QuickSpecs

Overview

HP EliteBook Revolve 810 G2 Tablet PC

1. WLAN antennas
2. Dual-microphone array
3. Webcam LED
4. 720p HD Webcam
5. Home button
6. WWAN antennas*
7. Side docking connector
8. Audio jack
9. MicroSD slot
10. Speaker
11. Volume up/down button
12. Rotation lock button
13. Power button
14. Clickpad image sensor
15. Ambient light sensor

* WWAN module available as AMO in May 2014. All WWAN modules listed are available preconfigured. Only the HP lt4112 LTE/HSPA+ Mobile Broadband Module is sold separately as an optional feature. WWAN use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE is not available in all regions and requires Windows.
Overview

Rear
1. RJ-45 (Ethernet) jack
2. USB 3.0 port
3. Security lock slot
4. DisplayPort 1.2
5. USB 3.0 charging port
6. Power connector

Left
1. Vent
2. Speaker
QuickSpecs

HP EliteBook Revolve 810 G2 Tablet PC

Overview

1. Service cover
2. Vents
3. Near Field Communication (NFC) antenna

Bottom
4. Battery bay cover release latch
5. Battery bay
At A Glance

- Windows 8.1 Pro 64, Windows 8.1 64, Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64), Windows 7 Professional 64, Windows 7 Home Premium 64, or FreeDOS 2.0
- 11.6-inch diagonal LED-backlit, ultra-slim, HD UWVA display (1366 x 768) with capacitive multi-touch screen
- Industrial, business rugged HP DuraCase construction features a full magnesium alloy chassis, wear-resistant HP DuraFinish, and stainless steel hinges
- Full-sized backlit, spill-resistant keyboard with bottom-case drain
- Clickpad image sensor
- Choice of 4th Generation Intel® Core™ i7, i5 Core with Turbo Boost Technology or 4th Generation Intel® Core™ i3 Core
- Intel vPro technology enables you to remotely monitor, diagnose, and repair PCs over the network, even if a system’s OS is inoperable or it is powered off (vPro not available with Core i3-4010U or Core i5-4200U.)
- Choice of up to 256 GB M.2 Solid State Drive or 256 GB SED M.2 Solid State Drive
- Flexible wireless connectivity options:
  - Integrated WWAN modules with GPS support (optional, available May 2014)
  - Integrated Intel 802.11 (2x2) a/b/g/n ac, or a/b/g/n with Bluetooth 4.0 combo card
  - Integrated Intel 802.11a/b/g/n (2x2) wireless LAN module
- 6-cell polymer long life battery (44 WHr)
- Integrated Intel HD 4400 Graphics
- Integrated 720p HD Webcam
- DTS Studio Sound with integrated stereo speakers and dual microphone array
- Security features including HP Client Security, Common Criteria Certified Discrete TPM 1.2 Embedded Security Chip, and security lock slot
- Separate launch buttons for easy access to the following features: Windows, power, rotation lock, volume up and down
- DisplayPort v1.2 for high resolution support
- Optional HP 2013 UltraSlim docking station
- Sensors include Gyroscope, Accelerometer, Compass, Ambient Light Sensor, Near Field Communication (NFC)
- microSD slot

NOTE: See important legal disclosures for all listed specs in their respective features sections.
### PRODUCT NAME
HP EliteBook Revolve 810 G2 Tablet

### OPERATING SYSTEM

<table>
<thead>
<tr>
<th>Preinstalled</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 8.1 Pro 64*</td>
<td>Windows 8.1 Enterprise 64*</td>
</tr>
<tr>
<td>Windows 8.1 64*</td>
<td>Windows 7 Professional 32***</td>
</tr>
<tr>
<td>Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64)**</td>
<td>Windows 7 Enterprise 32***</td>
</tr>
<tr>
<td>Windows 7 Professional 64***</td>
<td>Windows 7 Enterprise 64***</td>
</tr>
<tr>
<td>Windows 7 Home Premium 64***</td>
<td>Windows 7 Ultimate 32***</td>
</tr>
<tr>
<td>FreeDOS 2.0</td>
<td>Windows 7 Ultimate 64***</td>
</tr>
<tr>
<td>** This system is preinstalled with Windows® 7 Pro software and also comes with a license and media for Windows 8 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. ** Systems may require upgraded and/or separately purchased hardware to take full advantage of Windows 7 functionality. See [<a href="http://www.microsoft.com/windows/windows-7/">http://www.microsoft.com/windows/windows-7/</a>] for details.</td>
<td></td>
</tr>
</tbody>
</table>

* 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/]

### PROCESSOR*

4th Generation Intel® Core™ i7-4600U with Intel HD Graphics 4400 (2.1 GHz, 4 MB L3 cache, 2 cores, 15 W)*
Up to 3.3 GHz with Intel Turbo Boost Technology**

4th Generation Intel® Core™ i5-4300U with Intel HD Graphics 4400 (1.9 GHz, 3 MB L3 cache, 2 cores, 15 W)*
Up to 2.9 GHz with Intel Turbo Boost Technology

4th Generation Intel® Core™ i5-4200U with Intel HD Graphics 4400 (1.6 GHz, 3 MB L3 cache, 2 cores, 15 W)*
Up to 2.6 GHz with Intel Turbo Boost Technology**

4th Generation Intel® Core™ i3-4010U with Intel HD Graphics 4400 (1.7 GHz, 3 MB L3 cache, 2 cores, 15 W)*

* 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.

** Intel® Turbo Boost technology requires a PC with a processor with Intel Turbo Boost capability. Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See [www.intel.com/technology/turboboost] for more information.

** NOTE: Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

### CHIPSET
**QuickSpecs**

**HP EliteBook Revolve 810 G2**

**Features**

Mobile Intel® QM87 (vPro support available with Core i7-4600 or Core i5-4300)
Chipset is intergrated with processor

**INTEL CORE i5 WITH VPRO/CORE i7 WITH VPRO TECHNOLOGY CAPABLE**

Intel Core i5 with vPro and Core i7 with vPro technology is a selectable feature that is available on units configured with select processors, an Intel Centrino® Advanced-N or Ultimate-N WLAN module and a preinstalled Windows operating system. It provides advances in remote manageability, security, energy efficient performance, and wireless connectivity. Intel Active Management Technology 9.0 (iAMT) offers built-in manageability and proactive security for networked notebook PCs, even when they are powered off* or when the operating system is inoperable. It can help identify threats before they reach the network, isolate infected systems, and update PCs regardless of their power state.

*Requires a Windows operating system, network hardware and software, connection with a power source, and a direct (non-VPN) corporate network connection which is either cable or wireless LAN.

**NOTE:** Some functionality of this technology, such as Intel® Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future “virtual appliances” applications for Intel vPro technology is dependent on 3rd party software providers. Microsoft Windows required. For hard drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 30 GB for Windows 8 is reserved for system recovery software.

**GRAPHICS**

Integrated:
UMA: Intel HD Graphics 4400

**DISPLAY**

**Internal**
11.6-inch diagonal LED-backlit, anti-glare, HD* AG UWVA Touchpanel (1366 x 768)
- Ultra- Wide-viewing angle
- LVDS – low voltage differential signaling
- Capacitive multitouch screen with digitizer
- Tough, durable Corning Gorilla Glass 3

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

**DisplayPort v1.2**
Supports resolutions up to 2560 x 1600, 30-bit color depth at 60 Hz, and full HD (1920 x 1080) monitors, 24-bit color depth at 120 Hz

**Number of Supported Displays**

<table>
<thead>
<tr>
<th>Number of Displays with 2013 UltraSlim Docking Station</th>
<th>UMA</th>
<th>Discrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>EliteBook Revolve 810 G2</td>
<td>3</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* HD content required to view HD images.

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

HP EliteBook Revolve 810 G2

Features

STORAGE AND DRIVES

Solid State Drive
128/180/256 GB M.2 Solid State Drives
256 GB SED M.2 Solid State Drive

NOTE: For hard drives and solid state drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 16 GB (for Windows 7) and 30 GB (for Windows 8.1) of system disk is reserved for the system recovery software.

MEMORY

Standard
DDR3L PC3-12800 SDRAM (1600 MHz)
One SODIMM slot supporting dual-channel memory plus 4 GB soldered down
4 GB and 8 GB SODIMMs

Maximum
Upgradeable to 12288 MB with optional 8192 MB SODIMM in slot 1 and 4096 MB soldered down
Dual-channel
Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.

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

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

Wireless
Support for a broad range of secure, integrated wireless LAN and wireless WAN options featuring support for the latest industry standards. Broadband Wireless (WWAN) requires a Windows operating system and is available in select countries as a standard, factory configurable feature only. Integrated Bluetooth is also available as both a factory configurable and after-market option and can be combined with any of the supported wireless LAN and wireless WAN options.

Broadband Wireless (WWAN)
HP hs3110 HSPA+ Mobile Broadband*
HP lt4111 LTE/EV-DO/HSPA+ Mobile Broadband Module*,**,*** (US)
HP lt4112 LTE/HSPA+ Mobile Broadband Module*,**,*** (EMEA, APJ)

Wireless LAN (WLAN)
Intel Dual Band Wireless-AC 7260 802.11 ac (2x2) WiFi + BT 4.0 combo****,*****
Intel Dual Band Wireless-N 7260AN 802.11 a/b/g/n (2x2) WiFi + BT 4.0 combo****
Intel Dual Band Wireless-N 7260NB 802.11 a/b/g/n (2x2) WiFi****

* WWAN module available as AMO in May 2014. All WWAN modules listed are available preconfigured. Only the HP lt4112 LTE/HSPA+ Mobile Broadband Module is sold separately as an optional feature. WWAN use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE is not available in all regions and requires Windows.

** 4G LTE not available on all products, in all regions and only available on products featuring Intel processors.

*** Sold separately or as an optional feature.

****WLAN is an optional feature. Wireless access point and Internet service is required and is not included. 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.

Communications
QuickSpecs

Features

Integrated Intel 1218LM Gigabit* Network Connection (vPro configurations)
* The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

AUDIO/MULTIMEDIA

Audio
DTS Studio Sound
Integrated stereo speakers
Integrated microphone (dual-microphone array)
Buttons for volume up and down
Headphone/microphone combo jack

Webcam
Integrated 720p HD webcam

- HD format (widescreen)
- Supports videoconferencing and still image capture
- High quality fixed focus lens
- Video capture at various resolutions up to 1280x720 resolution (720p) and up to 30fps
- M-JPEG compression supports higher frame rates for video capture and videoconferencing
- Improved low light sensitivity
- Improved dynamic range

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard
The HP backlit, spill-resistant keyboard is designed using a thin layer of Mylar film under the keyboard and a drain system that funnels fluid through a hole in the bottom of the notebook. This minimizes the risk of damage to sensitive components underneath. The 101/102-key compatible keyboard features an industry standard, full-pitch key layout with desktop keyboard features, such as the isolated inverted-T cursor control keys, editing keys, both left and right control and alt keys, and 12 function keys. U.S. and International key layouts are available. Other features include an integrated numeric keypad, hotkeys for instant access to power conservation, brightness, and other features, 19 mm x 19 mm key pitch (center-to-center spacing), 2.0 mm stroke, and comfort-dished keycaps.

Pointing Devices
Clickpad image sensor

Buttons and Function Keys

Function keys are:
F1 - Ambient Light Sensor
F2 - Battery Gauge
F3 - Sleep
F4 - Display Switching
F5 - Speaker Mute
F6 - Volume Down
F7 - Volume Up
F8 - mic mute
F9 - Brightness Down
F10 - Brightness Up
F11 - Backlit keyboard
QuickSpecs

HP EliteBook Revolve 810 G2

Features

F12 - WiFi toggle

SENSORS

Accelerometer
Compass
Ambient Light Sensor
Near Field Communication (NFC)

SOFTWARE AND SECURITY

Preinstalled Software with Windows Operating System

Security
HP Client Security (incl. Cred Mgr and Password Mgr)
HP Drive Encryption²
HP Device Access Manager with Just In Time Authentication
HP File Sanitizer
HP Trust Circles Standard³
Absolute Data Protect
Computrace¹
Microsoft Defender
Microsoft Security Essentials⁴
Privacy Manager (Web only)
Validity Fingerprint Driver
HP BIOS with Sure Start⁵

BIOS Features
HP Sure Start⁵
HP BIOS Protection⁶ (Follow NIST 800-147, 155 Guidelines)
HP Automatic Drive Lock
HP DriveLock
HP SpareKey⁸
Update via Network
Power On Authentication
Pre-Boot Security
HP Disk Sanitizer² (Not for SSD)
Master Record Security (backup/restore)
Secure Erase⁹ (SSD & HDD)
Measured Boot
Hybrid Boot
Secure Boot
Absolute Persistence Module (for all Absolute products)¹

HP Value Add
HP Cement
Digital ENERGY STAR® Logo W8
Getting Started with Windows 8
HP 3D DriveGuard
HP ePrint Driver¹⁰
HP Firmware & Driver Installer
HP Hotkey Support
HP Manageability
HP PageLift App
HP PageLift Desktop App
QuickSpecs

HP EliteBook Revolve 810 G2

Features

- HP Performance Advisor
- HP Quick Start
- HP Recovery Manager
- HP Registration App
- HP Remote Graphics
- HP Setup
- HP Software Setup
- HP Support Assistant
- HP Recovery Disc Creator (HPRDC)
- HP WallPaper
- Internet Explorer 9
- Internet Explorer 10
- IE Home
- System Default Settings for Win8
- UEFI System Diagnostics W8
- Wireless Button Driver

3rd Party

- Adobe® Flash Player (Commercial)
- Amazon Kindle App
- PDF Complete, Corporate Edition
- Box.Net (UK only)
- Box 50GB CMIT Cloud Offer
- BTB Host and ISP Stub
- BTB Host End Block
- Bing Search for IE9
- Bing Search for IE10
- Netflix App
- Skype Desktop App
- Skype App
- Microsof®t Products

1 The Absolute Persistence agent is shipped turned off, and is activated with customer purchase of a subscription. Service may be limited. Check with Absolute for availability outside the U.S. The optional subscription service of Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: http://www.absolute.com/company/legal/agreements/computrace-agreement. If Data Delete is utilized, the Recovery Guarantee payment is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either create a PIN or purchase one or more RSA SecurID tokens from Absolute Software. Requires Windows. Data is protected prior to Drive Encryption login. Turning the PC off or into hibernate logs out of Drive Encryption and prevents data access. Drive encryption planned to be available in October 2013.

2 HP Trust Circles Standard, when included, allows up to 5 Trust Circles with up to 5 contacts in each Trust Circle. Requires Windows.

3 HP Trust Circles Professional required for unrestricted number of Trust Circles and members contacts. Trust Circles Reader is available to allow a contact to participate in an invited Trust Circle. Requires Windows.

4 Opt in and internet connection required for updates.

5 HP Sure Start is available only on EliteBook 800 and Workstation ZBook series products. HP Tools partition with HP BIOS required for automatic recovery.

6 May require a manual recovery step for recovery if all copies of BIOS are compromised or deleted.

7 For the use cases outlined in the DOD 5220.22-M Supplement. Does not support Solid State Drives (SSDs). Initial setup required. Web history deleted only in Internet Explorer and Firefox browsers and must be user enabled.

8 Requires initial user set up.

9 For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.

10 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.

11 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.

12 Lync software is sold separately. Requires internet access.

Security

Standard
Common Criteria EAL4+ Augmented Certified Discrete TPM 1.2 Embedded Security Chip
Security lock slot
HP Sure Start
HP BIOS (BIOS Protection)\(^8\)
Secure Erase\(^1\)
Computrace Persistence\(^2\)
DriveLock and Automatic DriveLock
Preboot Security
Master Boot Record recovery (Windows 7 only)
HP Client Security Software:

- Drive Encryption
- Credential Manager
- Password Manager
- Absolute Data Protect (Windows 8 and 8.1 only)\(^6\)
- Computrace (Windows 7 only)\(^7\)
- Face Recognition\(^6\)
- One Step Logon
- SpareKey\(^3\)

Device Access Manager with Just In Time Authentication
Embedded Security (Windows 7 only)
Privacy Manager (Windows 7 only)
Microsoft Security Essentials (Windows 7 only)\(^4\)
DigitalPass (Windows 7 only)
Central Management capable\(^5\)

Optional
HP Combo Lock

1 For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.
2 Computrace agent is shipped turned off, and must be activated by customers when they purchase a subscription. Subscriptions can be purchased for terms ranging for multiple years. Service is limited, check with Absolute for availability outside the U.S.
3 Requires initial user setup.
4 Opt-in and Internet connection required for updates
5 In order to deploy and receive updated policies, the client needs to be connected to the network server and requires separately purchased DigitalPersona Pro software. System access may not prevent users from logging into the system on the first attempt if policy updates haven't yet been received and applied.
6 HP Revolve with Windows 8 and 8.1 includes includes a 4 year license of Absolute Data Protect to locate your device, lock and prevent unauthorized access and remotely delete personal data. See http://www.absolute.com/landing/2012/computrace-hp for complete details. Absolute Data Protect agent is shipped turned
QuickSpecs

HP EliteBook Revolve 810 G2

Features

off, and must be activated by customers. Service may be limited, check with Absolute for availability outside the U.S. The optional subscription service of Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: [http://www.absolute.com/company/legal/agreements/computrace-agreement](http://www.absolute.com/company/legal/agreements/computrace-agreement). If Data Delete is utilized, the Recovery Guarantee payment is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either create a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

7 HP Revolve with Windows 7 includes the Computrace agent, shipped turned off, and is activated with customer purchase of a subscription. Service may be limited. Check with Absolute for availability outside the U.S. The optional subscription service of Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: [http://www.absolute.com/company/legal/agreements/computrace-agreement](http://www.absolute.com/company/legal/agreements/computrace-agreement). If Data Delete is utilized, the Recovery Guarantee payment is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either create a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

8 May require a manual recovery step for recovery if all copies of BIOS are compromised or deleted.


Management

LANDesk Management Suite (optional)¹ ²
LANDesk Security Suite (optional)¹ ²
HP System Software Manager (available at no charge as a download from the web)
HP Softpaq Download Manager (available at no charge as a download from the web)
¹ Sold separately or as an optional feature.
² LANDesk software is sold separately. Managed devices must be connected to the management server. Location based functionality requires active LANDesk maintenance service. Wipe functionality performs a “Windows 8 Reset” and requires Windows 8. Lock performs a Windows “Lock Computer.”

POWER

Power Supply

External HP 45W Slim Smart AC Adapter
External 65W EM Smart AC Adapter (Asia, PRC, India only)
Power cord is configurable; either 3.2 feet or 6 feet (1.0 or 1.8 meter)

Primary Battery

HP 6-cell polymer long life (44WHr)

Battery Life

HP 6-cell polymer long life battery (44WHr) Up to 10 Hours 45 minutes*

System Standby Time

Up to 137 hours

Power Conservation

Supports enhanced Intel SpeedStep technology (allows Battery Optimized Mode, Maximum Performance Mode, or Automatic mode)
Intel Display Power Saving technology
Hibernation
Standby
ACPI compliance

* Windows 7 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.
QuickSpecs

Features

ENVIRONMENTAL
- US ENERGY STAR®
- IT ECO declaration
- EPEAT® Gold registered in the U.S. (with Microsoft OS). EPEAT status varies by country- please see epeat.net for registration status in your country.
- US Federal Energy Management Program (FEMP)

WEIGHTS & DIMENSIONS
Weight
Starting at 3.08 lb (1.40 kg) (weight will vary by configuration)
Dimensions (w x d x h)
8.34 x 11.22 x 0.80 in (at front) / 212 x 285 x 22.2 mm (at front)

NOTE: Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components. Weight includes 6-cell battery, lightest SSD, and 1 SODIMM.

PORTS/SLOTS
Ports
DisplayPort – One (v1.2)
Stereo headphone/microphone combo jack – One
Power Connector – One
Side Docking Connector – One
RJ-45 (Ethernet) – One
USB 3.0 – One
USB 3.0 Charging – One

Digital Media Slots
microSD Media Reader Slot - supports SD, SDHC, SDXC

SERVICE AND SUPPORT
Limited, 90-day warranty, depending on country); 1 and 3 year limited warranty options available. 3-year limited warranty on battery. Optional HP Care Pack Services are extended service contracts which go beyond your standard warranties. For more details visit: 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
SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)

Nominal Operating Voltage

Average Operating Power 10.2 W
Max Operating Power < 45 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 Gold**
ICES Yes
Australia / NZ A-Tick Compliance Yes
CCC Yes
Japan VCCI Compliance Yes
KC Yes
BSMI Yes
CE Marking Compliance Yes
BNCEI or BELUS Yes
CIT Yes
GOST Yes
Saudi Arabian Compliance (ICCP) Yes
SABS Yes
UKR SERTCOMPUTER Yes

* Configurations of the HP EliteBook Revolve 810 G2 that are ENERGY STAR qualified are identified as HP EliteBook Revolve 810 G2 ENERGY STAR on HP websites and on www.energystar.gov.
** EPEAT® Gold registered in the U.S. See www.epeat.net for registration status by country.

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

DISPLAYS
### Technical Specifications

**11.6-inch diagonal LED HD (1366 x 768)**

- **Active Area**: 9.88 x 5.67 in (25.61 x 14.40 cm)
- **Dimensions (W x H)**: 11.53 x 6.49 in (29.3 x 16.5 cm)
- **Diagonal Size**: 11.6 in (29.46 cm)
- **Contrast Ratio**: 300:1 (typical)
- **Refresh Rate**: 60 Hz
- **Brightness**: 400 nit (typical)
- **Pixel Resolution Format**: 1366 x 768
- **Backlight Configuration**: RGB Stripe
- **Viewing Angle**: 40/40/15/30 (Left/Right/Down/Up) (typical)

### STORAGE AND DRIVES

**Internal Storage**

- **128 GB* M.2 Solid State Drive**
  - **Drive Weight**: Up to 10 grams
  - **Capacity**: 128 GB
  - **Height**: 0.091 in (2.3 mm)
  - **Width**: 0.87 in (22 mm)
  - **Interface**: SATA 3 (6 Gb/s)
  - **Performance Maximum Sequential Read**: Up to 500 MB/s
  - **Performance Maximum Sequential Write**: Up to 300 MB/s
  - **Logical Blocks**: 250,069,680
  - **Operating Temperature**: 32° to 158°F (0° to 70°C) [case temp]
  - **Features**: ATA Security; ATA-8; SATA 3.0; DIPM; TRIM

- **180 GB* M.2 Solid State Drive**
  - **Drive Weight**: Up to 10 grams
  - **Capacity**: 180 GB
  - **Height**: 0.091 in (2.3 mm)
  - **Width**: 0.87 in (22 mm)
  - **Interface**: SATA Gen 3 (6 Gb/s)
  - **Performance Maximum Sequential Read**: Up to 510 MB/s
  - **Performance Maximum Sequential Write**: Up to 470 MB/s
  - **Logical Blocks**: 351,651,888
  - **Operating Temperature**: 32° to 158°F (0° to 70°C) [case temp]
  - **Features**: ATA Security; ATA-8, SATA 3.0; DIPM; TRIM
  - **Security Features**: TCG Opal 1 compliant

- **256 GB* M.2 Solid State Drive**
  - **Drive Weight**: Up to 10 grams
  - **Capacity**: 256 GB
  - **Height**: 0.091 in (2.3 mm)
  - **Width**: 0.87 in (22 mm)
  - **Interface**: SATA Gen 3 (6 Gb/s)
  - **Performance Maximum Sequential Read**: Up to 510 MB/s
  - **Performance Maximum Sequential Write**: Up to 465 MB/s
  - **Logical Blocks**: 500,118,192

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*Note: *M.2 Solid State Drive capacities are approximate and may vary based on product configuration and usage.
## Technical Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>32° to 158°F (0° to 70°C) [case temp]</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>ATA Security; ATA-8, SATA 3.0; DIPM; TRIM</td>
</tr>
<tr>
<td><strong>Security Features</strong></td>
<td>TCG Opal 2 compliant</td>
</tr>
</tbody>
</table>

### 180 GB* M.2 SED Solid State Drive

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive Weight</strong></td>
<td>10 Grams</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>180 GB</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>0.091 in (2.3 mm)</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>0.87 in (22 mm)</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>SATA 3 (6 Gb/s)</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Sequential Read</strong></td>
<td>Up to 540 MB/s</td>
</tr>
<tr>
<td><strong>Maximum Sequential Write</strong></td>
<td>Up to 490 MB/s</td>
</tr>
<tr>
<td><strong>Logical Blocks</strong></td>
<td>351,651,888</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>32° to 158°F (0° to 70°C) [case temp]</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>ATA Security; ATA-8, SATA 3.0; DIPM; TRIM; TCG Opal 1.0</td>
</tr>
</tbody>
</table>

* For solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 16 GB (for Windows 7) and 30 GB (for Windows 8.1) of system disk is reserved for the system recovery software.

## NETWORKING/COMMUNICATIONS

### Intel® 82579LM Gigabit Network Connection

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethernet Features</strong></td>
<td>10 Mbit/s operation (10BASE-T; IEEE 802.3; IEEE 802.3 clauses 13-14)</td>
</tr>
<tr>
<td><strong>Power Management</strong></td>
<td>ACPI compliant - multiple power modes</td>
</tr>
<tr>
<td><strong>Performance Features</strong></td>
<td>TCP/IP/UDP Checksum Offload (configurable)</td>
</tr>
<tr>
<td><strong>Manageability</strong></td>
<td>Wake-on-LAN from standby and hibernation (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only)</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>PCI Express 1.1 x1 to fully support ASPM L0s/L1 and CLKREQ.</td>
</tr>
</tbody>
</table>

- TCP/IP/UDP Checksum Offload (configurable)
- Protocol Offload (ARP & NS)
- Large send offload and Giant send offload
- Receiving Side Scaling
- MACSec Offload (802.3ae)
- Intel vPro
- iSCSI Boot
- 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
- 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

---

For solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 16 GB (for Windows 7) and 30 GB (for Windows 8.1) of system disk is reserved for the system recovery software.
NOTE: Intel 82579 PCIe interface is not PCIe compliant. It operates at half of PCIe specification V1.1 (2.5GT/S) speed.

**NIC Device Driver Name**

Intel 82579LM/82579V Ethernet Network Connection

**HP hs3110/3114 HSPA+ Mobile Broadband Module**

**Technology/Operating bands**

Modes: WCDMA/HSDPA/HSUPA/HSPA+/AWS/GSM/EDGE/GPRS

Penta-band WCDMA/HSDPA/HSUPA/HSPA+/AWS:

- 850/900/1900/2100/AWS MHz
- GSM/GPRS/EDGE: 850/900/1800/1900 MHz

**Wireless protocol standards**

GSM/GPRS/EDGE: Class B, Multi-slot class 33, coding schemes CS1 - CS4 and MSC1 - MSC9.

UMTS/WCDMA: Release 99 and Release 7

Advanced Receiver Type 3i

**GPS**

GPS Standalone, A-GPS: L1 (Internet- and Network assisted)

**Wireless parametric standards**

Complies with 3GPP specifications

**Maximum data rates**

GPRS/EDGE: Multi-slot Class 33, Class B

WCDMA PS: UL (384 kbps) / DL (384 kbps)

UL/DL HSPA: UL (5.76 Mbps)/ DL (7.2 Mbps)

UL/DL HSPA+: UL (5.76 Mbps)/ DL (21Mbps)

**Maximum output power**

WCDMA/HSPA/HSPA+ 2100/1900/900/850/AWS MHz:

- +24dBm (Power Class 3)
- GPRS 1900/1800 MHz: +30dBm (Power Class 1)
- GPRS 900/850 MHz: +33dBm (Power Class 4)
- EDGE 1900/1800 MHz: +26dBm (Power Class E2)
- EDGE 900/850 MHz: +27dBm (Power Class E2)

**Maximum power consumption**

2500mA (peak); 600mA (average)

**Power consumption, sleep mode**

3.6 mA

**Power management**

USB selective suspend, Connected Standby

Integrated notebook wireless button

**Antenna type**

Dual high efficiency 5 band antennae with spatial diversity, mounted in the display enclosure

**Form Factor**

M.2 Socket 2, USB 2.0 interface high speed

**Weight**

<6 g

**Dimensions**

(Length x Width x Thickness)

2.01 x 1.18 x 0.18 in (42 x 30 x 2.3 mm)

**SIM card supply voltage**

1.8 V/3.0 V UICC (SIM/UICC/USIM)

**Voltage, Operating**

3.135V~4.4V (3.3 V recommended)

**Temperature, operating**

14° to 131° F (-10° to 55° C) (Normal operation)

-4° to 158° F (-20° to 70° C) (Extended operation)

**Temperature, storage**

-40° to 185° F (-40° to 85° C)

**Humidity**

5% to 95%

**Configuration utilities**

HP Connection Manager

**LED activity**

LED Off - Radio Off; Solid LED On - Radio On
## Technical Specifications

<table>
<thead>
<tr>
<th>HP lt4111 LTE/EV-DO/HSPAP+ 4G WWAN*</th>
<th>Technology/Operating Bands</th>
<th>Worldwide — April 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LTE Technology/Operating Bands</strong></td>
<td>LTE FDD all bands with diversity: 1900 MHz (Band II), 1700/2100 MHz (Band IV (AWS), 850 MHz (Band V), 700 MHz (Band XIII), 700 MHz (Band XVIII), 1900 MHz G Block (Band XXV)</td>
<td></td>
</tr>
<tr>
<td><strong>Wireless Protocol Standards</strong></td>
<td>WCDMA/HSDPA/HSUPA/HSPA+/ all bands with diversity: 2100 MHz (Band I), 1900 MHz (Band II), AWS 1700/2100 MHz (Band IV), 850 MHz (Band V), 800 MHz (Band VIII)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>3GPP Release 8 LTE Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Data Rates</strong></td>
<td>EVDO Release 0 and Release A</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>Complies with 3GPP specifications Release 8 for LTE</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Output Power</strong></td>
<td>3GPP Release 8 LTE Specification</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>EVDO Release 0 and Release A</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Data Rates</strong></td>
<td>1575.42 MHz (± 1.023 MHz), GLONASS 1596-1607 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>LTE (Category 3): 100 Mbps (Download), 50Mbps (Upload)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload)</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Power Consumption</strong></td>
<td>HSPA+: 21.6 Mbps (Download), 5.76 Mbps (Upload)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>EDGE: 236.8 kbps (Download), 236.8 kbps (Upload)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>GPRS: 85.6 kbps (Download), 85.6 kbps (Upload)</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Output Power</strong></td>
<td>LTE: +23 dBm (+/- 1 dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>WCDMA: +23 dBm (+/- 1 dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>GSM850/900, GMSK: +32dBm (+/- 1dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Power Consumption</strong></td>
<td>GSM850/900, 8PSK: +27dBm (+/- 1dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>DCS1800 / PCS 1900, GMSK: +29dBm (+/- 1dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>DCS1800 / PCS 1900, 8PSK: +26dBm (+/- 1dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Output Power</strong></td>
<td>LTE: +23 dBm (+/- 1 dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>CDMA: +24dBm (+/- 1dBm)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>1575.42 MHz (± 1.023 MHz), GLONASS 1596-1607 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Power Consumption</strong></td>
<td>LTE: 1,200 mA (peak); &lt;900 mA (average)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>WCDMA: 1,100 mA (peak); &lt;800 mA (average)</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>EGPRS: 2,500 mA (peak); &lt;700 mA (average)</td>
<td></td>
</tr>
<tr>
<td><strong>Power Consumption, Sleep Mode</strong></td>
<td>2 mA</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>USB selective suspend, Integrated notebook wireless button</td>
<td></td>
</tr>
<tr>
<td><strong>GPS Bands</strong></td>
<td>Dual high efficiency multi-band antennae with spatial diversity</td>
<td></td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>M.2, 3042-53 Key B</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>6 g</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions (Length x Width x Thickness)</strong></td>
<td>42 mm x 30 mm x 2.3 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Voltage, Operating</strong></td>
<td>3.135 V to 4.4 V (3.3 V +1.1V/-0.165V)</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature, Operating</strong></td>
<td>-13° to 140° F (-25° to 60° C)</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature, Non-operating, 96 hours</strong> (from MIL-STD 202 Method 108)</td>
<td>-40° to 185° F (-40° to 85° C)</td>
<td></td>
</tr>
<tr>
<td><strong>Humidity, Non-operating</strong></td>
<td>95% relative humidity for 48 hours @ 185° F (85° C) (non-condensing)</td>
<td></td>
</tr>
<tr>
<td><strong>LED Activity</strong></td>
<td>LED Off - Radio Off; Solid LED On - Radio On</td>
<td></td>
</tr>
</tbody>
</table>

1. 1900 MHz (Band II) and 850 MHz (Band V) not supported at launch but support planned in a future firmware update.

* 4G LTE not available on all products, in all regions and only available on products featuring Intel processors. WWAN use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location.
## QuickSpecs

### HP EliteBook Revolve 810 G2

#### Technical Specifications

**HP lt4112 LTE/HSPA+ Gobi 4G Module**

<table>
<thead>
<tr>
<th>Technology/Operating Bands</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTE FDD all bands with diversity: 2100 MHz (Band I), 1900 MHz (Band II), 1800 MHz (Band III), 850 MHz (Band V), 2600 MHz (Band VII), 900 MHz (Band VIII), 800 MHz (Band XX, DD800)</td>
<td><strong>Worldwide</strong> — April 2014</td>
</tr>
<tr>
<td>WCDMA/HSDPA/HSUPA/HSPA+ all bands with diversity: 2100 MHz (Band I), 1900 MHz (Band II), 800 MHz (Band V), 900 MHz (Band VIII)</td>
<td><strong>Page 19</strong></td>
</tr>
<tr>
<td>GSM/GPRS/EDGE: 1900 MHz (Band I), 1800 MHz (Band III), 850 MHz (Band V), 900 MHz (Band VIII)</td>
<td></td>
</tr>
</tbody>
</table>

**Wireless Protocol Standards**

- 3GPP Release 8 LTE Specification
- WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification
- Complies with 3GPP specifications Release 8 for LTE

**Wireless Parametric Standards**

- LTE (Category 3): 100 Mbps (Download), 50Mbps (Upload)
- DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload)
- HSPA+: 21.6 Mbps (Download), 5.76 Mbps (Upload)
- EDGE: 236.8 kbps (Download), 236.8 kbps (Upload)
- GPRS: 85.6 kbps (Download), 85.6 kbps (Upload)

**Maximum Output Power**

- LTE: +23 dBm (+/- 2 dBm)
- WCDMA: +23.5 dBm (+/- 1 dBm)
- GPRS Band II, III: +29.5 dBm (+/- 1 dBm)
- GPRS Band V, VIII: +32.5 dBm (+/- 1 dBm)
- EGPRS Band II, III: +26.5 dBm (+/- 1.5 dBm)
- EGPRS Band V, VIII: +27.5 dBm (+/- 1.5 dBm)

**Maximum Power Consumption**

- LTE: 1,200 mA (peak); <900 mA (average)
- WCDMA: 1,100 mA (peak); <800 mA (average)
- EGPRS: 2,800 mA (peak); <700 mA (average)

**Power Consumption, Sleep Mode**

- 3 mA

**Power Management**

- USB selective suspend, Integrated notebook wireless button

**Antenna Type**

- Dual high efficiency multi-band antennae with spatial diversity

**Form Factor**

- M.2, USB 2.0 interface

**Weight**

- 6 g

**Dimensions**

- (Length x Width x Thickness) 42 mm × 30 mm × 2.3 mm

**Voltage, Operating**

- 3.135 V to 4.4 V (3.3 V +1.1V/-0.165V)

**Temperature, operating**

- 14° to 131° F (-10° to 55° C)

**Temperature, non-operating, 96 hours**

- -40° to 185° F (-40° to 85° C)

**Humidity, Non-operating**

- 95% relative humidity for 48 hours @ 185° F (85° C) (non-condensing)

**LED Activity**

- LED Off - Radio Off; Solid LED On - Radio On

*4G LTE not available on all products or in all regions. WWAN use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors.*

---

**Intel Dual Band Wireless- N 7260AN 802.11 a/b/g/n (2x2) WiFi + Bluetooth 4.0 Combo Adaptor**

<table>
<thead>
<tr>
<th>Standards</th>
<th>IEEE 802.11a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IEEE 802.11b</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.11g</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.11n</td>
</tr>
</tbody>
</table>
### Interoperability
Wi-Fi certified

### Frequency Band
- **802.11b/g/n**: 2.402 - 2.482 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

### Antenna Structure
2 transmit; 2 receive (2x2)

### Data Rates
- **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.

### Modulation
Direct Sequence Spread Spectrum
- CCK, BPSK, QPSK, 16-QAM, 64-QAM

### Security
- IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only
- AES-CCMP: 128 bit in hardware
- 802.1x authentication
- WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.
- WPA2 certification
- IEEE 802.11i
- Cisco Certified Extensions, all versions through CCX4 and CCX Lite
- WAPI

### Sub-channels
Multinational support with frequency bands and channels compliant to local regulations.

### Network Architecture
- **Ad-hoc (Peer to Peer)**
- **Infrastructure (Access Point Required)**

### Roaming
IEEE 802.11 compliant roaming between band Access Points

### Output Power
- **2.4G**: +13.5dBm minimum
- **5G**: +12dBm minimum

### Power Consumption
- Transmit: 2.0 Watts
- Receive: 1.6 Watts
- Idle mode:\(^1\): 250 mW (WLAN Associated)
- Idle mode:\(^2\): 100 mW (WLAN unassociated)
- Radio off: 75 mW

### Power Management
ACPI and PCI Express compliant power management
- 802.11 compliant power saving mode

### Receiver Sensitivity
- **802.11g**: -90 dBm (6 Mbps), -89 dBm (9 Mbps), -87 dBm (12 Mbps), -85 dBm (18 Mbps), -82 dBm (24 Mbps), -79 dBm (36 Mbps), -76 dBm (48 Mbps), -74 dBm (54 Mbps)
- **802.11b**: -95 dBm (1 Mbps), -93 dBm (2 Mbps), -91 dBm (5.5 Mbps), -88 dBm (11 Mbps)
- **802.11a**: -90 dBm (6 Mbps), -89 dBm (9 Mbps), -87 dBm (12 Mbps), -85 dBm (18 Mbps), -82 dBm (24 Mbps), -79 dBm (36 Mbps), -76 dBm (48 Mbps), -74 dBm (54 Mbps)
### HP EliteBook Revolve 810 G2

**Technical Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.11n</td>
<td>69 dBm (150 Mbps), -66 dBm (300 Mbps)</td>
</tr>
<tr>
<td><strong>Antenna Connections</strong></td>
<td>2 U.FL type connectors (output impedance of 50 ± 2 ohms)</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>PCI-Express Half-MiniCard</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>0.12 x 1.06 x 1.18 in (3.1 x 26.8 x 30.0 mm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>3.1g</td>
</tr>
<tr>
<td><strong>Operating Voltage</strong></td>
<td>3.3v +/- 9%</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>Operating: 14° to 158° F (-10° to 70° C)</td>
</tr>
<tr>
<td></td>
<td>Non-operating: -40° to 176° F (-40° to 80° C)</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>Operating: 10% to 90% (non-condensing)</td>
</tr>
<tr>
<td></td>
<td>Non-operating: 5% to 95% (non-condensing)</td>
</tr>
<tr>
<td><strong>Altitude</strong></td>
<td>Operating: 0 to 10,000 ft (3,048 m)</td>
</tr>
<tr>
<td></td>
<td>Non-operating: 0 to 50,000 ft (15,240 m)</td>
</tr>
<tr>
<td><strong>LED Activity</strong></td>
<td>LED Off - Radio OFF; Solid LED On - Radio ON</td>
</tr>
<tr>
<td><strong>1.</strong></td>
<td>Check latest software/driver release for updates on supported security features.</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>Maximum output power may vary by country according to local regulations.</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>In Power Save Polling mode and on battery power.</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>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).</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>HP Integrated Module with Bluetooth 4.0+EDR Wireless Technology</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bluetooth Specification</strong></td>
<td>4.0+EDR Compliant</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>1.18 x 0.26 x 0.13 in (30 x 6.5 x 3.25 mm)</td>
</tr>
<tr>
<td><strong>Frequency Band</strong></td>
<td>2402 to 2480 MHz</td>
</tr>
<tr>
<td><strong>Number of Available Channels</strong></td>
<td>79 (1 MHz) available channels</td>
</tr>
<tr>
<td><strong>Data Rates and Throughput</strong></td>
<td>3 Mbps data rate; throughput up to 2.17 Mbps</td>
</tr>
<tr>
<td></td>
<td>Synchronous Connection Oriented links up to 3, 64 kbps, voice channels</td>
</tr>
<tr>
<td></td>
<td>Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric or 1306.9 kbps symmetric</td>
</tr>
<tr>
<td><strong>Transmit Power</strong></td>
<td>-1.5 dBm to 4 dBm (Bluetooth Class II)</td>
</tr>
<tr>
<td><strong>Receiver Sensitivity</strong></td>
<td>Better than -20 dBm at 0.1 % raw bit error rate</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>Peak (Tx) 264 mW</td>
</tr>
<tr>
<td></td>
<td>Peak (Rx) 231 mW</td>
</tr>
<tr>
<td></td>
<td>Sleep &lt;1 mW</td>
</tr>
<tr>
<td><strong>Antenna</strong></td>
<td>Internally integrated within module</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>Up to 33 ft (10 m)</td>
</tr>
<tr>
<td><strong>Electrical Interface</strong></td>
<td>USB 2.0 compliant</td>
</tr>
<tr>
<td><strong>Bluetooth Software Supported</strong></td>
<td>Broadcom Bluetooth for Windows</td>
</tr>
<tr>
<td></td>
<td>Microsoft Windows Bluetooth Software</td>
</tr>
<tr>
<td><strong>Link Topology</strong></td>
<td>Point to Point, Multipoint Pico Nets up to 7 slaves</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Full support of Bluetooth Security Provisions</td>
</tr>
<tr>
<td><strong>Power Management</strong></td>
<td>Microsoft Windows ACPI, and USB Bus Support</td>
</tr>
<tr>
<td></td>
<td>Self configurable to optimize power conservation in all operating modes,</td>
</tr>
<tr>
<td></td>
<td>including Standby, Hold, Park, and Sniff</td>
</tr>
</tbody>
</table>
### Technical Specifications

#### 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
<table>
<thead>
<tr>
<th>Profile</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Port Profile (SPP)</td>
<td>1</td>
</tr>
<tr>
<td>Service Discovery Application Profile (SDAP)</td>
<td></td>
</tr>
<tr>
<td>Dial-Up Networking (DUN)</td>
<td>1, 2</td>
</tr>
<tr>
<td>Generic Object Exchange Profile (GOEP)</td>
<td>1, 2</td>
</tr>
<tr>
<td>Object Push Profile (OPP)</td>
<td>1, 2</td>
</tr>
<tr>
<td>File Transfer Profile (FTP)</td>
<td></td>
</tr>
<tr>
<td>Synchronization Profile (SYNC)</td>
<td></td>
</tr>
<tr>
<td>Hard Copy Cable Replacement (HCRP)</td>
<td>1, 2</td>
</tr>
<tr>
<td>Personal Area Networking Profile (PAN)</td>
<td>1, 2</td>
</tr>
<tr>
<td>Human Interface Device Profile (HID)</td>
<td>1, 2</td>
</tr>
<tr>
<td>FAX Profile (FAX)</td>
<td></td>
</tr>
<tr>
<td>Basic Imaging Profile (BIP)</td>
<td>2</td>
</tr>
<tr>
<td>Headset Profile (HSP)</td>
<td></td>
</tr>
<tr>
<td>Hands Free Profile (HFP)</td>
<td></td>
</tr>
<tr>
<td>Advanced Audio Distribution Profile (A2DP)</td>
<td></td>
</tr>
</tbody>
</table>

1. indicates the profile is supported by Microsoft Windows XP SP2
2. indicates the profile is part of Windows Vista

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

#### Intel Dual Band Wireless-AC 7260 802.11 ac (2x2)
WiFi + BT 4.0 combo Adapter*

#### Wireless LAN Standards
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n
- IEEE 802.11ac

#### Interoperability
- Wi-Fi certified

#### Frequency Band
- 802.11b/g/n
  - 2.402 - 2.482 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
  - 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
- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 802.11n: MCS0 – MCS 15, (20MHz, and 40MHz)
- 802.11ac : MCS0 – MCS9, (1SS, and 2SS) (20MHz, 40MHz, and 80MHz)

#### Modulation
- Direct Sequence Spread Spectrum
**QuickSpecs**

**QuickSpecs**

**Technical Specifications**

- **Security**:
  - IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only
  - AES-CCMP: 128 bit in hardware
  - 802.1x authentication
  - WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.
  - WPA2 certification
  - IEEE 802.11i
  - Cisco Certified Extensions, all versions through CCX4 and CCX Lite
  - WAPI

- **Network Architecture Models**
  - Network Architecture Models
  - Roaming: IEEE 802.11 compliant roaming between access points

- **Output Power**
  - 2.4G: +13.5dBm minimum
  - 5G: +12dBm minimum
  - Maximum output power must be able to achieve modular regulatory certification with notebooks that have antennas >20cm from the user and peak gain of +3dBi at 2.4GHz and +4dBi at 5GHz

- **Power Consumption**
  - Transmit: 2.0 W (max)
  - Receive: 1.6 W (max)
  - Idle mode (PSP): 250 mW (WLAN Associated)
  - Idle mode: 100 mW (WLAN unassociated)
  - Radio disabled: 75 mW

- **Power Management**
  - ACPI and PCI Express compliant power management
  - 802.11 compliant power saving mode

- **Receiver Sensitivity**
  - 802.11b: -95 dBm (1 Mbps), -93 dBm (2 Mbps), -91 dBm (5.5 Mbps), -88 dBm (11 Mbps)
  - 802.11a/g: -90 dBm (6 Mbps), -89 dBm (9 Mbps), -87 dBm (12 Mbps), -85 dBm (18 Mbps), -82 dBm (24 Mbps), -79 dBm (36 Mbps), -76 dBm (48 Mbps), -74 dBm (54 Mbps)
  - 802.11n: -69 dBm (72.2 Mbps), -66 dBm (300 Mbps)

- **Antenna type**
  - High efficiency antenna with spatial diversity, mounted in the display enclosure
  - Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications

- **Form Factor**
  - PCI-Express Half-MiniCard

- **Dimensions**
  - 0.19 x 1.06 x 1.18 in (4.75 x 26.8 x 30 mm)

- **Weight**
  - 3.1g

- **Operating Voltage**
  - 3.3v +/- 9%

- **Temperature**
  - Operating: 14° to 158° F (-10° to 70° 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 - 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.
Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).

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 |

<table>
<thead>
<tr>
<th>Bluetooth Software Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcom Bluetooth for Windows</td>
</tr>
<tr>
<td>Microsoft Windows Bluetooth Software</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Bluetooth Profiles Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic Access Profile (GAP)</td>
</tr>
<tr>
<td>Service Discovery Application Profile (SDAP)</td>
</tr>
<tr>
<td>Serial Port Profile (SPP)</td>
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<td>Generic Object Exchange Profile (GOEP)</td>
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<tr>
<td>Personal Area Networking Profile (PAN)</td>
</tr>
<tr>
<td>Human Interface Device Profile (HID)</td>
</tr>
<tr>
<td>Generic Audio/Video Distribution Profile (GAVDP)</td>
</tr>
<tr>
<td>Advanced Audio/Video Distribution Profile (A2DP)</td>
</tr>
<tr>
<td>FAX Profile (FAX)</td>
</tr>
<tr>
<td>Basic Imaging Profile (BIP)</td>
</tr>
<tr>
<td>Headset Profile (HSP)</td>
</tr>
<tr>
<td>Hands Free Profile (HFP)</td>
</tr>
</tbody>
</table>
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. 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

Intel Dual Band Wireless-N 7260NB 802.11 a/b/g/n (2x2) WiFi Adapter*

| Wireless LAN Standards | IEEE 802.11a
|                        | IEEE 802.11b
|                        | IEEE 802.11g
|                        | IEEE 802.11n

Interoperability
Wi-Fi certified

Frequency Band
802.11b/g/n 2.402 - 2.482 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

Antenna Structure
2 transmit; 2 receive (2x2)

Data Rates
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.

Modulation
Direct Sequence Spread Spectrum
CCK, BPSK, QPSK, 16-QAM, 64-QAM

Security
- IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only
- AES-CCMP: 128 bit in hardware
- 802.1x authentication
- WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.
- WPA2 certification
- IEEE 802.11i
- Cisco Certified Extensions, all versions through CCX4 and CCX Lite
- WAPI

Sub-channels
Multinational support with frequency bands and channels compliant to local regulations.

Network Architecture
Ad-hoc (Peer to Peer)
Infrastructure (Access Point Required)

Roaming
IEEE 802.11 compliant roaming between band Access Points

Output Power
- 2.4G: +13.5dBm minimum
- 5G: +12dBm minimum

Power Consumption
Transmit: 2.0 Watts
Receive: 1.6 Watts
Idle mode\(^2\): 250 mW (WLAN Associated)
Idle mode: 100 mW (WLAN unassociated)
Radio off: 75 mW

Power Management
ACPI and PCI Express compliant power management
802.11 compliant power saving mode
# Technical Specifications

<table>
<thead>
<tr>
<th><strong>Receiver Sensitivity</strong>&lt;sup&gt;4&lt;/sup&gt;</th>
<th>802.11g: -90 dBm (6 Mbps), -89 dBm (9 Mbps), -87 dBm (12 Mbps), -85 dBm (18 Mbps), -82 dBm (24 Mbps), -79 dBm (36 Mbps), -76 dBm (48 Mbps), -74 dBm (54 Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>802.11b: -95 dBm (1 Mbps), -93 dBm (2 Mbps), -91 dBm (5.5 Mbps), -88 dBm (11 Mbps)</td>
</tr>
<tr>
<td></td>
<td>802.11g: -90 dBm (6 Mbps), -89 dBm (9 Mbps), -87 dBm (12 Mbps), -85 dBm (18 Mbps), -82 dBm (24 Mbps), -79 dBm (36 Mbps), -76 dBm (48 Mbps), -74 dBm (54 Mbps)</td>
</tr>
<tr>
<td></td>
<td>802.11n: -69 dBm (150 Mbps), -66 dBm (300 Mbps)</td>
</tr>
<tr>
<td><strong>Antenna Connections</strong></td>
<td>2 U.FL type connectors (output impedance of 50 ± 2 ohms)</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>PCI-Express Half-MiniCard</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>0.12 x 1.06 x 1.18 in (3.1 x 26.8 x 30.0 mm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>3.1g</td>
</tr>
<tr>
<td><strong>Operating Voltage</strong></td>
<td>3.3v +/- 9%</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>Operating: 14° to 158° F (-10° to 70° C); Non-operating: -40° to 176° F (-40° to 80° C)</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>Operating: 10% to 90% (non-condensing); Non-operating: 5% to 95% (non-condensing)</td>
</tr>
<tr>
<td><strong>Altitude</strong></td>
<td>Operating: 0 to 10,000 ft (3,048 m); Non-operating: 0 to 50,000 ft (15,240 m)</td>
</tr>
<tr>
<td><strong>LED Activity</strong></td>
<td>LED Amber – Radio OFF; Solid LED On - Radio ON</td>
</tr>
</tbody>
</table>

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. In Power Save Polling mode and on battery power.
4. 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).
5. 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.

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

## AUDIO/MULTIMEDIA

**Audio**

<table>
<thead>
<tr>
<th><strong>Audio</strong></th>
<th><strong>DTS Studio Sound</strong> (Windows OS only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware</strong></td>
<td><strong>Implementation</strong> IDT 92HD91 High Definition CODEC</td>
</tr>
<tr>
<td><strong>Function Key Volume Controls</strong></td>
<td>Volume up, volume down, and mute</td>
</tr>
<tr>
<td><strong>Mute Buttons</strong></td>
<td>Playback and Record mute buttons with LED indicator</td>
</tr>
<tr>
<td><strong>Full Duplex</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Microphone In</strong></td>
<td>Stereo</td>
</tr>
<tr>
<td><strong>Headphone/Line Out</strong></td>
<td>Stereo</td>
</tr>
<tr>
<td><strong>Integrated Microphone</strong></td>
<td>Yes, dual digital microphone array</td>
</tr>
<tr>
<td><strong>Audio Output Quality</strong></td>
<td>Frequency Response 20 Hz – 20 kHz</td>
</tr>
</tbody>
</table>
Signal to Noise Ratio: >85 dB
Total Harmonic Distortion: 0.01%
Noise Floor: -110 dB
Play/Record Sampling Rate(s): 8 kHz - 48kHz
DAC: 16, 20 or 24-bit
ADC: 16 or 20-bit

Integrated Stereo Speakers
Power Rating: 1 Watt
Impedance: 8 Ohms

POWER

HP 45W Slim Smart AC Adapter
Dimensions (H x W x D): 96.0 x 49.5 x 22.4 mm
Input: 90 to 265 VAC
Input Efficiency: 87% min at 115 VAC/230VAC
Input frequency range: 47 to 63 Hz
Input AC current: 1.4 A at 90 VAC and maximum load
Output: 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 7.4mm barrel type Smart ID DC connector
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 10,000 ft (0 to 2,000 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 Slim Smart AC Adapter EM
Dimensions (H x W x D): 126.0 x 50.0 x 30.0 mm
Input: 90 to 265 VAC
Input Efficiency: 87% min at 115 VAC/230VAC
Input frequency range: 47 to 63 Hz
Input AC current: 1.7 A at 90 VAC and maximum load
Output: Output power: 65W
DC output: 19.5V
Hold-up time: 5 msec at 115 VAC input
## QuickSpecs

### Technical Specifications

<table>
<thead>
<tr>
<th>Output current limit</th>
<th>&lt;11A, Over voltage protection- 29V max automatic shutdown</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector</strong></td>
<td>3 pin/grounded, mates with 7.4mm barrel type Smart ID DC connector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Environmental Design</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating temperature</strong></td>
<td>32° to 95° F (0° to 35° C)</td>
</tr>
<tr>
<td><strong>Non-operating (storage) temperature</strong></td>
<td>-4° to 121° F (-20° to 85° C)</td>
</tr>
<tr>
<td><strong>Altitude</strong></td>
<td>0 to 16,405 ft (0 to 5,000 m)</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>0% to 95%</td>
</tr>
<tr>
<td><strong>Storage Humidity</strong></td>
<td>0% to 95%</td>
</tr>
</tbody>
</table>

| **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 45W Slim Smart AC Adapter non-slim

<table>
<thead>
<tr>
<th><strong>Dimensions (H x W x D)</strong></th>
<th>95.0 x 40.0 x 26.5mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td>90 to 265 VAC</td>
</tr>
<tr>
<td><strong>Input Efficiency</strong></td>
<td>88% min at 115 VAC / 89% min at 230VAC</td>
</tr>
<tr>
<td><strong>Input frequency range</strong></td>
<td>47 to 63 Hz</td>
</tr>
<tr>
<td><strong>Input AC current</strong></td>
<td>1.4 A at 90 VAC and maximum load</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Output power</strong></td>
<td>45W</td>
</tr>
<tr>
<td><strong>DC output</strong></td>
<td>19.5V</td>
</tr>
<tr>
<td><strong>Hold-up time</strong></td>
<td>5 msec at 115 VAC input</td>
</tr>
<tr>
<td><strong>Output current limit</strong></td>
<td>&lt;8A, Over voltage protection- 29V max automatic shutdown</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>3 pin/grounded, mates with 7.4mm barrel type Smart ID DC connector</td>
</tr>
</tbody>
</table>

### 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

| **HP 45W Slim Smart AC Adapter non-slim** | 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 6-cell (44 WHr) Polymer Primary battery

<table>
<thead>
<tr>
<th><strong>Dimensions (H x W x L)</strong></th>
<th>11.09 x 4.05 x 0.54 in (28.156 x 10.282 x 1.365 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight (max)</strong></td>
<td>0.308 kg</td>
</tr>
<tr>
<td><strong>Cells/Type</strong></td>
<td>6-cell Polymer</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>11.1V</td>
</tr>
<tr>
<td><strong>Amp-hour capacity</strong></td>
<td>4.0Ah</td>
</tr>
<tr>
<td><strong>Watt-hour capacity</strong></td>
<td>44Wh</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Operating (Charging)</strong></td>
<td>32° to 113° F (0° to 45° C)</td>
</tr>
<tr>
<td><strong>Operating (Discharging)</strong></td>
<td>14° to 140° F (-10° to +0° C)</td>
</tr>
</tbody>
</table>
Battery Re-Charge Time
- Non-operating: System in OFF or Standby Mode - 2.5 hours (This depends on system setting)
- System ON: 3-5 hours (This depends on system setting)

Fuel Gauge LED
- No

Optional Travel Battery
- Available: No

ENVIRONMENTAL DATA
Eco-Label Certifications
- 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 Gold registered in the United States. See [http://www.epeat.net](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 Commercial Notebook model is based on a "Typically Configured Notebook".

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

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Normal Operation (Short idle)</th>
<th>Normal Operation (Long idle)</th>
<th>Sleep</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 VAC</td>
<td>4.65 W</td>
<td>2.90 W</td>
<td>0.66 W</td>
<td>0.50 W</td>
</tr>
<tr>
<td>230 VAC</td>
<td>4.99 W</td>
<td>2.84 W</td>
<td>0.69 W</td>
<td>0.54 W</td>
</tr>
<tr>
<td>100 VAC</td>
<td>4.84 W</td>
<td>2.70 W</td>
<td>0.66 W</td>
<td>0.49 W</td>
</tr>
</tbody>
</table>

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*

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Normal Operation (Short idle)</th>
<th>Normal Operation (Long idle)</th>
<th>Sleep</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 VAC</td>
<td>16 BTU/hr</td>
<td>10 BTU/hr</td>
<td>2 BTU/hr</td>
<td>2 BTU/hr</td>
</tr>
<tr>
<td>230 VAC</td>
<td>17 BTU/hr</td>
<td>10 BTU/hr</td>
<td>2 BTU/hr</td>
<td>2 BTU/hr</td>
</tr>
<tr>
<td>100 VAC</td>
<td>17 BTU/hr</td>
<td>9 BTU/hr</td>
<td>2 BTU/hr</td>
<td>2 BTU/hr</td>
</tr>
</tbody>
</table>

* 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)

<table>
<thead>
<tr>
<th>Sound Power (LWAd, bels)</th>
<th>Sound Pressure (LpAm, decibels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typically Configured -</td>
<td></td>
</tr>
<tr>
<td>2.9</td>
<td>26</td>
</tr>
</tbody>
</table>
QuickSpecs

HP EliteBook Revolve 810 G2

Technical Specifications

Idle
Fixed Disk - Random writes

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 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 17.6 % post-consumer recycled plastic (by wt.)
- This product is 92.4 % recyclable when properly disposed of at end of life.

Packaging Materials

- External:
  - PAPER/Corrugated – 340 g
- Internal:
  - PLASTIC/EPE-Expanded Polyethylene - 80 g
  - PLASTIC/Polyethylene low density - 25 g
  - OTHER/OTHER - 1450 g
  - PLASTIC/PET - 500 g
- The plastic packaging material contains at least 30 % recycled content.
- The corrugated paper packaging materials contains at least 30% 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
QuickSpecs

HP EliteBook Revolve 810 G2

Technical Specifications

- 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)

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

Eco-label certifications

ISO 14001 certificates:
and

COUNTRY OF ORIGIN

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Part #</th>
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<tbody>
<tr>
<td><strong>Memory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HP 2GB DDR3 1600 PC3-12800 SODIMM</td>
<td>H2P63AA#xxx</td>
</tr>
<tr>
<td></td>
<td>HP 4GB DDR3 1600 PC3-12800 SODIMM</td>
<td>H2P64AA#xxx</td>
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<tr>
<td></td>
<td>HP 8GB DDR3 1600 PC3-12800 SODIMM</td>
<td>H2P65AA#xxx</td>
</tr>
<tr>
<td><strong>Cases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HP Slim Ultrabook Messenger (up to 15.6” x .88”/22/5mm)</td>
<td>F3W14AA</td>
</tr>
<tr>
<td></td>
<td>HP Slim Ultrabook Top Load (up to 15.6” x .88”/22/5mm)</td>
<td>F3W15AA</td>
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<tr>
<td></td>
<td>HP Slim Ultrabook Backpack (up to 15.6” x .88”/22/5mm)</td>
<td>F3W16AA</td>
</tr>
<tr>
<td></td>
<td>HP Essential Top Load Case (up to 15.6”)</td>
<td>H2W17AA#xxx</td>
</tr>
<tr>
<td></td>
<td>HP Essential Backpack (up to 15.6”)</td>
<td>H1D24AA</td>
</tr>
<tr>
<td></td>
<td>HP Essential Messenger Case (up to 17.3”)</td>
<td>H1D25AA</td>
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<td></td>
<td>HP Professional Series Carrying Case (up to 15.6”)</td>
<td>H4J90AA</td>
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<tr>
<td></td>
<td>HP Professional Series Carrying Case TSA (up to 15.6”)</td>
<td>H4J92AA</td>
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<td>HP Professional Series Backpack (up to 15.6”)</td>
<td>H4J93AA</td>
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<td></td>
<td>HP Professional Leather Case (up to 17.3”)</td>
<td>H4J94AA</td>
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<tr>
<td></td>
<td>HP Business Slim Top Load (up to 14.1” x .75” thick)</td>
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<tr>
<td><strong>Docking</strong></td>
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<tr>
<td></td>
<td>HP 2013 UltraSlim Docking Station</td>
<td>D9Y32AA#xxx</td>
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<tr>
<td></td>
<td>HP Dual Hinge II Notebook Stand</td>
<td>E8F99AA#xxx</td>
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<td></td>
<td>HP Display and Notebook Stand II</td>
<td>E8G00AA#xxx</td>
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<td>HP Adjustable Dual Monitor Stand</td>
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<td>HP Adjustable Display Stand</td>
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<td>HP LCD Monitor Stand</td>
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<td>HP USB 2.0 Port Replicator</td>
<td>H1L07AA#xxx</td>
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<td>HP USB 3.0 Port Replicator</td>
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<tr>
<td><strong>Input/Output - Mice</strong></td>
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<tr>
<td></td>
<td>HP USB Optical Travel mouse</td>
<td>RH304AA</td>
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<td></td>
<td>HP Wireless Mobile Mouse</td>
<td>H2L63AA</td>
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<td>HP USB Essential Keyboard/Mouse</td>
<td>H2S75AA</td>
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<td>HP X6000 Mouse</td>
<td>H2575AA</td>
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<td></td>
<td>HP 3-button USB Laser Mouse</td>
<td>H2L62AA#XXX</td>
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<td>HP X4000b Bluetooth Mouse</td>
<td>H4B81AA</td>
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<td>HP Stylish Wireless KB/Mouse</td>
<td>H4B79AA</td>
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<td>HP Stylish USB KB/Mouse</td>
<td>H4B88AA</td>
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<tr>
<td></td>
<td>HP Slim BT Keyboard US</td>
<td>H4Q44AA#ABA</td>
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<tr>
<td><strong>Input/Output - Other</strong></td>
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<tr>
<td></td>
<td>HP USB Ethernet Adapter</td>
<td>XZ613AA#ABA</td>
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<td></td>
<td>USB Graphics Adapter (DBU PL)</td>
<td>NL571AA</td>
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<tr>
<td><strong>Adapters</strong></td>
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<tr>
<td></td>
<td>HP DP to HDMI 1.4 Adapter</td>
<td>F3W43AA</td>
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<td></td>
<td>90W Slim Combo Adapter</td>
<td>H4A41AA#xxx</td>
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<td>90W w/USB Universal Adapter</td>
<td>H4A43AA#ABA</td>
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### Options and Accessories (sold separately and availability may vary by country)

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>90W Smart AC/Auto/Air Combo Adapter</td>
<td>AJ652AA#xxx</td>
</tr>
<tr>
<td>90W Smart Auto/Truck Adapter</td>
<td>ED493AA</td>
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<tr>
<td>HP Smart 65W Travel AC Adapter</td>
<td>AU155AA#xxx</td>
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<tr>
<td>HP 65W Slim Adapter</td>
<td>AX727AA#xxx</td>
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<tr>
<td>65W Smart AC Adapter</td>
<td>ED494AA#xxx</td>
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<td>90W Smart AC Adapter</td>
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<td>90W Slim Adapter</td>
<td>BT796AA#xxx</td>
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### Storage - External Storage

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<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>HP External USB Optical Drive</td>
<td>F2B56AA</td>
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### Platform Battery

<table>
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<tr>
<th>Description</th>
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<td>HP OD06XL Long Life Notebook Battery</td>
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### Health and Education

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<th>Description</th>
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<td>20 Notebook Managed Charging Cart</td>
<td>QL489AA#xxx</td>
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<tr>
<td>20 Notebook Charging Cart</td>
<td>QL488AA</td>
</tr>
<tr>
<td>30 Notebook Managed Charging Cart</td>
<td>QL490AA</td>
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<tr>
<td>30 Notebook Charging Cart</td>
<td>H4F31AA#ABA</td>
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### Security

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>HP Docking Station Cable Lock</td>
<td>AU656AA#xxx</td>
</tr>
<tr>
<td>HP UltraSlim Keyed Cable Lock</td>
<td>H4D73AA</td>
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</tbody>
</table>

### Monitors

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>HP U160 15.6-inch LED Backlit Monitor</td>
<td>C4M77AA or D4T56AA#xxx (check region for which sku is available)</td>
</tr>
<tr>
<td>HP EliteDisplay E271i 27-inch IPS LED Monitor</td>
<td>D7Z72AA/A8/AS/AT</td>
</tr>
<tr>
<td>HP EliteDisplay E231 23-inch LED Monitor</td>
<td>C9V75AA/A8/AS/AT</td>
</tr>
<tr>
<td>HP EliteDisplay E201 20-inch LED Monitor</td>
<td>C9V73AA/A8/AS/AT</td>
</tr>
<tr>
<td>HP ProDisplay P221 21.5&quot; LED Monitor</td>
<td>C9E49AA/A8/AS/AT</td>
</tr>
<tr>
<td>HP ProDisplay P201 20&quot; LED Monitor</td>
<td>C9F26AA/A8/AS/AT</td>
</tr>
</tbody>
</table>

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Summary of Changes

<table>
<thead>
<tr>
<th>Date of change:</th>
<th>Version History:</th>
<th>Description of change:</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 30, 2014</td>
<td>Changed</td>
<td>Added change log.</td>
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