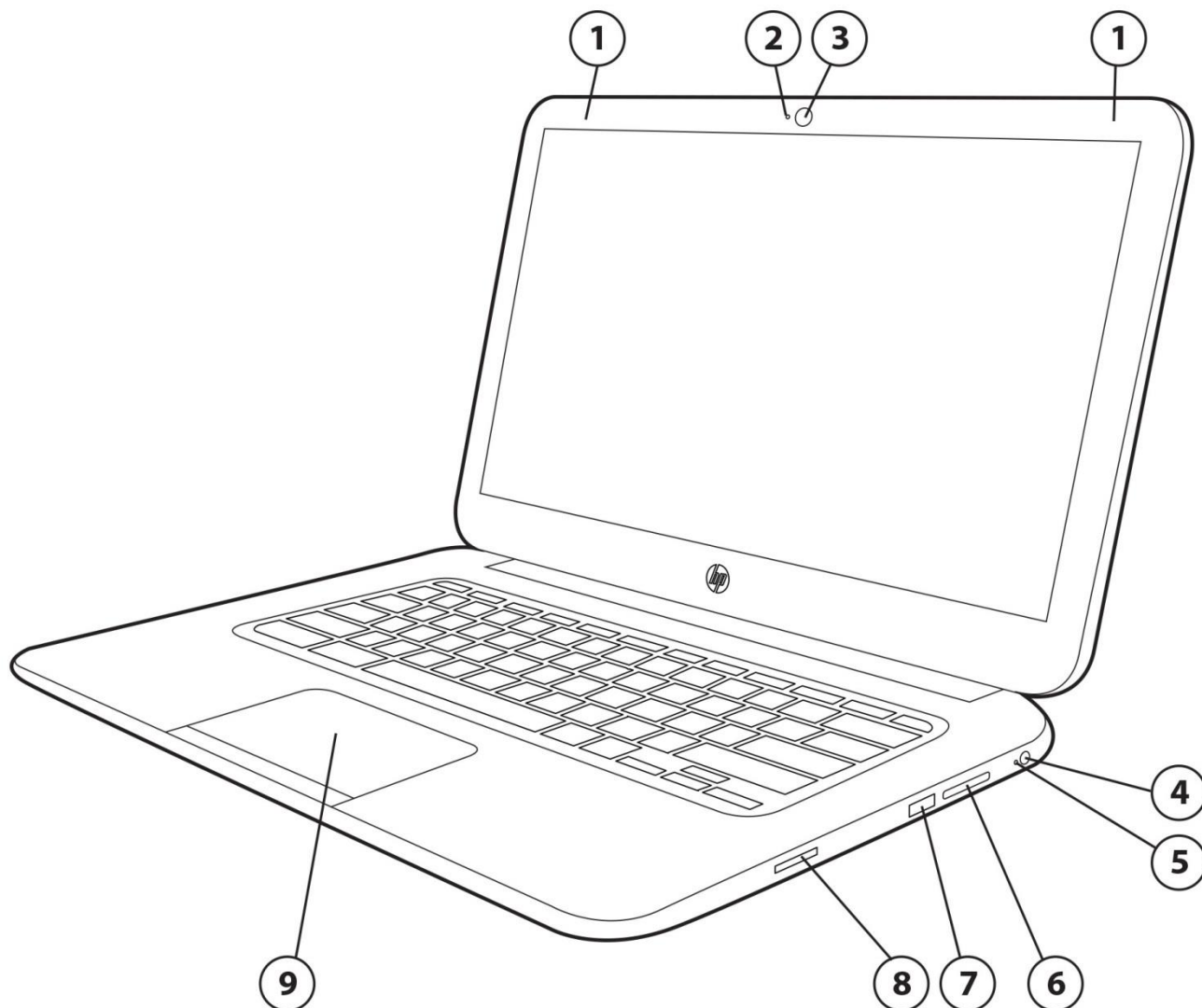


### Overview

#### HP Chromebook14

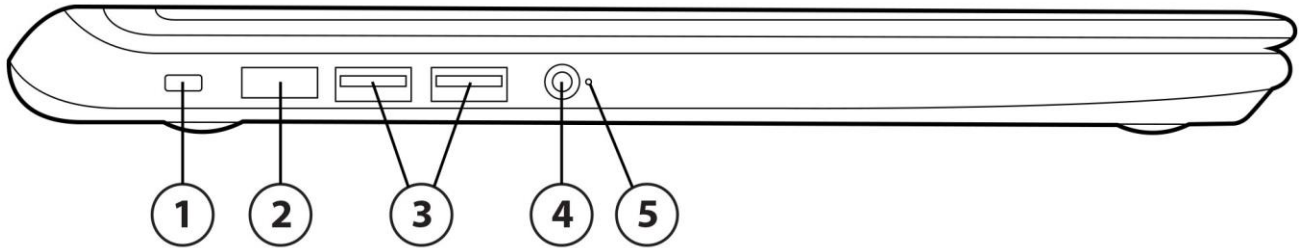


#### Front/Right Image

- |    |                  |    |                    |
|----|------------------|----|--------------------|
| 1. | WLAN antennas    | 6. | Memory card reader |
| 2. | Webcam light     | 7. | USB 2.0 port       |
| 3. | Webcam           | 8. | SIM slot           |
| 4. | Power connector  | 9. | TouchPad zone      |
| 5. | AC adapter light |    |                    |



### Overview



#### Left Image

1. Security cable slot
2. HDMI port
3. USB 3.0 ports (2)
4. Headphone-out/microphone-in combo
5. Power state LED indicator

### AT A GLANCE

- Google Chrome OS
- Provides cloud computing functionality where you can access your files, applications, documents and profiles\*
- Intel® HD Graphics
- Full-size, Island-style Chrome OS keyboard
- HDMI port for connecting to high-resolution displays
- Integrated HD webcam, integrated microphone
- Intel 802.11 a/b/g/n (2x2) wireless LAN module
- Optional HP cr3114 HSPA+ Mobile Broadband Module
- 14.0" diagonal LED-backlit HD BrightView display

**NOTE: See important legal disclosures for all listed specs in their respective features sections.**



## Features

### OPERATING SYSTEM

**Preinstalled** Chrome OS

### PROCESSOR

Intel® Celeron® 2955U 1(1.4 GHz, 2 MB L3 cache, 2 cores, 15W)\*

\* Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

### CHIPSET

Intel processor controller hub (PCH), ULT, soldered on circuit (SoC), integrated in MCP

### GRAPHICS

Integrated: Intel® HD\* Graphics  
Support for HD decode and HDMI

\* High definition (HD) content is required to view high-definition images.

### DISPLAY

**Internal**  
14.0" diagonal HD\* WLED BrightView (1366x768) flat (3.6mm) SVA

**External**  
Up to 32-bit per pixel color depth

**HDMI**  
1.4b port supports up to 1080p, 1920 x 1080 at 60Hz

\* High definition (HD) content is required to view high-definition images.

**NOTE:** Resolutions are dependent upon monitor capability, and resolution and color depth settings.

### STORAGE AND DRIVES

#### Primary Storage Bay

**Solid State Drive**  
16 GB or 32 GB M.2

**Cloud Storage**  
Store up to 100 GB with Google Drive\*

\*\* This offer is tied to this device and is non-transferable. If this device is returned, the extra storage will be revoked. In order to redeem this offer, you will need to be on Chrome OS 23 or later. Internet access is required and not included. Additional information about storage plan refunds, renewals, cancellations and expiration is available at the Google website:



## Features

<https://support.google.com/chromebook/answer/2703646?hl=en>

### MEMORY

#### Standard

DDR3L SDRAM (1600 MHz)  
One SODIMM slot  
Standard memory of 4096 MB\*

\*Maximum memory speed supported by the system may be 1333 MHz or 1066 MHz.

**NOTE:** Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.

### NETWORKING/COMMUNICATIONS

#### Broadband Wireless (WWAN)

Optional HP cr3114 HSPA+ Mobile Broadband Module\*

#### Wireless LAN (WLAN)

Atheros AR9462 802.11a/b/g/n (2x2) Wi-Fi + BT 4.0 Combo Adapter\*\*

\* Wireless Broadband use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Sold separately or as an optional feature.

\*\* Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited.

### AUDIO/MULTIMEDIA

#### Audio

High Definition Audio support  
Stereo speakers  
Headphone / Microphone Combo Jack  
One digital microphone with echo cancellation and noise suppression appropriate software

#### Webcam

HP TrueVision HD slim webcamera\*

- Supports videoconferencing and still image capture
- Improved quality for video streaming and still image capture (1280x720 resolution)
- Up to 30 frames/sec
- Fixed focus lens

\* Internet access is required and not included.

### KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

#### Keyboard

The island-style Chrome OS keyboard features full-pitch key layout with features such as the isolated inverted-T cursor control keys, editing keys, both left and right control and alt keys, and 12 function keys. International key layouts are available. Other features include hotkeys for instant access to, brightness, etc. 19-mm x 19-mm key pitch (center-to-center spacing), 2.2-mm stroke, comfort-dished keycaps, and bright key legends for improved visibility in low light conditions.



## Features

### Pointing Devices

Clickpad with multi-touch gestures support

### Buttons and Function Keys

Power button

## SOFTWARE AND SECURITY

### Preinstalled Software

Chrome OS with default set of apps, HP registration app

### Security

TPM 1.2 Embedded Security Chip\*

Security Cable Lock (Slot) (lock must be purchased separately)

Sign-on with your Google credentials

For more information on HP security solutions refer to: <http://www.hp.com/go/security>.

## POWER

### Power Supply

External 65W HP AC adapter (not available in India)

External 65W EM HP AC adapter (only available in India)

External 65W HP Slim Travel AC adapter (only available in India)

Power cord included is 1.0 m (+/- 0.1 m).

### Primary Battery

HP 4-cell (51 WHr) Li-Ion polymer battery

### Power Conservation

Energy Star compliant

## WEIGHTS & DIMENSIONS

### Weight

Starting at < 4.19 lb (1.9 kg)

### Dimensions (w x d x h)

13.56 x 9.44 x 0.86 in

34.44 x 23.98 x 2.16 cm

**NOTE:** Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components. Weight includes 4-cell battery, solid state drive, and 4 GB memory.

## PORTS/SLOTS

### Ports

HDMI v1.4b\* - One

Headphone / Microphone in Combo - One



### Features

Power Connector – One  
USB 3.0 – Two (left side)  
USB 2.0 – One (right side)

#### **HP Multi-Format Digital Media Reader**

Supports SD/SDHC/SDXC

\* HDMI cable sold separately.

### SERVICE AND SUPPORT

HP Services offers limited 1-year warranty options depending on country; 1-year limited warranty on primary battery. On-site service and warranty upgrades are also available. HP Care Pack Services\*,\*\* extend service contracts beyond the standard warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: <http://www.hp.com/go/lookuptool>. Additional HP Care Pack Services\*,\*\* information by product is available at: [www.hp.com/go/cpc](http://www.hp.com/go/cpc).

\* Sold separately or as an optional feature.

\*\* Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit [www.hp.com/go/cpc](http://www.hp.com/go/cpc).

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

<http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp>



### Technical Specifications

#### SYSTEM UNIT

<b>Stand-Alone Power Requirements</b> (AC Power)	<b>Nominal Operating Voltage</b>	18.5/19.5V
<b>Temperature</b>	<b>Max Operating Power</b>	< 65 W
<b>Relative Humidity</b>	<b>Operating</b>	41° to 95° F (5° to 35° C)
<b>Shock</b>	<b>Non-operating</b>	-4° to 140° F (-20° to 60° C)
<b>Random Vibration</b>	<b>Operating</b>	10% to 90%, non-condensing
<b>Altitude</b> (unpressurized)	<b>Non-operating</b>	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
<b>Planned Industry Standard Certifications</b>	<b>Operating</b>	40 G, 2 ms, half-sine
	<b>Non-operating</b>	200 G, 2 ms, half-sine
	<b>Operating</b>	0.75 grms
	<b>Non-operating</b>	1.50 grms
	<b>Operating</b>	-50 to 10,000 ft (-15.24 to 3,048 m)
	<b>Non-operating</b>	-50 to 40,000 ft (-15.24 to 12,192 m)
	<b>UL</b>	Yes
	<b>CSA</b>	Yes
	<b>FCC Compliance</b>	Yes
	<b>ENERGY STAR®</b>	Select models*
	<b>EPEAT</b>	Registered Silver in United States**
	<b>ICES</b>	Yes
	<b>Australia / NZ A-Tick Compliance</b>	Yes
	<b>CCC</b>	Yes
	<b>Japan VCCI Compliance</b>	Yes
	<b>KC</b>	Yes
	<b>BSMI</b>	Yes
	<b>CE Marking Compliance</b>	Yes
	<b>BNCI or BELUS</b>	Yes
	<b>CIT</b>	Yes
	<b>GOST</b>	Yes
	<b>Saudi Arabian Compliance (ICCP)</b>	Yes
	<b>SABS</b>	Yes
	<b>UKRSERTCOMPUTER</b>	Yes

\* Configurations of the HP Chromebook14 that are ENERGY STAR qualified are identified as HP Chromebook14 ENERGY STAR on HP websites and on [www.energystar.gov](http://www.energystar.gov).

\*\* EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country. EPEAT status listed above applies to U.S.

For accessibility information on HP products, please visit: <http://www.hp.com/accessibility>.

#### DISPLAY

<b>14.0-inch LED HD (1366 x 768) BrightView</b>	<b>Dimensions (W x H)</b>	12.74 x 7.56 in (32.4 x 19.2 cm)
	<b>Diagonal Size</b>	14.0 in (35.6cm)
	<b>Surface Treatment</b>	BrightView
	<b>Contrast Ratio</b>	400:1 (typical)
	<b>Refresh Rate</b>	60 Hz



### Technical Specifications

<b>Brightness</b>	200 nit (typical)
<b>Pixel Resolution</b>	<b>Pitch</b> 0.227 mm
	<b>Format</b> 1366 x 768
	<b>Configuration</b> RGB Stripe
<b>Backlight</b>	LED
<b>PPI</b>	112 ppi
<b>Viewing Angle</b>	±30° Horizontal, ±10° Vertical (minimum) 30/30/20/10 (Left/Right/Down/Up) (minimum) or 45/45/35/25 (Left/Right/Down/Up) (typical)

### STORAGE AND DRIVES

#### Internal Storage

<b>SATA 6Gb/s 16 GB, 2242 M.2 Solid State Drive</b>	<b>Drive Weight</b>	6 Grams max.
	<b>Capacity</b>	16 GB
	<b>Height</b>	0.138 in (3.65mm)
	<b>Width</b>	0.866 in (22 mm)
	<b>Interface</b>	M.2 SATA Gen6 (6 Gb/s)
	<b>Performance</b>	<b>Maximum Sequential Read</b> <b>Maximum Sequential Write</b>
		Up to 210 MB/s                      Up to 30 MB/s
	<b>Logical Blocks</b>	31,277,232
	<b>Operating Temperature</b>	32° to 158°F (0° to 70°C) [case temp]
	<b>Features</b>	ATA Security; ATA-8, SATA 3.0; DIPM; TRIM

<b>SATA 6Gb/s 32 GB, 2242 M.2 Solid State Drive</b>	<b>Drive Weight</b>	Up to 10 Grams
	<b>Capacity</b>	32 GB
	<b>Height</b>	0.138 in (3.5mm)
	<b>Width</b>	0.866 in (22 mm)
	<b>Interface</b>	M.2 SATA Gen6 (6 Gb/s)
	<b>Performance</b>	<b>Maximum Sequential Read</b> <b>Maximum Sequential Write</b>
		Up to 380 MB/s                      Up to 70 MB/s
	<b>Logical Blocks</b>	62,533,296
	<b>Operating Temperature</b>	32° to 158°F (0° to 70°C) [case temp]
	<b>Features</b>	ATA Security; ATA-8, SATA 3.0; DIPM; TRIM

### NETWORKING/COMMUNICATIONS

<b>HP cr3114 HSPA+ Mobile Broadband*</b>	<b>Technology/Operating Bands</b>	Modes: WCDMA/HSDPA/HSUPA/HSPA+/AWS/GSM/EDGE/GPRS Penta-band WCDMA/HSDPA/HSUPA/HSPA+/AWS: 850/900/1900/2100/AWS
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### Technical Specifications

<b>802.11abgn (2x2) Wi-Fi + BT 4.0 Combo Adapter*</b>	IEEE 802.11g IEEE 802.11n
<b>Interoperability</b>	Wi-Fi certified Cisco Compatible Extensions Program
<b>Frequency Band</b>	802.11b/g/n: 2.4 GHz and 5 GHz 802.11a/n: 4.9 - 4.95 GHz (Japan) 5.15 - 5.25 GHz 5.25 - 5.35 GHz 5.47 - 5.725 GHz 5.825 - 5.850 GHz
<b>Data Rates</b>	802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: card will support rates for NSS=1 and NSS=2 for RX and TX for 20 and 40 MHz channels. Short and long guard interval shall be supported.
<b>Modulation</b>	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM
<b>Security<sup>1</sup></b>	Supports 64- and 128-bit WEP, WPA, WPA2, hardware-accelerated AES, 802.1x authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, EAP-FAST.
<b>Sub-channels</b>	Multinational support with frequency bands and channels compliant to local regulations.
<b>Media Access Protocol</b>	CSMA/CA (Collision Avoidance) with ACK
<b>Network Architecture Models</b>	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
<b>Roaming</b>	IEEE 802.11 compliant roaming between access points
<b>Output Power<sup>2</sup></b>	13.5 dBm , nominal
<b>Power Consumption</b>	Idle associated: 250 mW Idle unassociated: 100 mW Radio disabled: 75mW Transmit: 2.0 W (max) Receive: 1.6 W (max)
<b>Power Management</b>	ACPI compliant power management 802.11 compliant power saving mode
<b>Receiver Sensitivity<sup>3</sup></b>	300 Mbps: -66 dBm, 54 Mbps: -74 dBm, 11 Mbps: -88 dBm , 1 Mbps: -95 dBm
<b>Antenna Type</b>	Two embedded, high efficiency dual band antennae with spatial diversity, mounted in the display enclosure
<b>Form Factor</b>	PCI-Express Half-MiniCard 1.2
<b>Weight</b>	0.013 lb (6 g)
<b>Dimensions</b>	0.19 x 1.06 x 1.18 in (4.75 x 26.8 x 30 mm)
<b>Operating Voltage</b>	3.3v +/- 10%
<b>Temperature</b>	Operating 14° to 158° F (-10° to 70° C) Non-operating -40° to 176° F (-40° to 80° C)
<b>Humidity</b>	Operating 10% to 90% (non-condensing) Non-operating 5% to 95% (non-condensing)
<b>Altitude</b>	Operating 0 to 10,000 ft (3,048 m)



### Technical Specifications

		Non-operating	0 to 50,000 ft (15,240 m)
	<b>LED Activity</b>	LED Off - Radio OFF; Solid LED On - Radio ON	
		<ol style="list-style-type: none"> <li>1. Check latest software/driver release for updates on supported security features.</li> <li>2. Maximum output power may vary by country according to local regulations.</li> <li>3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CCK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).</li> </ol>	
<b>Bluetooth 4.0 Wireless Technology</b>	<b>Bluetooth Specification</b>	2.1+EDR, 3.0+HS, 4.0 Compliant	
	<b>Dimensions</b>	1.18 x 0.26 x 0.13 in (30 x 6.5 x 3.25 mm)	
	<b>Frequency Band</b>	2402 to 2480 MHz	
	<b>Number of Available Channels</b>	79 (1 MHz) available channels	
	<b>Data Rates and Throughput</b>	3 Mbps data rate; throughput up to 2.17 Mbps Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric or 1306.9 kbps symmetric	
	<b>Transmit Power</b>	Max 4 dBm (Bluetooth Class II)	
	<b>Receiver Sensitivity</b>	Better than -80 dBm at 0.1 % raw bit error rate	
	<b>Power Consumption</b>	Average 230mW Sleep <1 mW	
	<b>Antenna</b>	Internally integrated within module	
	<b>Range</b>	Up to 33 ft (10 m)	
	<b>Electrical Interface</b>	USB 2.0 compliant	
	<b>Link Topology</b>	Point to Point, Multipoint Pico Nets up to 7 slaves	
	<b>Security</b>	Full support of Bluetooth Security Provisions	
	<b>Power Management</b>	USB Bus Support Self configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff	
	<b>Certifications</b>	All necessary regulatory approvals for supported countries, including: FCC (47 CFR) Part 15C, Section 15.247 & 15.249 ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark	
	<b>Temperature</b>	Operating	-4° to 158° F (-20° to 70° C)
		Non-operating	-40° to 176° F (-40° to 80° C)
	<b>Humidity</b>	Operating	10% to 90%
		Non-operating	5% to 95%
	<b>Altitude</b>	Operating	15,000 ft (4,572 m)
		Non-operating	40,000 ft (12,192 m)
	<b>Bluetooth Profiles Supported</b>	Serial Port Profile (SPP) Service Discovery Application Profile (SDAP) Dial-Up Networking (DUN) Generic Object Exchange Profile (GOEP)	



### Technical Specifications

Object Push Profile (OPP)  
 File Transfer Profile (FTP)  
 Synchronization Profile (SYNC)  
 Hard Copy Cable Replacement (HCRP)  
 Personal Area Networking Profile (PAN)  
 Human Interface Device Profile (HID)  
 FAX Profile (FAX)  
 Basic Imaging Profile (BIP)  
 Headset Profile (HSP)  
 Hands Free Profile (HFP)  
 Advanced Audio Distribution Profile (A2DP)

\* Wireless access point and internet service required. Availability of public wireless access points limited.

### AUDIO/MULTIMEDIA

#### Audio Hardware

<b>Implementation</b>	HD Audio
<b>Volume Controls</b>	Up, down, and mute function keys
<b>Full Duplex</b>	Yes
<b>Microphone In</b>	Stereo
<b>Headphone/Line Out</b>	Stereo
<b>Integrated Microphone</b>	Yes

#### Audio Output Quality

<b>Frequency Response</b>	10 Hz ~ 22 KHz
<b>Signal to Noise Ratio</b>	Typical 95 dB FSA (DAC)
<b>Total Harmonic Distortion</b>	Typical -88 dB FS (DAC)
<b>Noise Floor</b>	-110 dB
<b>Play/Record Sampling Rate(s)</b>	Up to 192 KHz
<b>DAC</b>	24 bits
<b>ADC</b>	24 bits

#### Integrated Altec Lansing Stereo Speakers

<b>Power Rating</b>	1.5 W
<b>Impedance</b>	4 ohms

#### Multimedia Integrated HD Webcam

Supports videoconferencing and still image capture  
 Improved quality for video streaming and still image capture (1280x720 resolution)  
 Up to 30 frames/sec  
 Fixed focus lens

### POWER

#### HP 65W AC Adapter

<b>Dimensions</b>	4.21 x 1.85 x 1.18 in (10.7 x 4.7 x 3.0 cm)
<b>Weight</b>	0.62 lb (280 g)
<b>Input</b>	100 to 240 VAC



### Technical Specifications

	<b>Output</b>	Input Efficiency	87% min at 115 VAC
		Input frequency range	47 to 63 Hz
		Input AC current	1.7 A at 90 VAC
		Output power	65W
		DC output	18.5/19.5V
		Hold-up time	5 msec at 115 VAC input
		Output current limit	<11A, Over voltage protection- 29V max automatic shutdown
	<b>Connector</b>	3 pin/grounded, mates with interchangeable cords	
	<b>Environmental Design</b>	Operating temperature	41° to 95° F (5° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 5,000 ft (0 to 1,524 m)
		Humidity	20% to 95%
		Storage Humidity	10% to 95%
	<b>EMI and Safety Certifications</b>	CE Mark - full compliance with LVD and EMC directives; Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE; MTBF - over 200,000 hours at 25°C ambient condition.	
<b>4-Cell (51 WHr) Lithium-Ion polymer battery</b>	<b>Dimensions</b> (h x w x l)	3.71 x 68.2 x 110.3mm	
	<b>Cells/Type</b>	4-cells/Lithium-Ion polymer	
	<b>Voltage</b>	Nominal	7.5 V
	<b>Energy</b>	Watt-hour capacity	51 WHr
	<b>Temperature</b>	Operating (Charging)	32° to 113° F (0° to 45° C)
		Operating (Discharging)	14° to 140° F (-10° to 60° C)
		Non-operating	-4° to 140° F (-20° to 60° C)
	<b>Battery Re-Charge Time</b>	System in OFF or Standby Mode	2.5 hours
		System ON	3 to 5 hours (depending on system power consumption)

### COUNTRY OF ORIGIN

Made in China

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## Technical Specifications

warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.



## Summary of Changes



## Summary of Changes

Date of change:	Version History:		Description of change:
July 29, 2014	From v1 to v2	Changed	Footer updated, change log added

