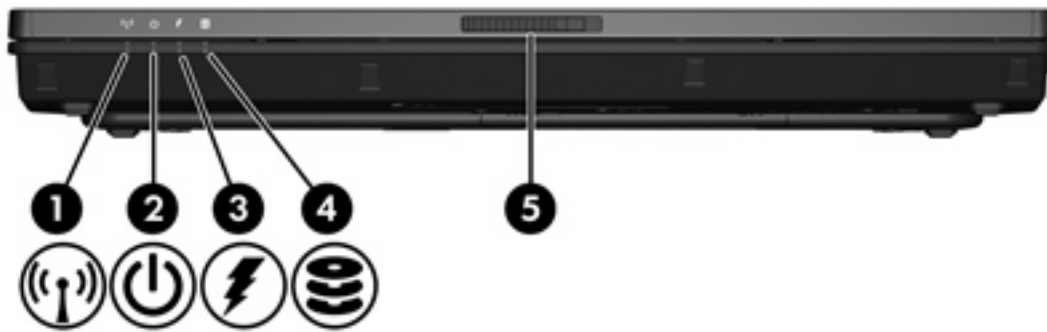
Component	Description
(1) <code>esc</code> key	Displays system information when pressed in combination with the <code>fn</code> key.
(2) <code>fn</code> key	Executes frequently used system functions when pressed in combination with a function key or the <code>esc</code> key.
(3) Windows logo key	Displays the Microsoft Windows Start menu.
(4) Windows applications key	Displays a shortcut menu for items beneath the pointer.
(5) Embedded numeric keypad keys	Can be used like the keys on an external numeric keypad.
(6) Function keys	Execute frequently used system functions when pressed in combination with the <code>fn</code> key.

 **NOTE** Refer to the table in "[Hotkey quick reference](#)" for a description of each hotkey.

Hotkey quick reference

To perform this function	Press
Display system information.	fn+esc
Clear system information	fn+esc or click OK
Initiate standby.	fn+f3
Resume from standby	Power button
Alternate between computer display and external display	fn+f4
Display battery information.	fn+f8
Clear battery information	fn+f8
Decrease screen brightness.	fn+f9
Increase screen brightness.	fn+f10

Front components



Component	Description
(1) Wireless light	On: An integrated wireless device, such as a wireless local area network (LAN) device and/or a Bluetooth® device is turned on.
(2) Power light	On: The computer is on. Blinking: The computer is in standby. Blinking rapidly: An AC adapter with a higher power rating should be connected. Off: The computer is off or in hibernation.
(3) Battery light	Amber: A battery pack is charging. Green: A battery pack is close to full charge capacity. Blinking amber: A battery pack that is the only available power source has reached a low-battery condition. When the battery reaches a <i>critical</i> low-battery condition, the battery light begins blinking rapidly. Off: If the computer is plugged into an external power source, the light is turned off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light stays off until the battery reaches a low-battery condition.
(4) Drive light	<ul style="list-style-type: none"> Blinking green: The hard drive or optical drive is being accessed. Amber: HP Mobile Data Protection with accelerometer software has temporarily parked the internal hard drive.
(5) Display release latch	Opens the computer.

Rear components

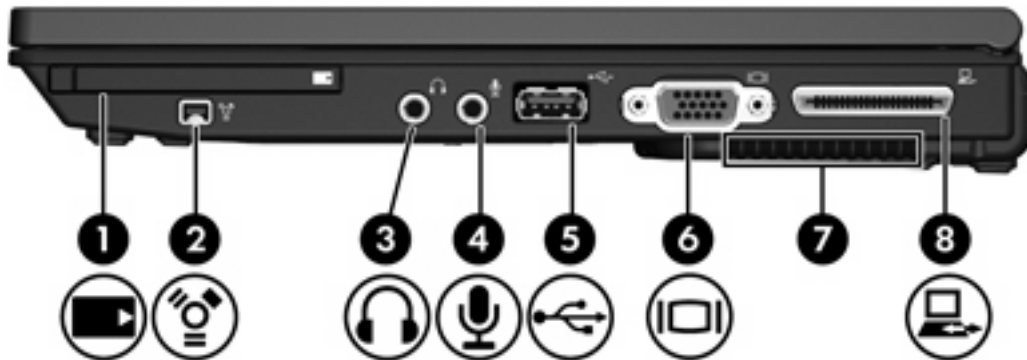


Component	Description
(1) RJ-45 (network) jack	Connects a network cable.
(2) Security cable slot	Attaches an optional security cable to the computer.

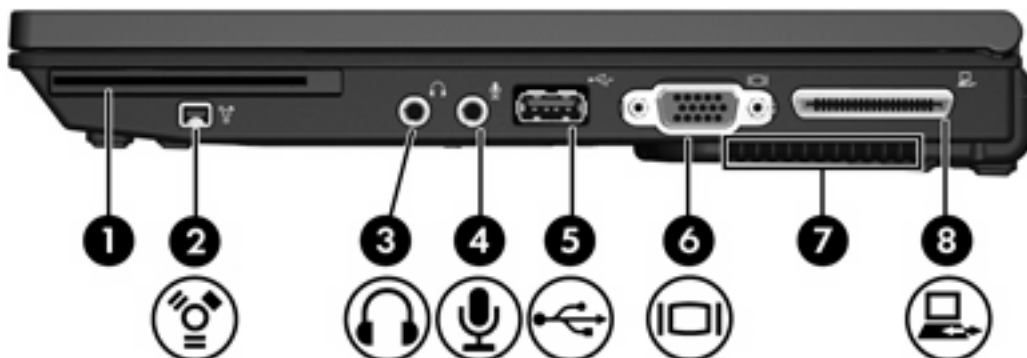
NOTE The security cable is designed to act as a deterrent, but may not prevent the computer from being mishandled or stolen.



Right-side components

Computer features vary depending on model. Refer to one of the following illustrations.

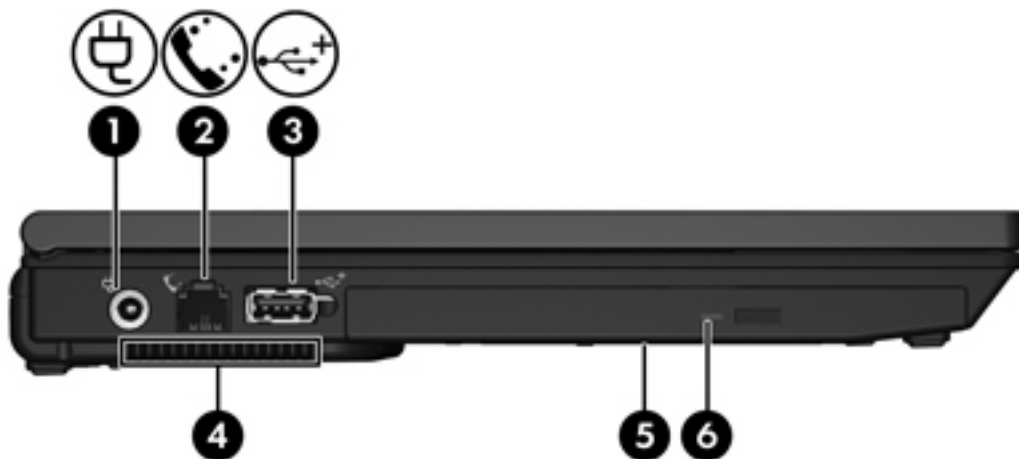




Component	Description
(1) PC Card slot (select models only)	Supports optional Type I or Type II PC Cards.
(2) 1394 port	Connects an optional IEEE 1394 device, such as a camcorder.
(3) Audio-out (headphone) jack	Produces computer sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
(4) Audio-in (microphone) jack	Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.
(5) USB port	Connects an optional USB device.
(6) External monitor port	Connects an external VGA monitor or projector.
(7) Vent	Enables airflow to cool internal components.
<p>CAUTION To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.</p>	
<p>NOTE The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.</p>	
(8) Docking connector	Connects an optional docking device.



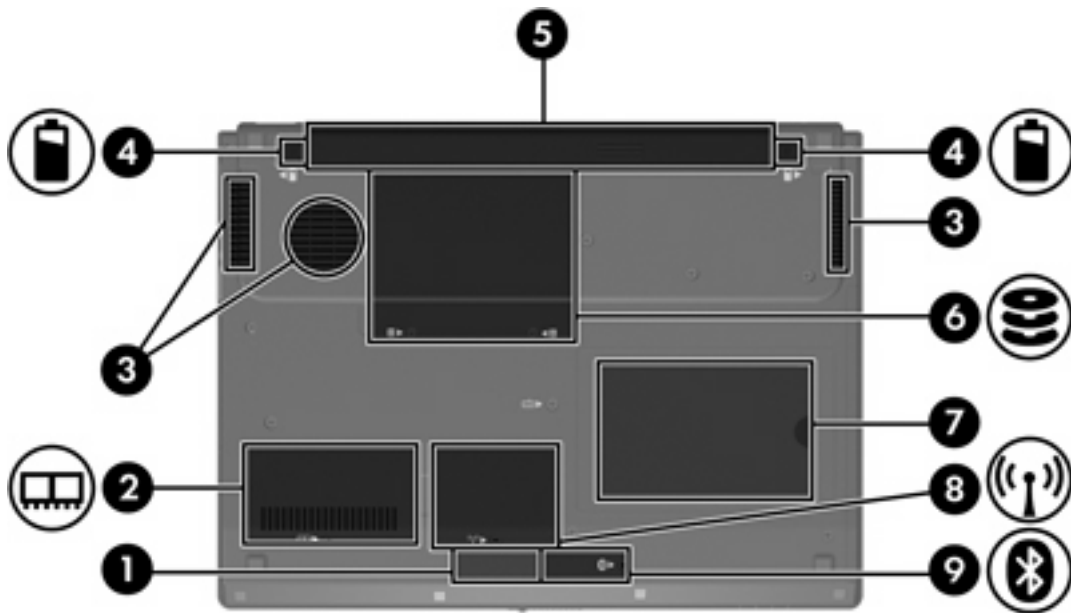
Component	Description
(1) Smart card reader (select models only)	Supports smart cards and Java™ Cards.
(2) 1394 port	Connects an optional IEEE 1394 device, such as a camcorder.
(3) Audio-out (headphone) jack	Produces computer sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
(4) Audio-in (microphone) jack	Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.
(5) USB port	Connects an optional USB device.
(6) External monitor port	Connects an external VGA monitor or projector.
(7) Vent	Enables airflow to cool internal components.
	 CAUTION To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.
	 NOTE The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
(8) Docking connector	Connects an optional docking device.

Left-side components



Component	Description
(1) Power connector	Connects an AC adapter.
(2) RJ-11 (modem) jack	Connects a modem cable.
(3) Powered USB 2.0 port	Provides power to an external USB device if used with a powered USB cable.
(4) Vent	Enables airflow to cool internal components.
	 CAUTION To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.
	 NOTE The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
(5) Optical drive (select models only)	Reads an optical disc.
(6) Optical drive light	Blinking: The optical drive is being accessed.

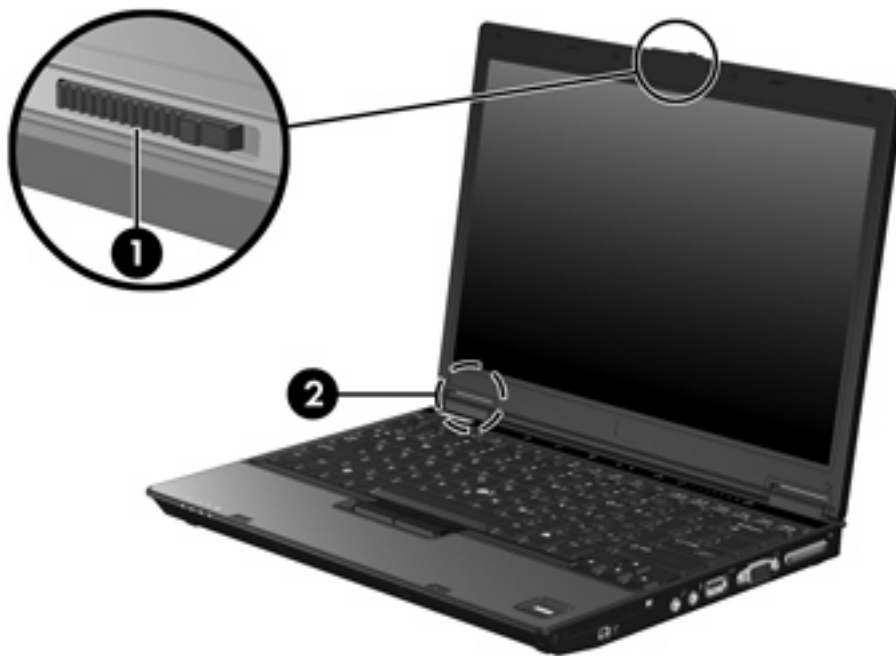
Bottom components



Component	Description
(1) Speaker	Produces computer sound.
(2) Memory module compartment	Contains the memory module slot.
(3) Vents (3)	Enable airflow to cool internal components.
	<p>CAUTION To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.</p> <p>NOTE The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.</p>
(4) Battery pack release latches	Release the battery pack from the battery bay.
(5) Battery bay	Holds the battery pack.
(6) Hard drive bay	Holds the hard drive.
(7) Business card holder	Holds a standard sized business card.
(8) Mini Card compartment	Contains a wireless LAN device (select models only)
	<p>CAUTION To prevent an unresponsive system and the display of a warning message, replace the devices with only a Mini Card authorized for use in the computer by the governmental agency that regulates wireless devices in your country. If you replace the device and then receive a warning message, remove the device to restore computer functionality, and then contact Customer Care through the Help and Support Center.</p>
(9) Bluetooth compartment	Contains a Bluetooth device (select models only).

Component	Description
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Display components



Component	Description
(1) Display release latch	Opens the computer.
(2) Internal display switch	Turns off the display if the display is closed while the computer is turned on.

Wireless antennae (select models only)

On select computer models, at least 2 wireless antennae send and receive wireless device signals. These antennae are not visible from the outside of the computer.

For wireless regulatory notices pertaining to your region, refer to the *Regulatory, Safety and Environmental Notices* located in the Help and Support Center.



NOTE For optimal transmission, keep the areas immediately around the antennae free from obstructions.

Additional hardware components



Component	Description
(1) Power cord*	Connects an AC adapter to an AC outlet.
(2) HP Smart AC adapter	Converts AC power to DC power.
(3) Battery pack*	Powers the computer when the computer is not plugged into external power.
(4) Modem cable*	Connects the internal modem to an RJ-11 telephone jack or to a country-specific modem adapter.
(5) Country-specific modem cable adapter (select models only)	Adapts the modem cable to a non-RJ-11 telephone jack.

*Modem cables, battery packs, and power cords vary in appearance by region and country.

Labels

The labels affixed to the computer provide information you may need when you troubleshoot system problems or travel internationally with the computer.

- Service tag—Provides the product brand and series name, serial number (s/n), and product number (p/n) of your computer. Have this information available when you contact Customer Care. The service tag label is affixed to the bottom of the computer.
- Microsoft Certificate of Authenticity—Contains the Microsoft® Windows® Product Key. You may need the Product Key to update or troubleshoot the operating system. This certificate is affixed to the bottom of the computer.
- Regulatory label—Provides regulatory information about the computer. The regulatory label is affixed under the business card holder.
- Modem approval label—Provides regulatory information about the modem and lists the agency approval markings required by some of the countries in which the modem has been approved for use. You may need this information when traveling internationally. The modem approval label is affixed inside the hard drive bay.
- Wireless certification label(s)—Provide information about optional wireless devices available on select models, and the approval markings of some of the countries in which the devices have been approved for use. An optional device may be a wireless local area network (WLAN) device or an optional Bluetooth® device. If your computer model includes one or more wireless devices, one or more certification labels are included with your computer. You may need this information when traveling internationally. Wireless certification labels are affixed inside the Mini PCI compartment.

2 Specifications

Operating environment

The operating environment information in the following table may be helpful if you plan to use or transport the computer in extreme environments.

Factor	Metric	U.S.
Temperature		
Operating (not writing to optical disc)	0°C to 35°C	32°F to 95°F
Operating (writing to optical disc)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
Maximum altitude (unpressurized)		
Operating (14.7 to 10.1 psia*)	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating (14.7 to 4.4 psia*)	-15 m to 12,192 m	-50 ft to 40,000 ft

*Pounds per square inch absolute (psia) is another unit of measurement for altitude.

Rated input power

The power information in this section may be helpful if you plan to travel internationally with your computer.

The computer operates on DC power, which can be supplied by an AC or a DC power source. Although the computer can be powered from a stand-alone DC power source, it should be powered only with an AC adapter or a DC power cord supplied by or approved for an HP computer.

The computer is capable of accepting DC power within the following specifications.

Input power	Rating
Operating voltage	18.5 V dc @ 3.5 A – 65 W
Operating current	3.5 A

This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240 V rms.

Index

Symbols/Numerics

1394 port 10, 11

A

AC adapter

identifying 17

altitude specifications 19

antennae 16

applications key, Windows 6

audio-in (microphone) jack 10, 11

audio-out (headphone) jack 10, 11

B

battery bay 13, 18

battery light, identifying 3, 8

battery pack

identifying 17

battery pack charge information 7

battery pack release latch 13

bays

battery 13, 18

Bluetooth device 13

hard drive 13

Bluetooth compartment 13

Bluetooth label 18

business card holder 13

buttons

mute 5

power 5

wireless 5

C

cable

RJ-11 (modem) 17

caps lock light 3

Certificate of Authenticity label 18

compartments

Bluetooth 13

memory module 13

Mini Card 13

components

bottom 13

display 15

front 8

left-side 12

rear 9

right-side 10

top 2

connector, power 12

cord, power, identifying 17

D

display

image, switching 7

screen brightness hotkeys 7

display release latch 8, 15

display switch 15

docking connector 10, 11

drive light 3, 8

drives

hard 13

optical 12

E

environmental specifications 19

external monitor port 10, 11

F

fingerprint reader 5

fn key

identifying 6

function keys

identifying 6

H

hard drive bay, identifying 13

headphone (audio-out) jack 10, 11

hotkeys

battery pack charge information 7

decreasing screen brightness 7

displaying system information 7

increasing screen brightness 7

initiating standby 7

quick reference 7

switching screen image 7

humidity specifications 19

I

IEEE 1394 port 10, 11

internal display switch 15

J

jacks

audio-in (microphone) 10, 11

audio-out (headphone) 10, 11

RJ-11 (modem) 12

RJ-45 (network) 9

K

keypad keys 6

keys

esc 6

fn 6

function 6

keypad 6

Windows applications 6

Windows logo 6

L

labels

Bluetooth 18

Microsoft Certificate of Authenticity 18

modem approval 18

- regulatory 18
- service tag 18
- wireless certification 18
- WLAN 18

latches

- battery pack release 13
- display release 8, 15

lights

- battery 3, 8
- caps lock 3
- drive 3, 8
- mute 4
- num lock 3
- power 3, 8
- volume 4
- wireless 3, 8

- lock, security cable 9

M

- memory module compartment 13
- microphone (audio-in) jack 10, 11
- Microsoft Certificate of Authenticity label 18
- Mini Card compartment 13
- modem approval label 18
- modem cable adapter 17
- monitor port, external 10, 11
- mute button 5
- mute light 4

N

- network (RJ-45) jack 9
- num lock light 3

O

- operating environment specifications 19
- operating system
 - Microsoft Certificate of Authenticity label 18
 - Product Key 18
- optical drive, identifying 12

P

- PC Card slot 10
- ports
 - 1394 10, 11
 - external monitor 10, 11
 - USB 10, 11, 12
- power button 5
- power connector 12

- power cord 17
- power light 3, 8
- Presentation button 5
- Product Key 18
- product name and number, computer 18

R

- rated input power specifications 20
- reader, fingerprint 5
- regulatory information
 - modem approval label 18
 - regulatory label 18
 - wireless certification labels 18
- release latch
 - battery pack 13
 - display 8

- RJ-11 (modem) cable 17
- RJ-11 (modem) jack 12
- RJ-45 (network) jack 9

S

- screen brightness hotkeys 7
- screen image, switching 7
- security cable slot 9
- serial number, computer 18
- service tag 18
- slots
 - memory module 13
 - PC Card 10
 - security cable 9
- smart card reader 11
- speaker 13
- specifications
 - operating environment 19
 - rated input power 20
- standby hotkey 7
- system information hotkey 7

T

- temperature specifications 19
- traveling with the computer
 - environmental specifications 20
 - modem approval label 18
 - wireless certification labels 18

U

- USB ports, identifying 10, 11, 12

V

- vents 10, 11, 12, 13
- volume scroll zone 5

W

- Windows applications key 6
- Windows logo key 6
- wireless antennae 16
- wireless button 5
- wireless certification label 18
- wireless light 3, 8
- WLAN device 18
- WLAN label 18

