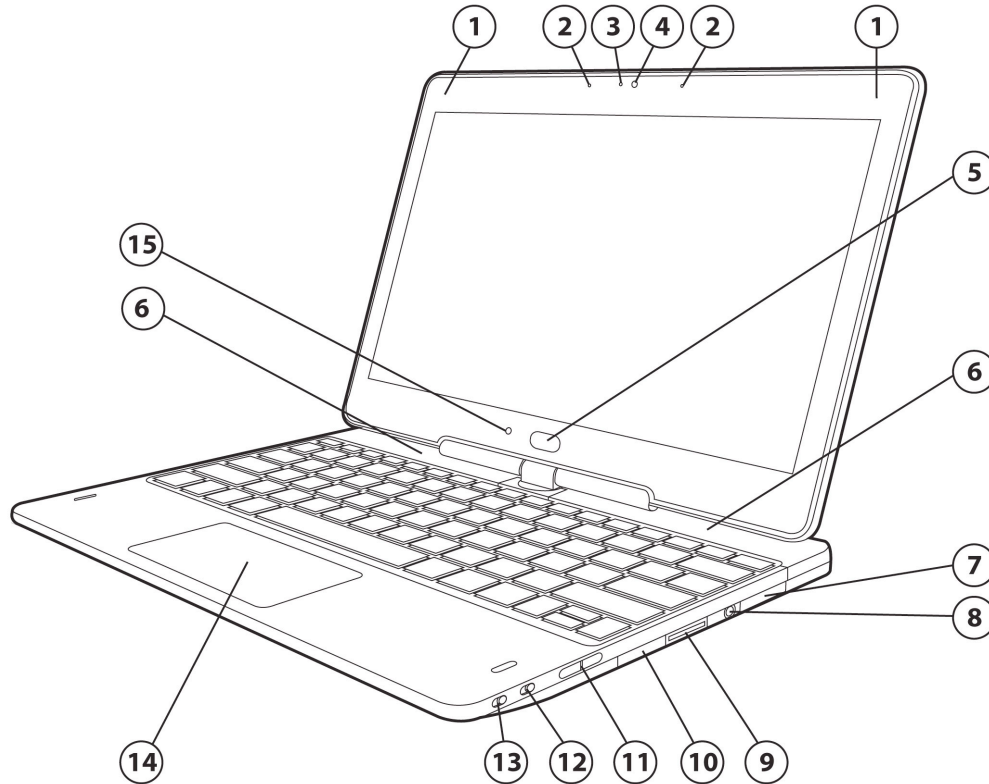


Overview

HP EliteBook Revolve 810 G2 Tablet PC

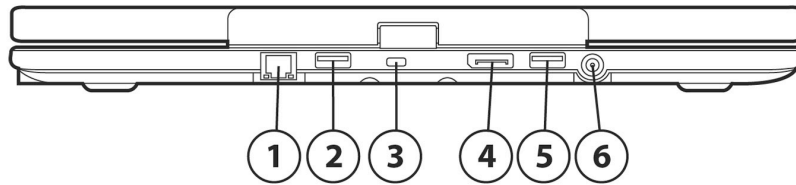


Front, Right

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

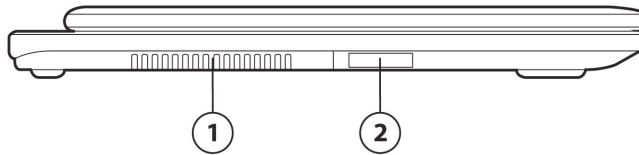
* WWAN is an optional, add-on feature and is planned to be available in March 2014. WWAN use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE is not available in all regions and requires Windows.

Overview



Rear

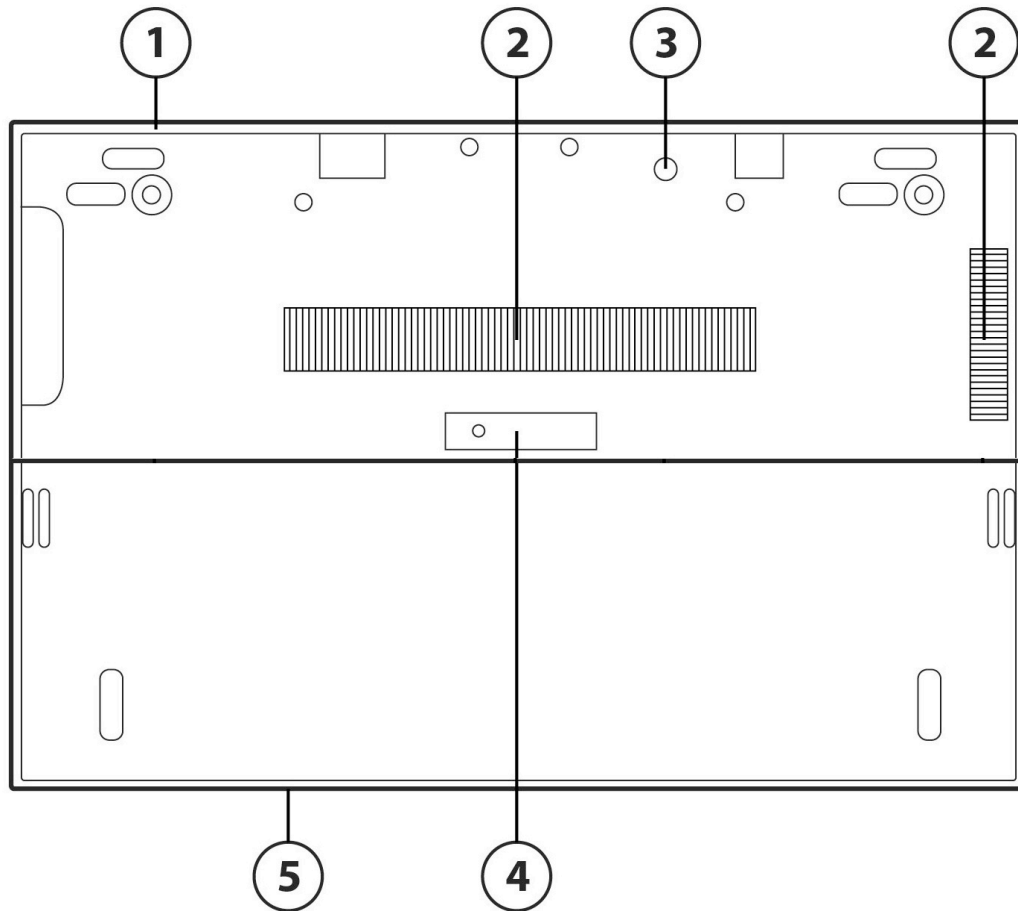
1. RJ-45 (Ethernet) jack
2. USB 3.0 port
3. Security lock slot
4. DisplayPort 1.2
5. USB 3.0 charging port
6. Power connector



Left

1. Vent
2. Speaker

Overview



Bottom

- 1. Service cover
- 2. Vents
- 3. Near Field Communication (NFC) antenna
- 4. Battery bay cover release latch
- 5. Battery bay

Overview

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 (optional), 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 March 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.

Features

PRODUCT NAME

HP EliteBook Revolve 810 G2 Tablet

OPERATING SYSTEM

Preinstalled

- 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***
- FreeDOS 2.0

Supported

- Windows 8.1 Enterprise 64*
- Windows 7 Professional 32***
- Windows 7 Enterprise 32***
- Windows 7 Enterprise 64***
- Windows 7 Ultimate 32***
- Windows 7 Ultimate 64***
- Windows 7 Home Premium 32***
- Windows 7 Home Basic 32***
- Windows 7 Home Basic 64***

* 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/>

** 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 <http://www.microsoft.com/windows/windows-7/> for details.

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

Features

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

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

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

Features

at 120 Hz

Number of Supported Displays

Number of Displays with 2013 UltraSlim Docking Station	UMA	Discrete
EliteBook Revolve 810 G2	3	n/a

* HD content required to view HD images.

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

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)

Features

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 is an optional, add-on feature and is planned to be available in March 2014. 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.

***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

Integrated Intel 82579LM 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

Features

The HP backlit (optional), 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

F12 - WiFi toggle

SENSORS

Accelerometer

Compass

Ambient Light Sensor

Near Field Communication (NFC)

SOFTWARE AND SECURITY

Preinstalled Software with Windows Operating System

Security

Absolute Data Protect

Computrace (removed from UI on activation)¹

Device Access Manager with Just In Time Authentication

DigitalPersona Fingerprint Driver

Drive Encryption²

HP Client Security (incl. Cred Mgr and Password Mgr)

HP Trust Circles Standard³

Microsoft Defender

Microsoft Security Essentials⁴

Privacy Manager (Web only)

Features

Validity Fingerprint Driver

BIOS Features

Absolute Persistence Module (for all Absolute products) ¹

HP Sure Start⁵

HP Automatic Drive Lock

HP BIOS Protection⁶ (Follow NIST 800-147, 155 Guidelines)

HP Disk Sanitizer⁷ (Not for SSD)

HP DriveLock

HP SpareKey⁸

Hybrid Boot

Master Record Security (backup/restore)

Measured Boot

Power On Authentication

Pre-Boot Security

Secure Boot

Secure Erase⁹ (SSD & HDD)

Update via Network

HP Value Add

HP Ceement

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

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)

Features

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 App¹¹
Skype App¹¹

Microsoft Products

Office Home & Business 2013
Office Professional 2013
Lync Optimized¹²

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

² 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.

³ HP Trust Circles Standard, when included, allows up to 5 Trust Circles with up to 5 contacts in each Trust Circle. Optional 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 HP Tools partition with an HP BIOS required for automatic recovery.

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

Features

Standard

Common Criteria EAL4+ Augmented Certified Discrete TPM 1.2 Embedded Security Chip

Security lock slot

HP Sure Start

HP BIOS (BIOS Protection)

Secure Erase¹

Computrace Persistence²

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 Recognition⁶
- One Step Logon
- SpareKey³

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 capable⁵

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 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>. 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

Features

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.

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

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 TBD Hours^{*,**}

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.

** Windows 8 testing conducted by HP consisting of full battery discharge while running a series of productivity scripts against the following applications (which may or may not be included with your particular product): Adobe® AcrobatReader 7.0, Adobe® Illustrator® CS2, Adobe® Photoshop® CS2, Apple® Quicktime 7.1, Intervideo® WinDVD® 8, Macromedia® Flash 8,

Features

Microsoft® Office® 2003 Pro, Microsoft® Project 2003, and Winzip® 10.0. Prior to testing, the system was fully charged, display brightness was set at 60 nits, wireless was turned off, and auto dim, suspend, hibernate and all other non-essential operation programs, utilities, and services to operation and battery testing were disabled. Battery life will vary depending on the 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.

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>

Technical Specifications

SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)	Nominal Operating Voltage	110/220 V
	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
	BNCI or BELUS	Yes
	CIT	Yes
	GOST	Yes
	Saudi Arabian Compliance (ICCP)	Yes
	SABS	Yes
	UKRSERTCOMPUTER	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.

Technical Specifications

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

DISPLAYS

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
		Configuration	RGB Stripe
	Backlight	LED	
	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	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	Maximum Sequential Write
		Up to 500 MB/s	Up to 250 MB/s
	Logical Blocks	250,069,680	
180 GB* M.2 Solid State Drive	Operating Temperature	32° to 158°F (0° to 70°C) [case temp]	
	Features	ATA Security; ATA-8; SATA 3.0; DIPM; TRIM	
	Drive Weight	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	Maximum Sequential Write
		Up to 520 MB/s	Up to 490 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	

QuickSpecs

HP EliteBook Revolve 810 G2

Technical Specifications

256 GB* M.2 Solid State Drive	Drive Weight	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	Maximum Sequential Write
		Up to 500 MB/s	Up to 350 MB/s
	Logical Blocks	500,118,192	
	Operating Temperature	32° to 158°F (0° to 70°C) [case temp]	
	Features	ATA Security; ATA-8, SATA 3.0; DIPM; TRIM	

* 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	Ethernet Features 10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 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) 1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 8023. Clauses 40) 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) IEEE 802.3az EEE(Energy Efficient Ethernet) Jumbo Frame 9K Auto MDI/MDIX Crossover cable detection Power Management ACPI compliant - multiple power modes Energy Detect Low Power Mode(Green Ethernet) Performance Features 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 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 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
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Technical Specifications

	Interface	PCI Express 1.1 x1 to fully support ASPM L0s/L1 and CLKREQ. 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)

Technical Specifications

	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
HP It4111 LTE/EV-DO/HSPA+ 4G WWAN*	Technology/Operating Bands	LTE FDD all bands with diversity: 1900 MHz (Band II) ¹ , 1700/2100MHz (Band IV (AWS), 850 MHz (Band V), 700MHz (Band XIII), 700MHz (Band XVII), 1900MHz G Block (Band XXV) WCDMA/HSDPA/HSUPA/HSPA+: all bands with diversity: 2100 MHz (Band I), 1900 MHz (Band II) , AWS 1700/2100MHz (Band IV), 850 MHz (Band V), 800 MHz (Band VIII) GSM/GPRS/EDGE: 1900 MHz, 1800 MHz , 850 MHz , 900 MHz CDMA: Cellular 800MHz (BC0), PCS 1900MHz (BC1)
	Wireless Protocol Standards	3GPP Release 8 LTE Specification WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification EVDO Release 0 and Release A
	Wireless Parametric Standards	Complies with 3GPP specifications Release 8 for LTE
	Maximum Data Rates	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)
	GPS	Standalone GPS, A-GPS, GPS XTRA
	GPS Bands	1575.42 MHz (± 1.023 MHz), GLONASS 1596-1607MHz
	Maximum Output Power	LTE: +23 dBm (+/- 1 dBm) WCDMA: +23 dBm (+/- 1 dBm) GSM850/900, GMSK: +32dBm (+/- 1dBm) GSM850/900, 8PSK: +27dBm (+/- 1dBm) DCS1800 / PCS 1900, GMSK: +29dBm (+/- 1dBm) DCS1800 / PCS 1900, 8PSK: +26dBm (+/- 1dBm) CDMA: +24dBm (+/- 1dBm)
	Maximum Power Consumption	LTE: 1,200 mA (peak); <900 mA (average) WCDMA: 1,100 mA (peak); <800 mA (average) EGPRS: 2,500 mA (peak); <700 mA (average)
	Power Consumption, Sleep Mode	2 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, 3042-S3 Key B
	Weight	6 g
	Dimensions (Length x Width x Thickness)	42 mm × 30 mm × 2.3 mm

Technical Specifications

Voltage, Operating	3.135 V to 4.4 V (3.3 V +1.1V/-0.165V)
Temperature, operating (from TIA/EIA/IS-98-D)	-13° to 140° F (-25° to 60° C)
Temperature, non-operating, 96 hours (from MIL-STD 202 Method 108)	-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
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, environment, network conditions, and other factors.	
HP It4112 LTE/HSPA+ Gobi 4G Module*	
Technology/Operating Bands	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) WCDMA/HSDPA/HSUPA/HSPA+ all bands with diversity: 2100 MHz (Band I), 1900 MHz (Band II), 800 MHz (Band V), 900 MHz (Band VIII) GSM/GPRS/EDGE: 1900 MHz (Band II), 1800 MHz (Band III), 850 MHz (Band V), 900 MHz (Band VIII)
Wireless Protocol Standards	3GPP Release 8 LTE Specification WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification
Wireless Parametric Standards	Complies with 3GPP specifications Release 8 for LTE
Maximum Data Rates	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)
GPS	Standalone
GPS Bands	1575.42 MHz (± 1.023 MHz), GLONASS 1596-1607MHz
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

QuickSpecs

HP EliteBook Revolve 810 G2

Technical Specifications

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 (from TIA/EIA/IS-98-D)	14° to 131° F (-10° to 55° C)		
Temperature, non-operating, 96 hours (from MIL-STD 202 Method 108)	-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*	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	
	Security¹	<ul style="list-style-type: none">• 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	

Technical Specifications

	local regulations.	
Network Architecture	Ad-hoc (Peer to Peer)	
Models	Infrastructure (Access Point Required)	
Roaming	IEEE 802.11 compliant roaming between band Access Points	
Output Power²	<ul style="list-style-type: none"> • 2.4G: +13.5dBm minimum • 5G: +12dBm minimum 	
Power Consumption	Transmit: 2.0 Watts Receive: 1.6 Watts Idle mode ³ : 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	
Receiver Sensitivity⁴	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) 802.11g:-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) 802.11n:-69 dBm (150 Mbps), -66 dBm (300 Mbps)	
Antenna Connections	2 U.FL type connectors (output impedance of 50 ± 2 ohms)	
Form Factor	PCI-Express Half-MiniCard	
Dimensions	0.12 x 1.06 x 1.18 in (3.1 x 26.8 x 30.0 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.

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

Technical Specifications

supplier IHV extensions required for Cisco Compatible Extensions support for Microsoft Windows Vista.

HP Integrated Module with Bluetooth 4.0+EDR Wireless Technology

Bluetooth Specification	4.0+EDR Compliant
Dimensions	1.18 x 0.26 x 0.13 in (30 x 6.5 x 3.25 mm)
Frequency Band	2402 to 2480 MHz
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	-1.5 dBm to 4 dBm (Bluetooth Class II)
Receiver Sensitivity	Better than -20 dBm at 0.1 % raw bit error rate
Power Consumption	Peak (Tx) 264 mW Peak (Rx) 231 mW Sleep <1 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	Serial Port Profile (SPP) ¹ Service Discovery Application Profile (SDAP) Dial-Up Networking (DUN) ^{1,2} Generic Object Exchange Profile (GOEP) ^{1,2} Object Push Profile (OPP) ^{1,2} File Transfer Profile (FTP) Synchronization Profile (SYNC) Hard Copy Cable Replacement (HCRP) ^{1,2} Personal Area Networking Profile (PAN) ^{1,2} Human Interface Device Profile (HID) ^{1,2}

Technical Specifications

FAX Profile (FAX)
 Basic Imaging Profile (BIP)²
 Headset Profile (HSP)
 Hands Free Profile (HFP)
 Advanced Audio Distribution Profile (A2DP)

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: MCS 0 ~ MCS 15, (20MHz, and 40MHz)
- 802.11ac : MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, and 80MHz)

Modulation

Direct Sequence Spread Spectrum
 BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM

Security¹

- 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

Technical Specifications

Network Architecture Models	Network Architecture Models	
Roaming	IEEE 802.11 compliant roaming between access points	
Output Power²	<ul style="list-style-type: none"> • 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 Sensitivity³	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

Technical Specifications

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. 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

Security¹

- 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
 Models**

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

Roaming

IEEE 802.11 compliant roaming between band Access Points

Output Power²

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

Power Consumption

Transmit: 2.0 Watts
 Receive: 1.6 Watts

Technical Specifications

	Idle mode ³ : 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
Receiver Sensitivity ⁴	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)
	802.11g:-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)
	802.11n:-69 dBm (150 Mbps), -66 dBm (300 Mbps)
Antenna Connections	2 U.FL type connectors (output impedance of 50 ± 2 ohms)
Form Factor	PCI-Express Half-MiniCard
Dimensions	0.12 x 1.06 x 1.18 in (3.1 x 26.8 x 30.0 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 Amber - 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.
 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	DTS Studio Sound (Windows OS only)
Hardware	Implementation IDT 92HD91 High Definition CODEC

Technical Specifications

	Function Key Volume Controls	Volume up, volume down, and mute
	Mute Buttons	Playback and Record mute buttons with LED indicator
	Full Duplex	Yes
	Microphone In	Stereo
	Headphone/Line Out	Stereo
	Integrated Microphone	Yes, dual digital microphone array
Audio Output Quality	Frequency Response	20 Hz – 20 kHz
	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)	9.60 x 4.95 x 2.24 cm	
		90 to 265 VAC	
		Input Efficiency	87% min at 115 VAC
	Output	Input frequency range	47 to 63 Hz
		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%

Technical Specifications

EMI and Safety Certifications		CE Mark - full compliance with LVD and EMC directives; Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE; Reliability - failure rate of less than 0.1% annually within the first three years of operation.	
HP 6-cell (44 WHr) Polymer Primary battery	Dimensions (H x W x L)	1.11 x 28.1 x 10.3 cm	
	Weight (max)	3.10g	
	Cells/Type	6-cell Polymer	
	Energy	Voltage	11.1V
		Amp-hour capacity	4.0Ah
		Watt-hour capacity	44Wh
	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	3-5 hours
	Fuel Gauge LED	No	
	Optional Travel Battery Available	No	

ENVIRONMENTAL

TBD

COUNTRY OF ORIGIN

TBD

QuickSpecs

HP EliteBook Revolve 810 G2

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

Type	Description	Part #
Memory	HP 2GB DDR3 1600 PC3-12800 SODIMM	H2P63AA#xxx
	HP 4GB DDR3 1600 PC3-12800 SODIMM	H2P64AA#xxx
	HP 8GB DDR3 1600 PC3-12800 SODIMM	H2P65AA#xxx
Cases	HP Slim Ultrabook Messenger (up to 15.6" x .88"/22/5mm)	F3W14AA
	HP Slim Ultrabook Top Load (up to 15.6" x .88"/22/5mm)	F3W15AA
	HP Slim Ultrabook Backpack (up to 15.6" x .88"/22/5mm)	F3W16AA
	HP Essential Top Load Case (up to 15.6")	H2W17AA#xxx
	HP Essential Backpack (up to 15.6")	H1D24AA
	HP Essential Messenger Case (up to 17.3")	H1D25AA
	HP Professional Series Carrying Case (up to 15.6")	H4J90AA
	HP Professional Series Carrying Case TSA (up to 15.6")	H4J92AA
	HP Professional Series Backpack (up to 15.6")	H4J93AA
	HP Professional Leather Case (up to 17.3")	H4J94AA
Docking	HP Business Slim Top Load (up to 14.1" x .75" thick)	H2T13AA
	HP 2013 UltraSlim Docking Station	D9Y32AA#xxx
	HP Dual Hinge II Notebook Stand	E8F99AA#xxx
	HP Display and Notebook Stand II	E8G00AA#xxx
	HP Adjustable Dual Monitor Stand	AW664AA#xxx
	HP Adjustable Display Stand	AW663AA#xxx
	HP LCD Monitor Stand	QM196AA
	HP USB 2.0 Port Replicator	H1L07AA#xxx
Input/Output - Mice	HP USB 3.0 Port Replicator	H1L08AA#xxx
	HP USB Optical Travel mouse	RH304AA
	HP Wireless Mobile Mouse	H2L63AA
	HP USB Essential Keyboard/Mouse	H2S75AA
	HP X6000 Mouse	H2L62AA#XXX
	HP 3-button USB Laser Mouse	H4B81AA
	HP X4000b Bluetooth Mouse	H3T50AA#xxx
Input/Output - Keyboard	HP Stylish Wireless KB/Mouse	H4B79AA
	HP Stylish USB KB/Mouse	H4B80AA
	HP Slim BT Keyboard US	H4Q44AA#ABA
Input/Output - Other	HP USB Ethernet Adapter	XZ613AA#ABA
	USB Graphics Adapter (DBU PL)	NL571AA

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

Adapters	HP DP to HDMI 1.4 Adapter	F3W43AA
	90W Slim Combo Adapter	H4A41AA#xxx
	90W w/USB Universal Adapter	H4A43AA#ABA
	90W Smart AC/Auto/Air Combo Adapter	AJ652AA#xxx
	90W Smart Auto/Truck Adapter	ED493AA
	HP Smart 65W Travel AC Adapter	AU155AA#xxx
	HP 65W Slim Adapter	AX727AA#xxx
	65W Smart AC Adapter	ED494AA#xxx
	90W Smart AC Adapter	ED495AA#xxx
	90W Slim Adapter	BT796AA#xxx
Storage - External Storage	HP External USB Optical Drive	F2B56AA
Platform Battery	HP OD06XL Long Life Notebook Battery	H6L25AA
Health and Education	20 Notebook Managed Charging Cart	QL489AA#xxx
	20 Notebook Charging Cart	QL488AA
	30 Notebook Managed Charging Cart	QL490AA
	30 Notebook Charging Cart	H4F31AA#ABA
Security	HP Docking Station Cable Lock	AU656AA#xxx
	HP UltraSlim Keyed Cable Lock	H4D73AA
Monitors	HP U160 15.6-inch LED Backlit Monitor	C4M77AA or D4T56AA#xxx (check region for which sku is available)
	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

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