

Overview

HP 250 G6 Notebook PC



Left

- | | |
|----------------------------|-------------------------------|
| 1. Webcam LED | 8. USB 3.1 (Gen 1) port |
| 2. Webcam | 9. HDMI port |
| 3. Microphone | 10. RJ-45/Ethernet port |
| 4. Touchpad | 11. VGA port |
| 5. Touchpad buttons | 12. AC plug LED |
| 6. Audio in/out combo jack | 13. AC Smart Pin adapter plug |
| 7. USB 3.1 (Gen 1) port | 14. Power button |

Overview



Right

- | | |
|---|-----------------------------|
| 1. Webcam LED | 7. SD Card slot |
| 2. Webcam | 8. Hard drive indicator LED |
| 3. Microphone | 9. Power indicator LED |
| 4. Security lock slot (Locks sold separately) | 10. Touchpad buttons |
| 5. Optical drive (optional) | 11. Touchpad |
| 6. USB 2.0 port | 12. Power button |

Overview

AT A GLANCE

- Windows 10 versions, FreeDOS 2.0
- Choice of the latest Intel® Core™, Intel® Pentium®, or Intel® Celeron® processors
- Intel® HD Graphics or AMD Radeon™ 520 (up to 2 GB of dedicated video memory)
- New Dark Ash Silver color with a fresh woven texture
- Display choices include: 15.6" diagonal HD or FHD
- Choice of hard drives up to 1 TB or M.2 SATA solid state drives up to 512 GB
- Weight starting at: 4.1 lbs (1.86 kg)
- Security features including FW TPM 2.0 and security lock slot (Lock not included)
- Keyboard
 - Full size textured island-style keyboard with numeric pad on the HP 250 G6"
- Touchpad with gestures support
- HP webcam with single digital microphone and HD (supporting WDR- Wide Dynamic Range) or VGA camera
- Two USB 3.1 (Gen 1) ports and One USB 2.0 port
- Wireless LAN (WLAN) up to 2x2 802.11ac to keep you connected

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

Features

PRODUCT NAME

HP 250 G6 Notebook PC

OPERATING SYSTEM

Preinstalled OS	Windows 10 Pro 64 ¹ Windows 10 Pro 64 (National Academic only) ¹ Windows 10 Home 64 ¹ Windows 10 Home Single Language 64 ¹ FreeDOS 2.0
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NOTE 1: 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 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com/>.

PROCESSOR

Intel® Core™ i7-7500U with Intel® HD Graphics 620 (2.7 GHz, up to 3.5 GHz with Intel Turbo Boost Technology, 4 MB cache, 2 cores) ^{2,3}

Intel® Core™ i5-7200U with Intel® HD Graphics 620 (2.5 GHz, up to 3.1 GHz with Intel Turbo Boost Technology, 3 MB cache, 2 cores) ^{2,3}

Intel® Core™ i3-7020U with Intel® HD Graphics 620 (2.5 GHz, up to 3.1 GHz with Intel® Turbo Boost Technology, 3 MB cache, 2 cores)

Intel® i3-6006U with Intel® HD Graphics 520 (2 GHz, 3 MB cache, 2 cores) ²

Intel® Pentium® N5000 with Intel® HD Graphics 605 (1.1 GHz, up to 2.7 GHz, 4 MB cache, 4 cores)

Intel® Pentium® N3710 with Intel® HD Graphics 405 (1.6 GHz, up to 2.56 GHz, 2 MB cache, 4 cores) ²

Intel® Celeron® N4000 with Intel® HD Graphics 600 (1.1 GHz, up to 2.6 GHz, 4 MB cache, 2 cores)

Intel® Celeron® N3060 with Intel® HD Graphics 400 (1.6 GHz, up to 2.48 GHz, 2 MB cache, 2 cores) ²

Processor Family

7th Generation Intel® Core™ i7 processor (7500U model)

7th Generation Intel® Core™ i5 processor (7200U model)

6th Generation Intel® Core™ i3 processor (6006U model)

Intel Braswell processor (Pentium N3710, Celeron N3060)

NOTE 2: Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

NOTE 3: In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on <http://www.support.hp.com>.

Features

CHIPSET

Chipset is integrated with processor

Features

GRAPHICS

Integrated

Intel® HD Graphics 620 ⁴

Intel® HD Graphics 520 ⁴

Intel® HD Graphics 405 ⁴

Intel® HD Graphics 400 ⁴

Supports

HD Decode, DX12, and HDMI⁷

Discrete

AMD Radeon™ 520 (up to 2048 MB of dedicated video memory) ^{5,6}

NOTE 4: HD content required to view HD images.

NOTE 5: AMD Dynamic Switchable Graphics technology requires an Intel processor, plus an AMD Radeon™ discrete graphics configuration and is not available on FreeDOS. With AMD Dynamic Switchable Graphics technology, full enablement of all discrete graphics video and display features may not be supported on all systems (e.g. OpenGL applications will run on the integrated GPU or the APU as the case may be).

NOTE 6: Available on select processors.

NOTE 7: Cables sold separately.

DISPLAY

Internal

39.6 cm (15.6") diagonal HD SVA eDP anti-glare slim WLED (1366 x 768) ^{4,8}

39.6 cm (15.6") diagonal FHD SVA eDP anti-glare slim WLED (1920 x 1080) ^{4,8}

NOTE 4: HD content required to view HD images.

NOTE 8: Resolutions are dependent upon monitor capability, and resolution and color depth settings.

STORAGE AND DRIVES

Primary Storage

Support all 7.2mm/9.5mm, SATA 2.5" Hard Drives

1 TB SATA 5400 rpm SATA (7.2/9.5 mm) ⁹

500 GB SATA 5400 rpm SATA (7 mm) ⁹

500 GB SATA 7200 rpm SATA (7 mm) ⁹

Dual Storage

1TB HDD + 128GB Value SSD (9)

M.2 SATA-3 Solid State Drives

128 GB M.2 SATA SSD ⁹

256 GB M.2 SATA SSD ⁹

512 GB M.2 SATA SSD ⁹

128 GB eMMC ⁹

Optical Drive

Features

Optional DVD+/-RW Double-Layer Writer ^{10,11}

NOTE 9: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.

NOTE 10: HD-DVD disks cannot be played on this drive. No support for DVD-RAM. Actual speeds may vary. Don't copy copyright-protected materials. Double Layer discs can store more data than single layer discs; discs burned with this drive may not be compatible with many existing single-layer DVD drives and players.

NOTE 11: Sold separately or as an optional feature.

MEMORY

Standard

DDR4 (Intel® Core™ i7-7500U, i5-7200U, i3-6006U processors only)

DDR4-2133 (Transfer rates up to 2133 MT/s) (DDR4-2400 bridge to DDR4-2133)

Dual channel support

No customer accessible / upgradeable

Configurations

4096 MB Total System Memory (4096 MB x 1)

6144 MB Total System Memory (2048 MB x 1 + 4096 MB x 1)

8192 MB Total System Memory (4096 MB x 2)

8192 MB Total System Memory (8192 MB x 1)

Maximum

Up to 8 GB DDR4-2133 SDRAM

Standard

DDR3L (Intel® Pentium® N3710, Celeron® N3060 processors only)

DDR3L-1600 (Transfer rates up to 1600 MT/s)

Single channel support

No customer accessible / upgradeable

Configurations

2048 MB Total System Memory (2048 MB x 1)

4096 MB Total System Memory (4096 MB x 1)

8192 MB Total System Memory (8192 MB x 1)

Maximum

Up to 8 GB DDR3L-1600 SDRAM

NETWORKING/COMMUNICATIONS

Wireless LAN (WLAN)

Realtek 802.11b/g/n (1x1) WiFi and Bluetooth® 4.0 Combo ¹²

Intel® Dual Band Wireless-AC 3168 802.11ac (1x1) Wi-Fi and Bluetooth® 4.2 Combo (non-vPro™) ¹²

Intel® Dual Band Wireless-AC 7265 802.11ac (2x2) WiFi and Bluetooth® 4.2 Combo (non-vPro™) ¹²

Ethernet

Integrated 10/100/1000 NIC

Communications

Compatible with Miracast-certified devices ¹³

Features

NOTE 12: Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ac WLAN devices.

NOTE 13: Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: <http://windows.microsoft.com/en-us/windows-8/project-wireless-screen-miracast>.

AUDIO/MULTIMEDIA

Audio

(2) Integrated stereo speakers

Camera

HP TrueVision HD Camera ⁴
Indicator LED, USB2.0, HD BSI sensor, f2.0, WDR
720p by 30 frames per second
Single digital microphone

Webcam

HP Webcam ¹⁴
VGA camera, indicator LED, USB 2.0, f2.4
480p by 30 frames per second
Single digital microphone

NOTE 4: HD content required to view HD images.

NOTE 14: Wireless access point and Internet service is required and is not included. Availability of public wireless access points limited.

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

Full size textured island-style keyboard with numeric keypad
Jet black
Touchpad
Multitouch gestures enabled
Support Modern Trackpad Gestures
Taps enabled as default

SOFTWARE AND SECURITY

Preinstalled Software

Buy Office
HP JumpStart
Windows 10 Redstone1 Recovery Manager Installer - CPS
Windows 10 Redstone1 Push Button Reset Recovery - CPS
HP Support Assistant
HP PC Hardware Diagnostics UEFI
HP ePrint ¹⁵
HP System Event Utility

Features

CyberLink Power Media Player
Bing Search for IE11
Security lock slot (Locks sold separately)
McAfee LiveSafe

NOTE15: Requires an Internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see www.hp.com/go/eprintcenter). Requires optional broadband module. Broadband use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Separately purchased data plans or usage fees may apply. Print times and connection speeds may vary.

POWER

Power Supply

65 W Smart AC adapter ¹⁷
65 W EM Smart AC adapter ¹⁷
45 W Smart AC adapter ¹⁷

Primary Battery

HP 3-cell battery, 31 Whr Li-ion
HP 4 cell battery, 41 Whr Li-ion

Power Cord

1 M (3.28 feet) length power cord with sticker label

Battery life

7th gen core CPU: Up to 12 hours (4 cell battery) ¹⁸
6th gen core CPU: Up to 10 hours (4 cell battery) ¹⁸
Intel® Pentium® and Celeron® CPU: Up to 9 hours and 30 minutes (4 cell battery) ¹⁸
Fast Charge (90 mins, 90% charged)
Supports battery fast charge

NOTE 17: Availability may vary by country.

NOTE 18: Windows 10 MM14 battery life will vary depending on various factors including product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See www.bapco.com for additional details.

WEIGHTS & DIMENSIONS

Weight

Starting at 1.86 kg ¹⁹
Starting at 4.1 lb ¹⁹

NOTE 19: Weight varies by configuration and components.

Dimensions (W x D x H)

38 x 25.38 x 2.38 cm
14.96 x 9.99 x 0.93 in

Features

PORTS/SLOTS

Ports/Connectors

USB 3.1 (Gen 1) ports - Two (Left)

USB 2.0 port - One (Right)

HDMI 1.4b - One ²⁰

VGA port - One

RJ-45 / Ethernet - One ²⁰

Headphone / microphone combo jack - One

AC Smart adapter port - One

Slots

HP Multi-Format Digital Media Card Reader

Supports SD/SDHC/SDXC

NOTE 20: All cables are sold separately.

SERVICE AND SUPPORT

HP Services offers limited 1-year warranty; 1-year limited warranty on primary battery. On-site service is also available with optional HP Care Services, which extend protection beyond the standard limited warranty. To choose the right level of service for your HP product, use the HP Care Services Lookup Tool at: <http://www.hp.com/go/lookuptool>. Additional HP Care Services, information by product is available at: <http://www.hp.com/go/cpc>.²¹

NOTE 21: HP Care Packs are sold separately. 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. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

Technical Specifications

DISPLAYS

15.6" FHD WLED AntiGlare (1920x1080) slim (3.2mm) SVA, eDP	Outline Dimensions (W x H x D)	360 x 224.3 x 3.2 (max)
	Active Area	344.26 x 193.69 mm
	Weight	360g max
	Diagonal Size	15.6"
	Surface Treatment	AG
	Contrast Ratio	500:1 (typ. AG)
	Refresh Rate	60Hz
	Pixel Per Inch (PPI)	141
	Brightness	220 nit typ.
	Pixel Resolution	Format 1920 x 1080 (FHD)
		Configuration RGB
	Interface	eDP 1.2
	LCD Mode	TN
	Viewing Angle	45/45/20/45

15.6" HD WLED AntiGlare (1366x768) slim (3.2mm) SVA, eDP	Outline Dimensions (W x H x D)	359.5 x 223.8 x 3.2 (max)
	Active Area	344.23 x 193.54
	Weight	370g max
	Diagonal Size	15.6"
	Surface Treatment	AG
	Contrast Ratio	500:1 (typ. AG)
	Refresh Rate	60Hz
	Pixel Per Inch (PPI)	100
	Brightness	220 nit typ.
	Pixel Resolution	Format 1366 x 768 (HD)
		Configuration RGB
	Interface	eDP 1.2
	LCD Mode	TN
	Viewing Angle	45/45/20/40

STORAGE AND DRIVES

500 GB 5400 rpm SATA Drive Weight	<95g (0.209lb)
Hard Drive	
Capacity	500 GB
Height	6.8 +/- 0.2 mm (0.268 +/- .008 in)

Technical Specifications

Width	69.85 +/- 0.25 mm (2.750 +/- 0.010 in)	
Interface	SATA 6Gb/s	
Performance	Maximum Sequential Read	600 MB/s max
	Maximum Sequential Write	600 MB/s max
Logical Blocks	976,773,168	
Operating Temperature	32° to 140° F (0° to 60° C)	
Features	DIPM	

500 GB 7200 rpm SATA Drive Weight Hard Drive

<95g (0.209lb)

Capacity	500 GB	
Height	6.8 +/- 0.2 mm (0.268 +/- .008 in)	
Width	69.85 +/- 0.25 mm (2.750 +/- 0.010 in)	
Interface	SATA 6Gb/s	
Performance	Maximum Sequential Read	600 MB/s max
	Maximum Sequential Write	600 MB/s max
Logical Blocks	976,773,168	
Operating Temperature	32° to 140° F (0° to 60° C)	
Features	DIPM	

1 TB 5400 rpm SATA Hard Drive Weight Drive

90g(0.198lb)

Capacity	1TB	
Height	7.0 (± 0.2) mm / 0.276 (± 008) in	

Technical Specifications

Width	69.85 (± 0.25) mm / 2.750 (± 0.010) in	
Interface	SATA 6Gb/s	
Performance	Maximum Sequential Read	600 MB/s max
	Maximum Sequential Write	600 MB/s max
Logical Blocks	1,953,525,168	
Operating Temperature	32° to 140° F (0° to 60° C)	
Features	DIPM	

128 GB SATA-3 Value Drive Weight 0.01 lb (6 g) ~ 0.02 lb (10 g)
Solid State Drive

Capacity	128 GB
Height	0.09 in (2.3 mm)
Width	0.87 in (22 mm)
Interface	ATA-8, SATA 3.0
Logical Blocks	250,069,680
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
Features	DIPM; TRIM; DEVSLP

256 GB SATA-3 Value Drive Weight 0.01 lb (6 g) ~ 0.02 lb (10 g)
Solid State Drive

Capacity	256 GB
Height	0.09 in (2.3 mm)
Width	0.87 in (22 mm)
Interface	ATA-8, SATA 3.0
Logical Blocks	500,118,192
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]

Technical Specifications

Features DIPM; TRIM; DEVSLP

128 GB SATA TLC Solid Drive Weight 0.01 lb (6 g) ~ 0.02 lb (10 g)
State Drive

Capacity 128 GB

Height 0.09 in (2.3 mm)

Width 0.87 in (22 mm)

Interface ATA-8, SATA 3.0

Logical Blocks 250,069,680

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features DIPM; TRIM; DEVSLP

256 GB SATA TLC Solid Drive Weight 0.01 lb (6 g) ~ 0.02 lb (10 g)
State Drive

Capacity 256 GB

Height 0.09 in (2.3 mm)

Width 0.87 in (22 mm)

Interface ATA-8, SATA 3.0

Logical Blocks 500,118,192

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features DIPM; TRIM; DEVSLP

Technical Specifications

NETWORKING/COMMUNICATIONS

WWAN

Realtek RTL8723DE 802.11 bgn 1x1 WiFi + BT 4.2 Combo Adapter

Technology/Operating bands	2.4Ghz
Wireless protocol standards	11n
Maximum data rates	150Mbps
Maximum output power	CE/11g at max 17dBm
Maximum power consumption	736mW in Tx mode
Form Factor	M2 1630
Weight	2 g
Dimensions (Length x Width x Thickness)	16 mm X 30 mm x 2.3 mm

Intel Dual band wireless-AC 3168 802.11AC 1x1 WiFi + BT 4.2 Combo Adaptor (non-vPro)

Technology/Operating bands	2.4Ghz/5G
Wireless protocol standards	11ac
Maximum data rates	433Mbps
Maximum output power	16.25dBm in 2.4G 17.25dBm in 5G
Maximum power consumption	1250 mW in 11ac 1x1 HB/80 Or 11n 1x1 HB/40
Form Factor	M2 2230
Weight	2 g
Dimensions (Length x Width x Thickness)	22 mm X 30 mm x 2.4 mm

Technical Specifications

Intel Dual Band Wireless-AC 7265 802.11 AC 2x2 WiFi + BT 4.2 Combo Adapter (non-vPro)

Technology/Operating bands	2.4Ghz/5G
Wireless protocol standards	11ac
Maximum data rates	867Mbps
Maximum output power	17.25dBm in 2.4G 16.25dBm in 5G
Maximum power consumption	1580 mW in Wi-Fi: 802.11n link at 200 mbps, FTP transmitting 90% and FTP receiving 10%. Bluetooth: A2DP, 375 Kbps
Form Factor	M2 2230
Weight	2 g
Dimensions (Length x Width x Thickness)	22 mm X 30 mm x 2.4 mm

POWER

65 W Smart AC adapter	Dimensions (H x W x D)	107.0 x 47.0 x 30.0mm
	Weight	250g +/-10%
	Input	Input Efficiency 88.0 % at 115 Vac and 89.0 % at 230Vac Input frequency range 47 to 63 Hz Input AC current Max. 1.7 A at 90 Vac
	Output	Output power 65W DC output 19.5V Hold-up time 5ms at 115 Vac input Output current limit <11.0A
	Connector	C6 (3pin/with grounded, with Smart ID DC connector)
	Environmental Design	Operating temperature 32° to 95° F (0° to 35° C) Non-operating (storage) temperature -4° to 185° F (-20° to 85° C) Altitude 0 to 16,400 ft (0 to 5,000 m) Humidity 20% to 95% Storage Humidity 10% to 95%
	EMI and Safety Certifications	*CE Mark - full compliance with LVD and EMC directives * Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV;

Technical Specifications

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.

65 W EM Smart AC adapter	Dimensions (H x W x D)	127.0x51.0x30.0mm	
	Weight	350g +/-10%	
	Input	Input Efficiency	88.0 % at 115 Vac and 89.0 % at 230Vac
		Input frequency range	47 to 63 Hz
	Output	Input AC current	Max. 1.7 A at 90 Vac
		Output power	65W
		DC output	19.5V
		Hold-up time	5ms at 115 Vac input
		Output current limit	<11.0A
	Connector	C6 (3pin/with grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)
		Humidity	20% to 95%
Storage Humidity		10% to 95%	
EMI and Safety Certifications	*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.		
45 W Smart AC adapter	Dimensions (H x W x D)	95.0 x 40.0 x 26.5 mm	
	Weight	200g +/-10%	
	Input	Input Efficiency	87.74 % at 115 Vac and 88.4 % at 230Vac
		Input frequency range	47 to 63 Hz
	Output	Input AC current	Max. 1.4 A at 90 VAC
		Output power	45W
		DC output	19.5V
		Hold-up time	5ms at 115 Vac input
		Output current limit	<8.0A
	Connector	C6 (3pin/with grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)
		Humidity	20% to 95%
Storage Humidity		10% to 95%	

Technical Specifications

EMI and Safety Certifications

*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.

HP 3-cell Li-Ion (31 WHr)	Dimensions	274.15mm x 35.25mm x 21.1mm
	Weight	185g
	Cells/Type	3cell Lithium-Ion cylindrical cell / 18650
	Voltage	LGC: 10.95V; SDI/Sanyo: 11.1V
	Amp-hour capacity	LGC: 2850mAh;SDI/Sanyo:2800mAh
	Watt-hour capacity	LGC: 31.2Wh; SDI/Sanyo:31.08Wh
	Operating (Charging)	0~45°C
	Operating (Discharging)	-10~60°C
	Fuel Gauge LED	No
	Warranty	300 cycles>80%(at 23°C)
	Optional Travel Battery Available	No
HP 4-cell Li-Ion (41 WHr)	Dimensions	274.15mm x 35.25mm x 21.1mm
	Weight	230g
	Cells/Type	4cell Lithium-Ion cylindrical cell / 18650
	Voltage	LGC: 14.6V; SDI/Sanyo:14.8V
	Amp-hour capacity	LGC: 2850mAh; SDI/Sanyo: 2800mAh
	Watt-hour capacity	LGC: 41.6Wh;SDI/Sanyo41.44Wh
	Operating (Charging)	0~45°C
	Operating (Discharging)	-10~60°C
	Fuel Gauge LED	No
	Warranty	300 cycles>80%(at 23°C)
	Optional Travel Battery Available	No

Technical Specifications

Environmental Data Eco-Label Certifications & declarations

This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:

- IT ECO declaration
- US ENERGY STAR®
- US Federal Energy Management Program (FEMP)
- EPEAT[®] GOLD registered in the United States. See <http://www.epeat.net> for registration status in your country.

System Configuration

The configuration used for the Energy Consumption and Declared Noise Emissions data for the Notebook model is based on a “Typically Configured Notebook”.

Energy Consumption (in accordance with US ENERGY STAR® test method)

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
Normal Operation (Sort idle)	8.34 W	8.58 W	8.84 W
Normal Operation (Long idle)	6.68 W	6.18 W	6.35 W
Sleep	0.65 W	0.68 W	0.65 W
Off	0.23 W	0.23 W	0.23 W

Note:

Energy efficiency data listed is for an ENERGY STAR® compliant product if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.

Heat Dissipation*

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
Normal Operation (Short idle)	29 BTU/hr	29 BTU/hr	30 BTU/hr
Normal Operation (Long idle)	23 BTU/hr	21 BTU/hr	22 BTU/hr

Technical Specifications

Sleep	2 BTU/hr	2 BTU/hr	2 BTU/hr
Off	1 BTU/hr	1 BTU/hr	1 BTU/hr

*NOTE: Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)

Sound Power
(L_{WAd} , bels)

Sound Pressure
(L_{pAm} , decibels)

Typically Configured – Idle

3.3

25

Fixed Disk – Random
writes

3.4

27

Longevity and Upgrading

This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the product may include:

- 3 USB ports
- 1 PC card slot (type I/II)
- 1 ExpressCard/54 slot
- 1 IEEE 1394 Port
- 2 SODIMM memory slots
- Optional expansion base docking station
- 1 multi-bay II storage port
- Interchangeable HDD??

Spare parts are available throughout the warranty period and or for up to “5” years after the end of production.

Batteries

This battery(s) in this product comply with EU Directive 2006/66/EC

Batteries used in the product do not contain:

Mercury greater the 1ppm by weight

Cadmium greater than 20ppm by weight

Battery size: CR2032 (coin cell)

Battery type: Lithium

Battery size: 6-cell high capacity Lithium-Ion battery (optional 8 cell available)

Battery type:

Technical Specifications

Additional Information

- This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.
- This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC.
- This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).
- This product is in compliance with the IEEE 1680 (EPEAT) standard at the Gold level, see www.epeat.net
- Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.
- This product contains 0.0% post-consumer recycled plastic (by wt.)
- This product is 95.9% recycle-able when properly disposed of at end of life.

Packaging Materials

External:	PAPER/Corrugated	350 g
Internal:	PLASTIC/Polyethylene low density - LDPE	10 g
	PLASTIC/Polyethylene Expanded - EPE	50 g
	PLASTIC/Polypropylene - PP	4 g

The plastic packaging material contains at least 81.0% recycled content. The corrugated paper packaging materials contains at least 80% recycled content.

Material Usage

This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at <http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf>):

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants – may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Technical Specifications

Packaging Usage

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: <http://www.hp.com/go/reuse-recycle> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/recyclers>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

HP, Inc. Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report

<http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html>

Eco-label certifications

<http://www8.hp.com/us/en/hp-information/environment/ecolabels.html>

ISO 14001 certificates:

<http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04755842>

and

<http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf>

Options and Accessories (sold separately and availability may vary by country)

Category	Description	Part Number
Cases	HP Essential Backpack (up to 15.6")	H1D24AA
	HP Essential Messenger Case (up to 17.3")	H1D25AA
Docking	HP 3005PR USB3 Port Replicator	Y4H06AA
	HP USB Travel Dock	TOK30AA
	HP 3001pr USB 3.0 Port Replicator	F3S42AA
Input Devices	HP Slim USB Keyboard and Mouse	H4B81AA
	HP Slim Wireless Keyboard and Mouse	H6F25AA
	HP 3-Button USB Laser Mouse	G1K28AA
	HP USB Travel Mouse	N9K77AA
	HP Comfort Grip Wireless Mouse	N9K78AA
	HP Ultra Mobile Wireless Mouse	N2Z63AAA
	HP HDMI to DVI Adapter	V7W66AA
Power	HP 45W Smart AC Adapter 4.5mm	H6Y88AA#xxx
	HP 65W Smart AC Adapter	H6Y89AA#xxx
	HP 65W Slim AC Adapter	H6Y82AA#xxx
	HP Power Bank	N9F71AA#xxx
Storage	HP External USB Optical Drive	F2B56AA
Memory	HP 4GB DDR3L-1600 1.35V SODIMM	H6Y75AA#XXX
	HP 8GB DDR3L-1600 1.35V SODIMM	H6Y77AA#XXX
Security	HP Essential Combination Lock	TOY16AA
	HP Combination Lock	TOY15AA
	HP Keyed Cable lock	TOY14AA
	HP Keyed Cable Lock 10mm	T1A62AA
	HP 15.6 NB Privacy Filter (For Jaguars and Lions only)	J7H71AA
	HP 14.0" Notebook Privacy Filter (For Colts and Rams only)	J6E65AA
UCC	HP Conferencing Keyboard	K8P74AA#xxx
	HP UC Speaker Phone	K7V16AA
	HP UC Wired Headset	K7V17AA
	HP Stereo USB Headset	T1A67AA
	HP Stereo 3.5mm Headset	T1A66AA
Displays	HP S140u 14-inch Portable Display	G8R65AA
	HP ProDisplay P223 21-5 inch Monitor	X7R61AA
	HP ProDisplay P232 23-inch Monitor	K7X31AA
	HP ProDisplay P240va 23.8-inch Monitor	N3H14AA

Summary of Changes

Date of change:	Version History:		Description of change:
April 24, 2017	From v1 to v2	Update	Graphics Section Updated
May 2, 2017	From v2 to v3	Update	Tech specs and accessories added
July 27, 2017	From v3 to v4	Update	Software and security section updated
November 28, 2017	From v4 to v5	Update	McAfee LiveSafe added to Software and security section Environmental data added
February 1, 2018	From v5 to v6	Update	New processors added to processor section and Dual storage category added to Storage and Drives section

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