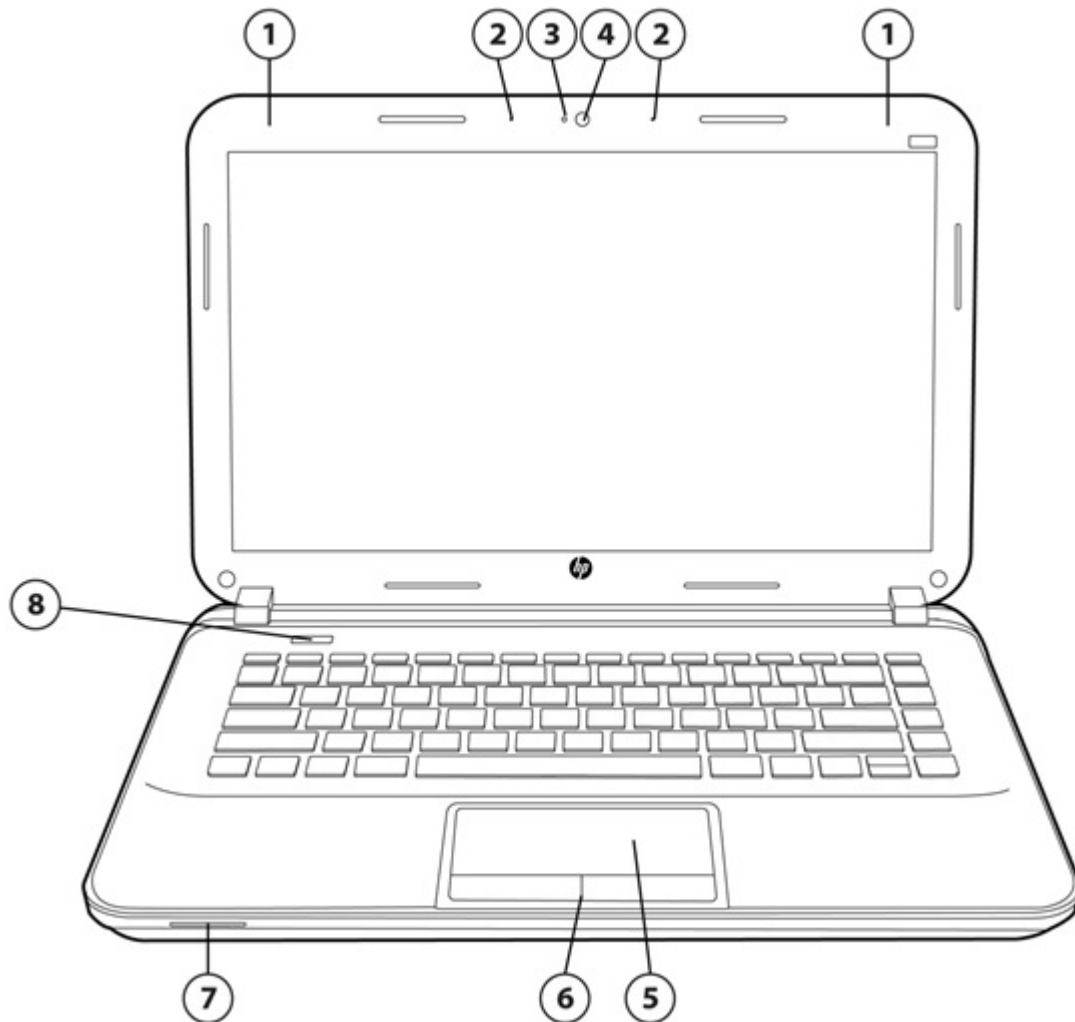


Overview

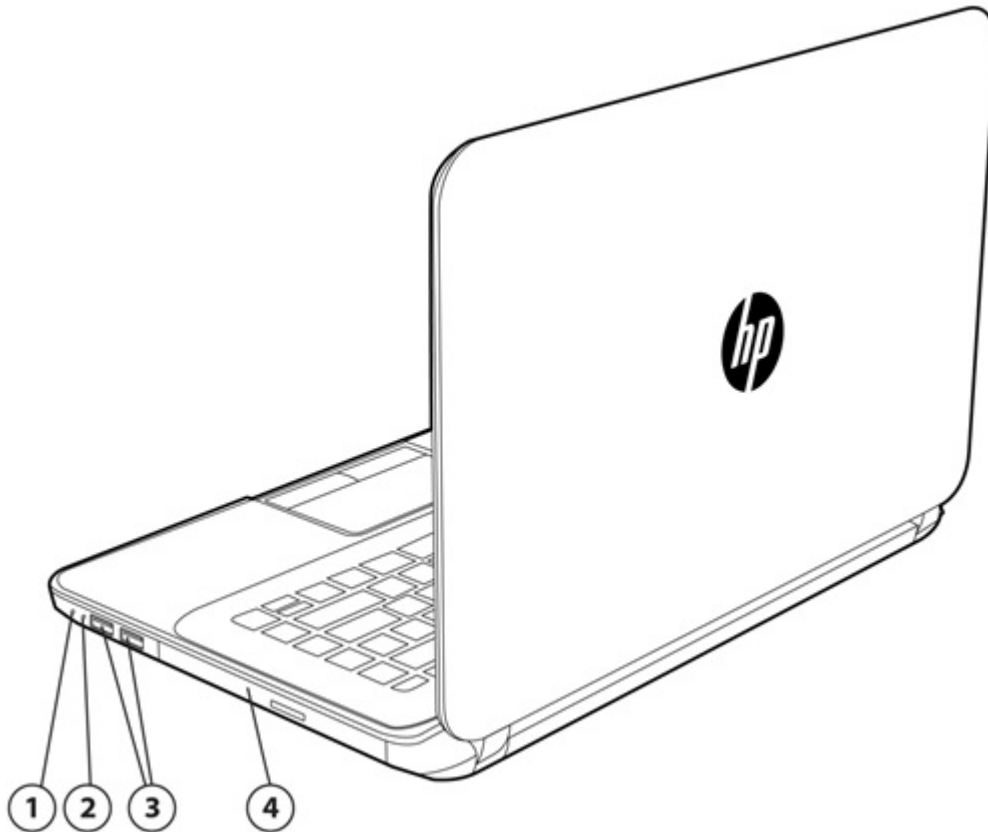
HP 245 G2 Notebook PC



Front View

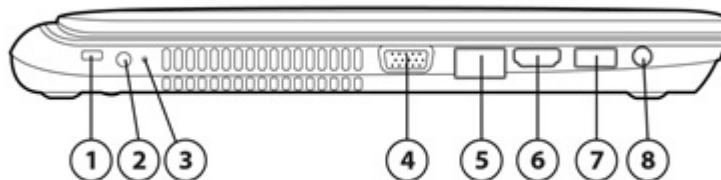
- | | |
|---------------------------------------|------------------------------|
| 1. WLAN antennas (select models only) | 5. Touchpad with scroll zone |
| 2. Internal microphone | 6. TouchPad buttons |
| 3. Webcam light | 7. Speaker |
| 4. Webcam | 8. Power button |

Overview



Right/Rear View

- 1. Duplicate power LED
- 2. Hard drive LED
- 3. USB 2.0 ports (2)
- 4. Optical drive door

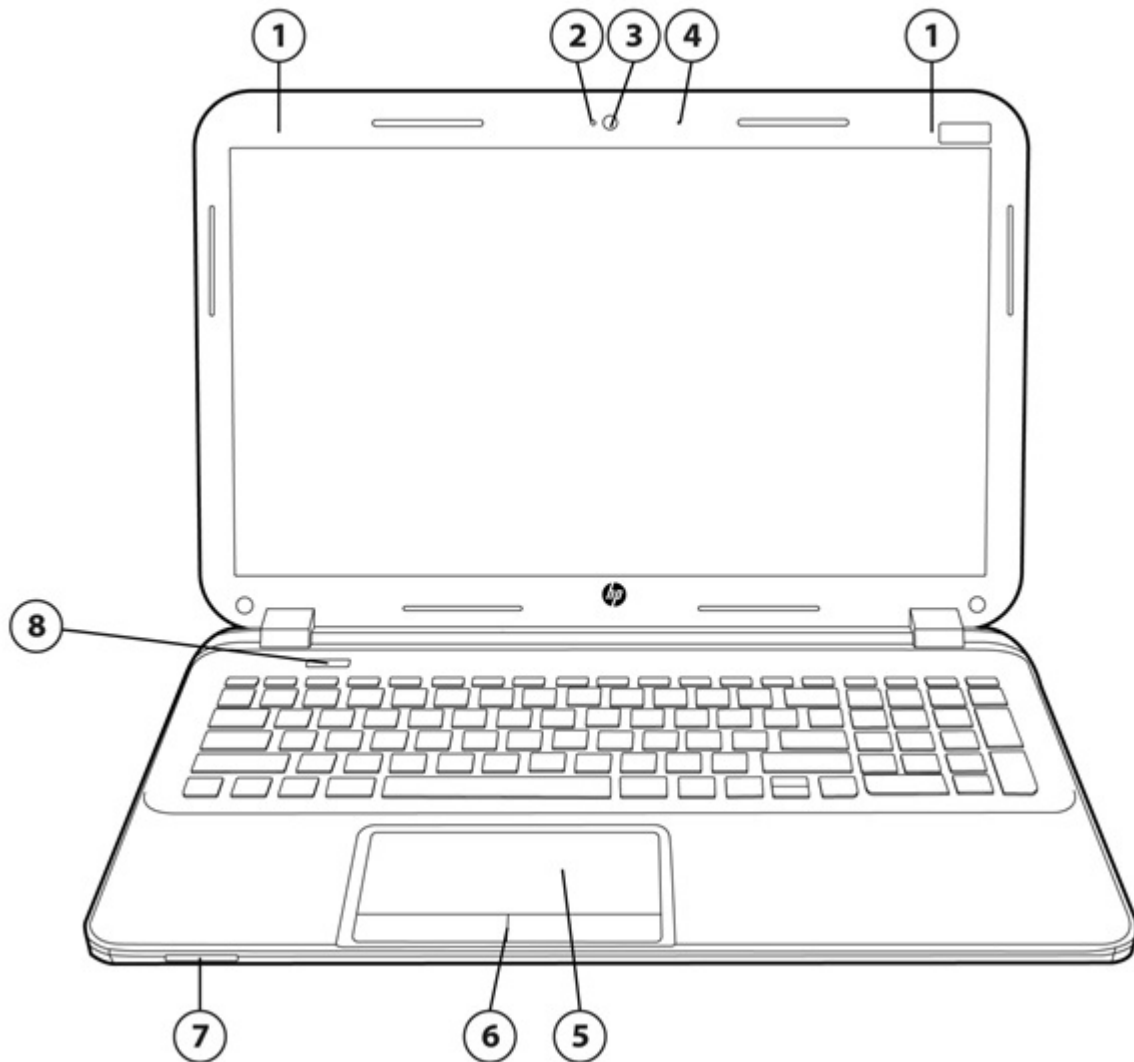


Left View

- 1. Security cable slot
- 2. Power connector
- 3. AC adaptor LED
- 4. VGA port
- 5. RJ-45 (Ethernet)
- 6. HDMI port
- 7. USB 3.0 port
- 8. Headphone / Microphone-in combo jack

HP 255 G2 Notebook PC

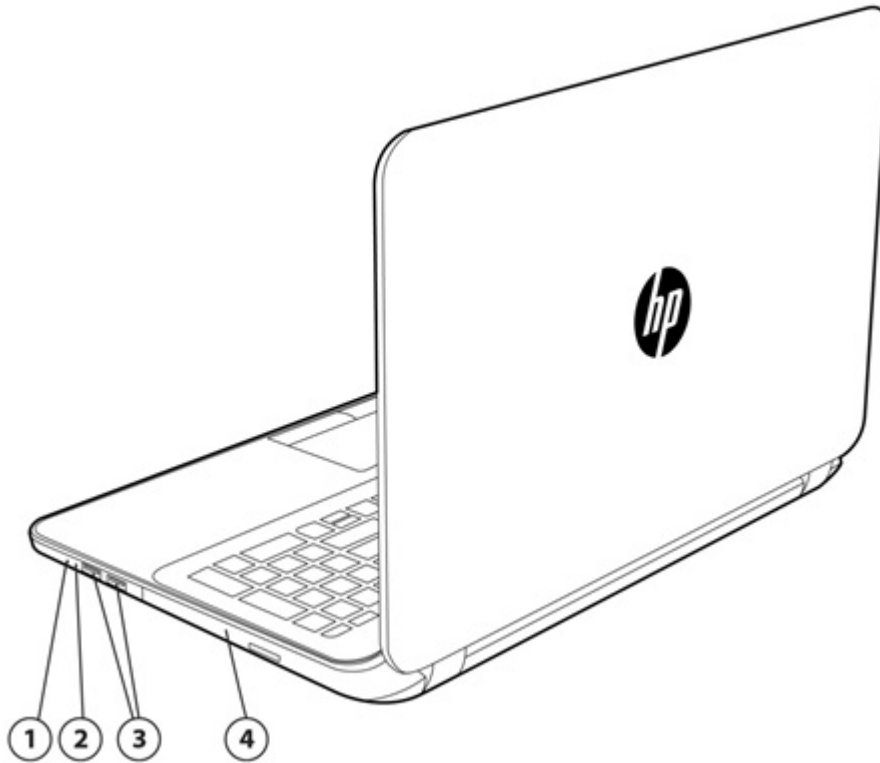
Overview



Front View

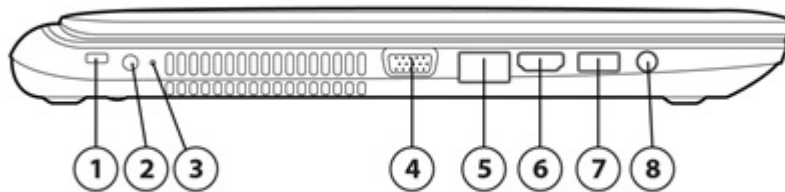
- | | |
|---------------------------------------|------------------------------|
| 1. WLAN antennas (select models only) | 5. Touchpad with scroll zone |
| 2. Internal microphone | 6. TouchPad buttons |
| 3. Webcam light | 7. Speaker |
| 4. Webcam | 8. Power button |

Overview



Right/Rear View

- 1. Duplicate power LED
- 2. Hard drive LED
- 3. USB 2.0 ports (2)
- 4. Optical drive door



Left View

- 1. Security cable slot
- 2. Power connector
- 3. AC adaptor LED
- 4. VGA port
- 5. RJ-45 (Ethernet)
- 6. HDMI port
- 7. USB 3.0 port
- 8. Headphone / Microphone-in combo jack

Overview

At A Glance

- Windows 8.1 versions, Windows 7 versions, Ubuntu Linux, FreeDOS 2.0
- VISION Technology with AMD Mobility Radeon™ HD
- Durable, sophisticated design with textured-surfaced black licorice color.
- Full-sized keyboard with numeric keypad (HP 255 G2 only)
- VGA port and HDMI port (for connecting to high-resolution displays)
- Integrated HD webcam, integrated microphone
- Integrated 802.11 b/g/n wireless LAN module
- Optional Bluetooth™ 2.1 or Bluetooth™ 4.0
- 14.0" (HP 245 G2 Notebook PC) or 15.6" (HP 255 G2 Notebook PC) diagonal LED-backlit HD anti-glare display

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

Features

PRODUCT NAMES

HP 245 G2 Notebook PC
HP 255 G2 Notebook PC

OPERATING SYSTEM

Preinstalled

Windows 8.1 64*
Windows 8.1 Pro 64*
Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64)**
Windows 7 Home Basic 64***
Windows 7 Professional 64***
Ubuntu Linux
FreeDOS 2.0

* Not all features are available in all editions of Windows 8.1. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8.1 functionality. See <http://www.microsoft.com> for details.

** This system is preinstalled with Windows® 7 Pro software and also comes with a license and media for Windows 8.1 Pro software. You may only use one version of the Windows software at a time. Switching between versions will require you to uninstall one version and install the other version. You must back up all data (files, photos, etc.) before uninstalling and installing operating systems to avoid loss of your data.

*** Not all features are available in all editions of Windows 7. This system may require upgraded and/or separately purchased hardware to take full advantage of Windows 7 functionality. See <http://www.microsoft.com/windows/windows-7/> for details.

ACCELERATED PROCESSING UNIT

AMD

AMD Quad Core A6-5200 APU with Radeon™ HD 8400 Graphics (2.0 GHz, 4 MB L2 cache, 4 cores)*
AMD Quad Core A4-5050 APU with Radeon™ HD 8330 Graphics (1.5 GHz, 2 MB L2 cache, 4 cores)*
AMD Quad Core A4-5000 APU with Radeon™ HD 8330 Graphics (1.5 GHz, 2 MB L2 cache, 4 cores)*
AMD Quad Core E2-3800 APU with Radeon™ HD 8280 Graphics (1.3 GHz, 2 MB L2 cache, 4 cores)*
AMD Dual Core E1-2150 APU with Radeon™ HD 8210 Graphics (1.05 GHz, 1 MB L2 cache, 2 cores)*
AMD Dual Core E1-2100 APU with Radeon™ HD 8210 Graphics (1.0 GHz, 1 MB L2 cache, 2 cores)*

* This system requires a separately purchased 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of AMD technology. Multi-core processing with AMD technology is designed to improve performance of this system. Given the wide range of SW applications available, performance will vary. AMD's numbering is not a measurement of clock speed.

CHIPSET

AMD Kerala (Kabini SoC APU, BGA)

Features

GRAPHICS

Integrated:

AMD Radeon™ HD 8400 (AMD Quad Core A6-5200 APU)

AMD Radeon™ HD 8330 (AMD Quad Core A4-5000 APU and AMD Quad Core A4-5050 APU)

AMD Radeon™ HD 8280 (AMD Quad Core E2-3800 APU)

AMD Radeon™ HD 8210 (AMD Dual Core E1-2100 APU AMD Dual Core E1-2150 APU)

Discrete:

AMD Radeon™ HD 8570M Graphics with up to 1024MB of dedicated video memory (Switchable Graphics)

DISPLAY

HP 245 G2 Notebook PC

Internal

14.0" diagonal LED-backlit HD* 16:9 widescreen BrightView (1366 x 768)

14.0" diagonal LED-backlit HD* 16:9 widescreen BrightView (1366 x 768) (touch-enabled)

External

Up to 32-bit per pixel color depth

VGA

Port supports resolutions up to 2048 x 1536 external resolution @75 Hz

HDMI

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

HP 255 G2 Notebook PC

Internal

15.6" diagonal LED-backlit HD anti-glare (1366 x 768)

15.6" diagonal LED-backlit HD anti-glare (1366 x 768) (touch-enabled)

External

Up to 32-bit per pixel color depth

VGA

Port supports resolutions up to 2048 x 1536 external resolution @ 75Hz

HDMI*

1.3 port supports up to 1080p, 1920 x 1080 at 60Hz and 1920 x 1200 @ 60Hz DVI Mode

*HDMI cable sold separately.

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

Features

STORAGE AND DRIVES

Primary Storage Bay

Hard Drives

320/500/750 GB/1 TB 5400 rpm SMART SATA II

NOTE: For hard drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 8.1) of system disk is reserved for the system recovery software.

OPTICAL DRIVES

Fixed Optical Drive

DVD+/-RW SuperMulti DL Drive*

* Double-layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. Note that DVD-RAM cannot read or write to 2.6 GB single-sided/5.2 GB double-sided - version 1.0 media. Don't copy copy-right protected materials.

MEMORY

Standard

DDR3L SDRAM (1600 MHz)*

One SODIMM slot supporting single channel* SODIMMs

Standard memory up to 8192MB

Maximum

Upgradeable to 8192 MB with optional 8192 MB* SODIMM in slot 1

* 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.

*Maximum memory capacities assume Windows 64-bit operating systems or Linux. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.

Features

NETWORKING/COMMUNICATIONS

Wireless

802.11b/g/n (1x1) wireless LAN module^{1,2}

Qualcomm 802.11 b/g/n (1x1) wireless LAN module^{1,2}

Optional Ralink 802.11 b/g/n (1x1) + Bluetooth® 4.0 Combo^{1,2}

Optional Bluetooth® 2.11,2 or Bluetooth® 4.0^{1,2}

Communications

Realtek Ethernet (10/100 NIC)

1. Sold separately or as an optional feature.

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

AUDIO/MULTIMEDIA

Audio

High Definition Audio support

Integrated Stereo Speakers

Integrated microphone

Webcam

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

* HD content required to view HD images.

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

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

The 101/102-key compatible keyboard features a full-pitch key layout with desktop keyboard features, such as editing keys, both left and right control and alt keys, and function keys. US and International key layouts are available. Includes a separate numeric keypad (HP 255 G2 only).

Pointing Devices

Touchpad with 2-piece pick button with left and right click functions

Buttons and Function Keys

Multi-touch gestures supported

Features

SOFTWARE AND SECURITY

Preinstalled Software with Windows Operating System

Buy Office
Recovery Manager Installer
Cyberlink Youcam DE
Cyberlink Power DVD (available on select models)
McAfee™ Internet Security*
Getting Started with Windows 8.1

Security

Security Lock slot (lock must be purchased separately)

* Internet access required. First 60 days included. Subscription required for live updates afterwards.

POWER

Power Supply

External 45W AC adapter (UMA only)
External 65W AC adapter (available for UMA and discrete)

Primary Battery

HP 3-cell (31 WHr) polymer battery (Available December 2013)
HP 4-cell (41 WHr) polymer battery

Battery Life

HP 245 G2 Notebook PC

| | |
|-------------------------|-----------------|
| 3-cell (31 WHr) battery | Up to TBD hours |
| 4-cell (41 WHr) battery | Up to TBD hours |

HP 255 G2 Notebook PC

| | |
|-------------------------|-----------------|
| 3-cell (31 WHr) battery | Up to TBD hours |
| 4-cell (41 WHr) battery | Up to TBD hours |

System Standby Time

Up to 1 week*

*Standby life will vary depending on various factors including battery, Memory, CPU, EC and LAN chip. The maximum capacity of the battery will naturally decrease with time and usage.

Power Conservation

Hibernation*
Standby*
ACPI compliance*

* Only Linux will feature power conservation.

Features

WEIGHTS & DIMENSIONS

HP 245 G2 Notebook PC

Weight

Starting at < 4.85 lb (2200 g) (Non-Touch) (Weight will vary by configuration)

Starting at < 5.29 lb (2400 g) (Touch) (Weight will vary by configuration)

Dimensions (w x d x h)

Non-Touch

13.62 x 9.45 x 1.11 in

346 x 240 x 28.1 mm

Touch

13.62 x 9.45 x 1.16 in

346 x 240 x 29.5 mm

HP 255 G2 Notebook PC

Weight

Starting at < 5.51 lb (2500 g) (Non-Touch) (Weight will vary by configuration)

Starting at < 6.17 lb (2800 g) (Touch) (Weight will vary by configuration)

Dimensions (w x d x h)

Non-Touch

14.90 x 10.2 x 1.11 in

378.4 x 259.2 x 28.1 mm

Touch

14.90 x 10.2 x 1.17 in

378.4 x 259.2 x 29.8 mm

NOTE: Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components.

Features

PORTS/SLOTS

Ports

VGA - One
HDMI* - One
Headphone / Microphone-in combo jack - One
Power Connector - One
RJ-45 (Ethernet) - One
USB 3.0 - One
USB 2.0 - Two

Digital Media Slots

Supports SD (Secure Digital)
Supports mini versions with adapter

* 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. Optional* HP Care Pack Services** are extended service contracts which go beyond your standard warranties. For more details visit: <http://www.hp.com/go/lookuptool>.

*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. Consult the HP Customer Support Center for details. <http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp>

NOTE: 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

Technical Specifications

SYSTEM UNIT

| | | |
|--|---|--|
| Stand-Alone Power Requirements (AC Power) | Nominal Operating Voltage | 18.5/19.5V |
| | Average Operating Power | Integrated graphics: 12.55 W**AMD E-series platform |
| | Max Operating Power | < 65 W |
| Temperature | Operating | 32° to 95° F (0° to 35° C) (not writing optical) 41° to 95° F (5° to 35° C) (writing optical) |
| | Non-operating | -4° to 140° F (-20° to 60° C) |
| Relative Humidity | Operating | 10% to 90%, non-condensing |
| | Non-operating | 5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature |
| Shock | Operating | 40 G, 2 ms, half-sine |
| | Non-operating | 200 G, 2 ms, half-sine |
| Random Vibration | Operating | 0.75 grms |
| | Non-operating | 1.50 grms |
| Altitude (unpressurized) | Operating | -50 to 10,000 ft (-15.24 to 3,048 m) |
| | Non-operating | -50 to 40,000 ft (-15.24 to 12,192 m) |
| Planned Industry Standard Certifications | UL | Yes |
| | CSA | Yes |
| | FCC Compliance | Yes |
| | ENERGY STAR® | Select models* |
| | EPEAT | Registered Silver in United States** |
| | ICES | Yes |
| | Australia / NZ A-Tick Compliance | Yes |
| | CCC | Yes |
| | Japan VCCI Compliance | Yes |
| | KC | Yes |
| | BSMI | Yes |
| | CE Marking Compliance | Yes |
| | BNCI or BELUS | Yes |
| | CIT | Yes |
| | GOST | Yes |
| | Saudi Arabian Compliance (ICCP) | Yes |
| | SABS | Yes |
| UKRSERTCOMPUTER | Yes | |

Technical Specifications

* Configurations of the HP 245 G2 and HP 255 G2 Notebook PCs that are ENERGY STAR qualified are identified as HP 245 G2 ENERGY STAR and HP 255 G2 ENERGY STAR on HP websites and on www.energystar.gov.

** EPEAT registration varies by country. See 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>.

DISPLAYS

| | | | | |
|---|----------------------------|---|------------|--|
| 14.0-inch LED HD (1366 x 768) BrightView | Active Area (w x h) | 12.16 x 6.85 in (30.9 x 17.4 cm) | | |
| | Diagonal Size | 14.0 in (35.6cm) | | |
| | Surface Treatment | BrightView | | |
| | Contrast Ratio | 300:1 (min) | | |
| | Refresh Rate | 60 Hz | | |
| | Brightness | 200 nit (typical) | | |
| | Pixel Resolution | Pitch | 0.252 mm | |
| | | Format | 1366 x 768 | |
| | | Configuration | RGB Stripe | |
| | | Backlight | LED | |
| 15.6" LED HD anti-glare (1366 x 768) | PPI | 101 ppi | | |
| | Viewing Angle | ±40° Horizontal, ±10°/-30° Vertical (minimum) 40/40/30/10 (Left/Right/Down/Up) | | |
| | Active Area (w x h) | 13.54 x 7.59 in (34.4 x 19.4 cm) | | |
| | Diagonal Size | 15.6 in (39.6cm) | | |
| | Surface Treatment | Anti-glare | | |
| | Contrast Ratio | 300:1 (min) | | |
| | Refresh Rate | 60 Hz | | |
| | Brightness | 200 nit (typical) | | |
| | Pixel Resolution | Pitch | 0.252 mm | |
| | | Format | 1366 x 768 | |
| | Configuration | RGB Stripe | | |
| | Backlight | LED | | |
| | PPI | 101 ppi | | |
| | Viewing Angle | ±40° Horizontal, +10°/-30° Vertical (minimum) 40/40/30/10 (Left/Right/Down/Up) (minimum) | | |

STORAGE AND DRIVES

Internal Storage



Technical Specifications

1 TB* 5400 rpm SATA Hard Drive

| | |
|---|--|
| Drive Weight | 0.254 lb (115 g) |
| Capacity | 1 TB |
| Height | 0.37 in (9.5 mm) |
| Width | 2.75 in (70 mm) |
| Interface | ATA-8, SATA 2.6, 3.0 Gb/s, NCQ |
| Transfer Rate | Synchronous (maximum) 300 MB/s (Drive Capability) |
| Seek Time (typical reads, including settling) | Single Track 3 ms |
| | Average 13 ms |
| | Maximum 24 ms |
| Rotational Speed | 5400 rpm |
| Logical Blocks | 1,953,525,168 |
| Operating Temperature | 32° to 140° F (0° to 60° C) [case temp] |
| Features | ATA Security |

750 GB* 5400 rpm SATA Hard Drive

| | |
|---|--|
| Drive Weight | 0.22 lb (101 g) |
| Capacity | 750 GB |
| Height | 0.37 in (9.5 mm) |
| Width | 2.75 in (70 mm) |
| Interface | ATA-8, SATA 2.6, 3.0 Gb/s, NCQ |
| Transfer Rate | Synchronous (maximum) 300 MB/s (Drive Capability) |
| Seek Time (typical reads, including settling) | Single Track 3 ms |
| | Average 13 ms |
| | Maximum 24 ms |
| Rotational Speed | 5400 rpm |
| Logical Blocks | 1,465,149,168 |
| Operating Temperature | 32° to 140° F (0° to 60° C) [case temp] |
| Features | ATA Security |

Technical Specifications

500 GB* 5400 rpm SATA Hard Drive

| | |
|---|--|
| Drive Weight | 0.22 lb (101 g) |
| Capacity | 500 GB |
| Height | 0.37 in (9.5 mm) |
| Width | 2.75 in (70 mm) |
| Interface | ATA-8, SATA 2.6, 3.0 Gb/s, NCQ |
| Transfer Rate | Synchronous (maximum) 150 MB/s (Drive Capability) |
| Seek Time (typical reads, including settling) | Single Track 3 ms |
| | Average 13 ms |
| | Maximum 24 ms |
| Rotational Speed | 5400 rpm |
| Logical Blocks | 976,773,168 |
| Operating Temperature | 32° to 140° F (0° to 60° C) [case temp] |
| Features | ATA Security |

320 GB* 5400 rpm SATA Hard Drive

| | |
|---|--|
| Drive Weight | 0.22 lb (101 g) |
| Capacity | 320 GB |
| Height | 0.37 in (9.5 mm) |
| Width | 2.75 in (70 mm) |
| Interface | ATA-8, SATA 2.6, 3.0 Gb/s, NCQ |
| Transfer Rate | Synchronous (maximum) 150 MB/s (Drive Capability) |
| Seek Time (typical reads, including settling) | Single Track 3 ms |
| | Average 13 ms |
| | Maximum 24 ms |
| Rotational Speed | 5400 rpm |
| Logical Blocks | 625,142,448 |
| Operating Temperature | 32° to 140° F (0° to 60° C) [case temp] |
| Features | ATA Security |

* For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 8.1) of system disk is reserved for the system recovery software.

Optical Drives

Technical Specifications

| | | | |
|-------------------------------------|-----------------------------------|--|---|
| DVD+/-RW SuperMulti DL Drive | Access Times | Random | <140ms CD (typical) < 160 ms DVD (typical) |
| | Max Data Transfer Rate | 24X CD-ROM 8X DVD 24X CD-R 24X CD-RW 8X DVD+R 8X DVD+RW 8X DVD-R 6X DVD-RW 5X DVD-RAM | |
| | Transfer Mode | UDMA Mode 5 | |
| | Interface | Gen 1 SATA | |
| | Supported Media (read) | CD-DA, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM | |
| | Supported Media (write) | CD-R, CD-RW, DVD+R, DVD+RW, DVD-R, DVD-RW, DVD-RAM, DVD+R DL, DVD-R DL | |
| | Max Media Capacity (read) | 8.5 GB | |
| | Max Media Capacity (write) | 8.5 GB | |
| | Transport | Tray Loading | |

NETWORKING/COMMUNICATIONS

Networking

| | | |
|--------------------------------------|-----------------------------|---|
| Integrated Realtek 10/100 NIC | Ethernet Features | 10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) Auto-Negotiation (Automatic Speed Selection) Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s IEEE 802.1p QoS (Quality of Service) Support IEEE 802.1q VLAN support IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable) |
| | Power Management | ACPI compliant - multiple power modes Situation-sensitive features reduce power consumption Advanced link down power saving for reducing link down power consumption |
| | Performance Features | TCP/IP/UDP Checksum Offload (configurable) Large send offload and Giant send offload Receiving Side Scaling |
| | Manageability | Wake-on-LAN from standby and hibernation (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only) PXE 2.1 Remote Boot |

Technical Specifications

| | | |
|--|---|--|
| | | Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite Virtual Cable Doctor for Ethernet cable status |
| Interface | | PCI Express 1.1 x1 to fully support ASPM L0s/L1 and CLKREQ |
| NIC Device Driver Name | | Realtek PCIe FE Ethernet Family Controller |
| Communications | | |
| Atheros 802.11b/g/n WiFi Adapter*, ** | Wireless LAN Standards | IEEE 802.11b IEEE 802.11g IEEE 802.11n |
| | Interoperability | Wi-Fi certified Cisco Compatible Extensions Program compliant with Microsoft Win7, (details at: http://www.hp.com/go/notebooks/WLAN) |
| | Frequency Band | 2.402 - 2.482 GHz |
| | Data Rates | 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n 150Mbps for MCS7 |
| | Frequency Support | 20 MHz: 2.4 GHz bands |
| | Modulation | Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM |
| | Security¹ | 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. Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program Version 5) with Microsoft Windows 7 only. |
| | Sub-channels | Multinational support with frequency bands and channels compliant to local regulations. |
| | Media Access Protocol | CSMA/CA (Collision Avoidance) with ACK |
| | Network Architecture Models | Ad-hoc (Peer to Peer) Infrastructure (Access Point Required) |
| | Roaming | IEEE 802.11 compliant roaming between access points |
| | Output Power² | 13.5 dBm, minimum |
| | Power Consumption | Idle associated: 250 mW avg (CLKREQ enabled) Idle unassociated: 100 mW avg Transmit/Receive channel: 2.0 /1.6 W |
| | Power Management | ACPI compliant power management 802.11 compliant power saving mode |
| | Receiver Sensitivity³ | 11b:-88dBm@11Mbps, 11g:-74 dBm@54Mbps, 11n:-70dBm@72.Mbps. |
| | Antenna type | High efficiency dual antenna with spatial diversity, usually mounted in the display enclosure |
| | Form Factor | PCI-Express Half-MiniCard |

Technical Specifications

| | | |
|--------------------------|---|-----------------------------|
| Weight | 4 g | |
| Dimensions | 3.3 x 26.65 x 29.85 mm | |
| Operating Voltage | 3.3v +/- 9% | |
| Temperature | Operating | -10° to 70° C |
| | Non-operating | -40° to 80° C |
| Humidity | Operating | 10% to 90% (non-condensing) |
| | Non-operating | 5% to 95% (non-condensing) |
| Altitude | Operating | 0 to 10,000 ft (3,048 m) |
| | Non-operating | 0 to 50,000 ft (15,240 m) |
| LED Activity | Amber LED on-Radio OFF; White LED on-Radio ON | |

1. Check latest software/driver release for updates on supported security features.
2. Maximum output power may vary by country according to local regulations.
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).

NOTE: WLAN supplier's client utility is required for Cisco Compatible Extensions support with Microsoft Windows XP. WLAN may also be compatible with certain third-party software supplicants. WLAN supplier IHV extensions required for Cisco Compatible Extensions support for Microsoft Windows Vista and Win7.

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

** Sold separately or as an optional add-on feature.

Qualcomm 802.11b/g/n WiFi Adapter*, **

| | |
|------------------------------------|---|
| Wireless LAN Standards | IEEE 802.11b IEEE 802.11g IEEE 802.11n |
| Interoperability | Wi-Fi certified Cisco Compatible Extensions Program compliant with Microsoft Win7, (details at: http://www.hp.com/go/notebooks/WLAN) |
| Frequency Band | 2.402 - 2.482 GHz |
| Data Rates | 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n150Mbps for MCS7 |
| Frequency Support | 20 MHz: 2.4 GHz bands |
| Modulation | Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM |
| Security¹ | 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. Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program Version 5) with Microsoft Windows7 only. |
| Sub-channels | Multinational support with frequency bands and channels compliant to local regulations. |
| Media Access Protocol | CSMA/CA (Collision Avoidance) with ACK |
| Network Architecture Models | Ad-hoc (Peer to Peer) Infrastructure (Access Point Required) |

Technical Specifications

| | |
|---|---|
| Roaming | IEEE 802.11 compliant roaming between access points |
| Output Power² | 13.5 dBm, minimum |
| Power Consumption | Idle associated: 250 mW avg (CLKREQ enabled) Idle unassociated: 100 mW avg Transmit/Receive channel: 2.0 /1.6 W |
| Power Management | ACPI compliant power management 802.11 compliant power saving mode |
| Receiver Sensitivity³ | 11b:-88dBm@11Mbps, 11g:-74 dBm@54Mbps, 11n:-70dBm@72.Mbps. |
| Antenna type | High efficiency dual antenna with spatial diversity, usually mounted in the display enclosure |
| Form Factor | PCI-Express Half-MiniCard v1.2 |
| Weight | 4 g |
| Dimensions | 3.3 x 26.65 x 29.85 mm |
| Operating Voltage | 3.3v +/- 9% |
| Temperature | Operating -10° to 70° C Non-operating -40° to 80° C |
| Humidity | Operating 10% to 90% (non-condensing) Non-operating 5% to 95% (non-condensing) |
| Altitude | Operating 0 to 10,000 ft (3,048 m) Non-operating 0 to 50,000 ft (15,240 m) |
| LED Activity | Amber LED on-Radio OFF; White LED on-Radio ON |

1. Check latest software/driver release for updates on supported security features.
2. Maximum output power may vary by country according to local regulations.
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).

NOTE: WLAN supplier's client utility is required for Cisco Compatible Extensions support with Microsoft Windows XP. WLAN may also be compatible with certain third-party software supplicants. WLAN supplier IHV extensions required for Cisco Compatible Extensions support for Microsoft Windows Vista and Win7.

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

** Sold separately or as an optional add-on feature.

Ralink 802.11b/g/n Bluetooth 4.0 Combo Card*

| | |
|-------------------------------|--|
| Wireless LAN Standards | IEEE 802.11b IEEE 802.11g IEEE 802.11n |
| Interoperability | Wi-Fi certified Cisco Compatible Extensions Program compliant with Microsoft Windows7 (details at: http://www.hp.com/go/notebooks/WLAN) |
| Frequency Band | 2.402 - 2.482 GHz |
| Data Rates | 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 150Mbps for MCS7 |

Technical Specifications

| | |
|--|--|
| Modulation | Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM |
| Security ¹ | 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. WAPI Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program Version 5) with Microsoft Windows Vista and XP only. |
| Sub-channels | Multinational support with frequency bands and channels compliant to local regulations. |
| Media Access Protocol | CSMA/CA (Collision Avoidance) with ACK |
| Network Architecture Models | Ad-hoc (Peer to Peer) Infrastructure (Access Point Required) |
| Roaming | IEEE 802.11 compliant roaming between access points |
| Output Power (for CCK) ² | 13.5dBm , minimum |
| Power Consumption | Idle associated: 250 mW Idle unassociated: 150 mW Transmit: 2.0 W (max) Receive: 2.0 W (max) |
| Power Management | ACPI compliant power management 802.11 compliant power saving mode |
| Receiver Sensitivity ³ | 11b:-88dBm@11Mbps, 11g:-74 dBm@54Mbps, 11n:-70dBm@72.Mbps. |
| Antenna type | High efficiency dual antenna with spatial diversity, mounted in the display enclosure |
| Form Factor | PCI-Express Half-MiniCard v1.2 |
| Weight | 6 g |
| Dimensions | 3.3 x 26.65 x 29.85 mm |
| Operating Voltage | 3.3v +/- 10% |
| Temperature | Operating 14° to 149° F (-10° to 65° C) Non-operating -40° to 176° F (-40° to 80° C) |
| Humidity | Operating 10% to 90% (non-condensing) Non-operating 5% to 95% (non-condensing) |
| Altitude | Operating 0 to 10,000 ft (3,048 m) Non-operating 0 to 50,000 ft (15,240 m) |
| LED Activity | LED Off - Radio OFF; Solid LED On - RadioON |

1. Check latest software/driver release for updates on supported security features.
2. Maximum output power may vary by country according to local regulations.
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).

NOTE: WLAN supplier's client utility is required for Cisco Compatible Extensions support with Microsoft Windows XP. WLAN may also be compatible with certain third-party software supplicants. WLAN supplier IHV extensions required for Cisco Compatible Extensions support for Microsoft Windows Vista and Win7.

Technical Specifications

Bluetooth Specification

V4.0 High Speed, V2.1+EDR, backwards compatible with V1.1, 1.2 and 2.0

Number of Available Channels 79 (1 MHz) available channels

Data Rates and Throughput 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

Transmit Power -6 dBm to 4 dBm (Bluetooth Class II)

Receiver Sensitivity Better than -80 dBm at 0.1 % raw bit error rate

Power Consumption Peak (Tx) 330 mW
Peak (Rx) 230 mW
Sleep <17 mW

Antenna Internally integrated within module

Range Up to 33 ft (10 m)

Electrical Interface USB 2.0 compliant
Microsoft Windows Plug and Play compliant

Bluetooth Software Supported Broadcom Bluetooth for Windows
Microsoft Windows Bluetooth Software

Link Topology Point to Point, Multipoint Pico Nets up to 7 slaves

Security Full support of Bluetooth Security Provisions

Power Management Microsoft Windows ACPI, and USB Bus Support
Self configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff

Certifications 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

Bluetooth Profiles Supported Generic Access Profile (GAP)
Service Discovery Application Profile (SDAP)
Serial Port Profile (SPP)
Dial_Up Networking Profile (DUN)
Generic Object Exchange Profile (GOEP)
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)
Generic Audio/Video Distribution Profile (GAVDP)
Advanced Audio/Video Distribution Profile (A2DP)
FAX Profile (FAX)
Basic Imaging Profile (BIP)
Headset Profile (HSP)
Hands Free Profile (HFP)

Technical Specifications

Basic Printing Profile (BPP)
VDP (Video Distribution Profile)
AVRCP (Audio Video Remote Control Profile)

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

** Sold separately or as an optional add-on feature.

AUDIO/MULTIMEDIA

Audio

| | | |
|-----------------|------------------------------|--|
| Hardware | Implementation | Realtek ALC3201-GR High Definition audio |
| | Volume Controls | Up, down, and mute function keys |
| | Full Duplex | Yes |
| | Microphone In | Stereo |
| | Headphone/Line Out | Stereo |
| | Integrated Microphone | Yes |

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

| | | |
|-----------------------------------|---------------------|--------|
| Integrated Stereo Speakers | Power Rating | 1.5 W |
| | Impedance | 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

Technical Specifications

| | | | |
|--------------------------------------|--|--|---|
| HP 45W Smart AC Adapter | Dimensions | 3.78 x 1.95 x 0.88 in (9.6 x 4.95 x 2.24 cm) | |
| | Input | 90 to 265 VAC | |
| | | Input Efficiency | 87% min at 115 VAC |
| | | Input frequency range | 47 to 63 Hz |
| | Output | Input AC current | 1.4 A at 90 VAC and maximum load |
| | | Output power | 45W |
| | | DC output | 19.5V |
| | | Hold-up time | 5 msec at 115 VAC input |
| | | Output current limit | <8A, Over voltage protection- 29V max automatic shutdown |
| | | Connector | 3 pin/grounded, mates with interchangeable cords |
| | Environmental Design | Operating temperature | 32° to 95° F (0° to 35° C) |
| | | Non-operating (storage) temperature | -4° to 121° F (-20° to 85° C) |
| | | Altitude | 0 to 16,405 ft (0 to 5,000 m) |
| | | Humidity | 0% to 95% |
| | | Storage Humidity | 0% 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; Reliability - failure rate of less than 0.1% annually within the first three years of operation. | | |
| HP 65W AC Adapter | Dimensions | 4.21 x 1.85 x 1.18 in (10.7 x 4.7 x 3.0 cm) | |
| | Weight | 0.62 lb (280 g) | |
| | Input | 100 to 240 VAC | |
| | | Input Efficiency | 87% min at 115 VAC |
| | | Input frequency range | 47 to 63 Hz |
| | Output | 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 |
| | | Connector | 3 pin/grounded, mates with interchangeable cords |
| | Environmental Design | 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) |

Technical Specifications

| | | | |
|---|--------------------------------------|--|--|
| | | 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. | |
| 4-Cell (41 WHr) Lithium-Ion battery | Cells/Type | 4-cell Lithium-Ion | |
| | Energy Temperature | Watt-hour capacity | 41 WHr |
| | | 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) |
| | Battery Re-Charge Time | System in OFF or Standby Mode | 2.5 hours |
| | | System ON | 3 to 5 hours (depending on system power consumption) |
| HP 3-cell (31 WHr) Lithium-Ion Primary battery | Dimensions (h x w x l) | 0.8 x 1.2 x 8.1 in (2 x 3 x 20.5cm) | |
| | Weight | 0.37lb, (0.166kg) | |
| | Cells/Type | Lithium-Ion | |
| | Energy | Voltage | 11.1V |
| | | Amp-hour capacity | 2.8Ah |
| | | Watt-hour capacity | 31Wh |
| | Temperature | Operating (Charging) | 32° to 113° F (0° to 45° C) |
| | | Operating (Discharging) | 14° to 122° F (-10° to 50° C) |
| | | Non-operating | -4° to 122° F (-20° to 50° C) |
| | Battery Re-Charge Time | System in OFF or Standby Mode | 2.5 hours |
| | | System ON | 3 to 5 hours |
| | Fuel Gauge LED | No | |
| | Warranty | 1 year | |

Technical Specifications

Environmental Data

HP 240 G2 Notebook PC

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®
- EPEAT Silver 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, 60Hz |
|------------------|--------------|--------------|--------------|
| Normal Operation | 6.17 W | 6.27 W | 6.37 W |
| Sleep | 0.58 W | 0.61 W | 0.58 W |
| Off | 0.52 W | 0.57 W | 0.52 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, 60Hz |
|------------------|--------------|--------------|--------------|
| Normal Operation | 21 BTU/hr | 21 BTU/hr | 22 BTU/hr |
| Sleep | 2 BTU/hr | 2 BTU/hr | 2 BTU/hr |
| Off | 2 BTU/hr | 2 BTU/hr | 2 BTU/hr |

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

Technical Specifications

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

| | Sound Power (LWAd, bels) | Sound Pressure (LpAm, decibels) |
|-----------------------------|-----------------------------|------------------------------------|
| Typically Configured - Idle | 1.8 | 21 |
| Fixed Disk - Random writes | 4.1 | 36 |

Batteries

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

Batteries used in the product do not contain:

- Mercury greater than 1ppm by weight
- Cadmium greater than 20ppm by weight

Battery size: CR2032 (coin cell)

Battery type: Lithium

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 <Silver> 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% post-consumer recycled plastic (by wt.)
- This product is 96.3% recycle-able when properly disposed of at end of life.

Packaging Materials

- External:
 - PAPER/Corrugated 374 g
- Internal:
 - PLASTIC/EPE (Expanded Polyethylene) 29.8 g
 - PLASTIC/Polyethylene low density 31.7 g
 - PLASTIC/Polypropylene 24
- The PAPER/Corrugated packaging material is made from 74 % recycled content.
- The PLASTIC/EPE (Expanded Polyethylene) packaging materials contains at least 0% recycled content.
- The PLASTIC/Polyethylene low density packaging materials contains at least 0% recycled content.
- The PLASTIC/Polypropylene packaging materials contains at least 0% recycled content.

Technical Specifications

HP 255 G2 Notebook PC

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®
- EPEAT Silver 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, 60Hz |
|------------------|--------------|--------------|--------------|
| Normal Operation | 5.34 W | 5.47 W | 5.48 W |
| Sleep | 0.94 W | 1.01 W | 0.94 W |
| Off | 0.38 W | 0.45 W | 0.38 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, 60Hz |
|------------------|--------------|--------------|--------------|
| Normal Operation | 18 BTU/hr | 19 BTU/hr | 19 BTU/hr |
| Sleep | 3 BTU/hr | 3 BTU/hr | 3 BTU/hr |
| Off | 1 BTU/hr | 2 BTU/hr | 1 BTU/hr |

* 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 (LWAd, bels) | Sound Pressure (LpAm, decibels) |
|-----------------------------|-----------------------------|------------------------------------|
| Typically Configured - Idle | 3.2 | 28 |
| Fixed Disk - Random writes | 4.1 | 36 |

Batteries

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

Batteries used in the product do not contain:

- Mercury greater than 1ppm by weight
- Cadmium greater than 20ppm by weight

Battery size: CR2032 (coin cell)

Battery type: Lithium

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

Technical Specifications

(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 <Silver> 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% post-consumer recycled plastic (by wt.)
- This product is 96.3% recycle-able when properly disposed of at end of life.

Packaging Materials

- External:
 - PAPER/Corrugated 433 g
- Internal:
 - PLASTIC/EPE (Expanded Polyethylene) 33 g
 - PLASTIC/Polyethylene low density 33.4 g
 - PLASTIC/Polypropylene 24.5 g
- The PAPER/Corrugated packaging material is made from 74 % recycled content.
- The PLASTIC/EPE (Expanded Polyethylene) packaging materials contains at least 0% recycled content.
- The PLASTIC/Polyethylene low density packaging materials contains at least 0% recycled content.
- The PLASTIC/Polypropylene packaging materials contains at least 0% recycled content.

ALL MODELS

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

Technical Specifications

- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

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.

HEWLETT-PACKARD 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://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14K_Certificate.pdf

and

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

COUNTRY OF ORIGIN

China

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

| Type | Description | Part # |
|-----------------------------|--|------------------|
| Docking | HP USB 3.0 Port Replicator | H1L08AA#xxx |
| | HP Dual Hinge Notebook Stand | AW661AA#xxx |
| Carrying Cases | HP Essential Top Load Case (up to 15.6") | H2W17AA#xxx |
| | HP Professional Series Carrying Case (up to 15.6") | H4J90AA |
| | HP Business Backpack (up to 17.3") | H5M90AA |
| | HP Business 4 Wheel Roller Case | H5M93AA |
| Input/Output | HP USB Essential Keyboard/Mouse | H6L29AA |
| | HP Ultra Mobile Wireless Mouse | H6F25AA |
| | HP Stylish USB Keyboard/Mouse | H4B80AA |
| Adapters | HP 65W Slim Adapter | AX727AA#XXX |
| | 65W Smart AC Adapter | ED494AA#xxx |
| | 90W Smart AC Adapter | ED495AA#xxx |
| | 90W Slim Adapter | BT796AA#xxx |
| | HP 65W Smart AC Adapter | H6Y89AA |
| | HP 90W Smart AC Adapter | H6Y90AA |
| | HP 65W Slim AC Adapter | H6Y82AA |
| | HP 90W Slim AC Adapter | H6Y83AA |
| Health and Education | 20 Notebook Managed Charging Cart | QL489AA#xxx |
| | 30 Notebook Managed Charging Cart | QL490AA |
| Security | HP UltraSlim Keyed Cable Lock | H4D73AA |
| Storage | HP Mobile USB DVDRW Non-LS | A2U57AA |
| Monitors | HP EliteDisplay E271i 27-inch IPS LED Monitor | D7Z72AA/A8/AS/AT |
| | HP EliteDisplay E231 23-inch LED Monitor | C9V75AA/A8/AS/AT |
| | HP EliteDisplay E201 20-inch LED Monitor | C9V73AA/A8/AS/AT |
| | HP ProDisplay P221 21.5" LED Monitor | C9E49AA/A8/AS/AT |
| | HP ProDisplay P201 20" LED Monitor | C9F26AA/A8/AS/AT |

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

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