

Overview

HP ProBook x360 11 G4 EE Notebook PC



Left

- | | | | |
|----|---|-----|--|
| 1. | Internal microphones (2) | 7. | Volume button |
| 2. | User-facing webcam LED | 8. | Power button |
| 3. | User-facing 720p webcam | 9. | Headphone / Microphone combo jack |
| 4. | ClickPad | 10. | USB 3.1 Gen 1 port |
| 5. | World-facing 5 megapixels webcam (Select models only) | 11. | Security lock slot (Nano lock sold separately) |
| 6. | World-facing webcam LED (Select models only) | | |

Overview



1. Power connector
2. Ethernet (RJ-45) port
3. HDMI port (Cable not included)

Right

4. USB 3.1 Gen 1 port
5. USB Type-C™ (Data and Power in-out)
6. Micro SD card reader

Overview

AT A GLANCE

- Starting at 3.18 lbs (1.44 kg)
- Less than 20 mm (0.79"), this flexible 360° hinge converts to laptop, tablet, tent, or stand mode easily
- Passed MIL-STD 810G testing¹ with rugged features such as co-molded rubber trim, spill- and pick-resistant keyboard, and Corning® Gorilla® Glass 3 touch screen
- Optional dual camera system for project-based learning
- Optional HP Active Pen provides an authentic digital inking experience
- Pre-installed with Windows 10 Pro 64, Windows 10 Pro 64 (National Academic), Windows 10 Home 64, or Windows 10 Pro in S mode 64
- Powered by 8th Generation Intel® m3-8100Y or i5-8200Y processors
- Choice of 29.4cm (11.6") diagonal HD UWVA slim LED touch screen (1366 x 768) or 29.4 cm (11.6") diagonal HD SVA slim LED touch screen (1366 x 768) displays
- 128 GB SATA-3 or 256 GB PCIe Solid State Drive storage options
- Up to 8 GB system memory for enhanced memory management
- Reliable connectivity with choice of Intel® Dual Band Wireless-AC 9260 802.11a/b/g/n/ac (2x2) WiFi and Bluetooth® 5.0 Combo WLAN or Realtek RTL8822BE 802.11a/b/g/n/ac (2x2) WiFi and Bluetooth® 4.2 Combo WLAN for learning and collaboration beyond the classroom
- Built-in ports include: Ethernet (RJ-45), USB 3.1 Gen 1, USB Type-C™, and HDMI 2.0a port for connecting to high-resolution displays
- Enhanced security TPM 2.0 discrete chip
- Battery life up to 15 hours

1. MIL STD 810G testing is pending and is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Damage under the MIL STD test conditions or any accidental damage requires an optional HP Accidental Damage Protection Care Pack.

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



Technical Specifications

PRODUCT NAME

HP ProBook x360 11 G4 EE Notebook PC

OPERATING SYSTEM

Preinstalled

Windows® 10 Pro 64¹
Windows® 10 Pro 64 (National Academic License)²
Windows® 10 Home 64¹
Windows® 10 Home Single Language 64¹
Windows 10 Pro in S mode 64³
Windows 10 Pro in S mode 64 (National Academic only)^{2,3}

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

1. Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com/>.
2. Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see <https://aka.ms/ProEducation> for Windows 10 Pro Education feature information.
3. Windows 10 Pro in S mode 64 works exclusively with apps from the Windows Store. Some accessories and apps compatible with Windows 10 may not work, and performance may vary. Certain default settings, features, and apps cannot be changed. Easily switch to Windows 10 Pro configuration (fee applies). Learn more at Microsoft.com/Windows10S.

PROCESSORS

Intel® Core™ m3-8100Y with Intel® UHD Graphics 615 (1.1 GHz base frequency, up to 2.7 GHz burst frequency, 4 MB cache, 2 cores)^{4,5,6}

Intel® Core™ i5-8200Y with Intel® UHD Graphics 615 (1.3 GHz base frequency, up to 3.2 GHz burst frequency, 4 MB cache, 2 cores)^{4,5,6}

Processors Family

8th Generation Intel® Core™ m3 processor (m3-8100Y)⁶

8th Generation Intel® Core™ i5 processor (i5-8200Y)⁶

4. Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
5. Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.
6. NOTE: In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on <http://www.support.hp.com>.



Technical Specifications

CHIPSET

Chipset is integrated with processor

GRAPHICS

Integrated

Intel® UHD Graphics 615⁷

7. HD content required to view HD images

DISPLAY

Internal

Touch

29.46 cm (11.6") diagonal HD SVA eDP WLED-backlit slim touch screen with HD camera, 220 cd/m², 67% sRGB (1366 x 768)^{7,8,9}

29.46 cm (11.6") diagonal HD IPS eDP WLED-backlit slim touch screen with HD camera, 220 cd/m², 50% sRGB (1366 x 768)^{7,8,9}

HDMI

Port supports resolutions up to 3840 x 2160 external resolution @60 Hz

- 7. HD content required to view HD images.
- 8. Resolutions are dependent upon monitor capability, and resolution and color depth settings.
- 9. Sold separately or as an optional feature.

STORAGE AND DRIVES

Primary Storage

128 GB SATA-3 TLC Solid State Drive¹⁰

256 GB PCIe Value Solid State Drive¹⁰

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

MEMORY

Standard

Maximum Memory

8 GB LPDDR3-1866 SDRAM¹¹



Technical Specifications

Memory

4 GB LPDDR3-1866 SDRAM (on-board)¹¹

8 GB LPDDR3-1866 SDRAM (on-board)¹¹

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

NETWORKING/COMMUNICATIONS

Broadband Wireless (WWAN)^{1,2,3}

WLAN

Intel® Dual Band Wireless-AC 9260 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™¹²

Realtek 802.11a/b/g/n/ac (2x2) and Bluetooth® 4.2 Combo¹¹

Miracast

Miracast Support¹⁴

Ethernet

Realtek RTL8111HSH-CG 10/100/1000 GbE NIC¹³

12. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ac WLAN devices.
13. 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.
14. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.

AUDIO/MULTIMEDIA

Audio

HP Audio

2 Integrated stereo speakers

Headphone / microphone in combo jack

Camera

User-facing 720p HD camera⁷

Located on display

Webcam

World-facing 5 MP secondary camera⁹

Located on keyboard deck

NOTE: Both webcams are fix focus.

7. HD content required to view HD images.
9. Sold separately or as an optional feature.



Technical Specifications

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS/PEN

Keyboard

Full-sized keyboard, spill and pick resistant

Pointing Device

Clickpad with multi-touch gesture support, taps enabled as default

Default on: 2-finger scroll, pinch

Support Windows 10 modern Trackpad gestures

Function Keys

F1 - Blank

F2 - ClickPad Enable/Disable

F3 - Sleep

F4 - Display Switching

F5 - Audio Mute/Unmute

F6 - Volume Down

F7 - Volume Up

F8 - Mic Mute/Unmute

F9 - Brightness Down

F10 - Brightness Up

F11 - Blank

F12 - Wireless On/Off

Pen

Optional HP Active Pen⁹

[9. Sold separately or as an optional feature.](#)

SOFTWARE AND SECURITY

BIOS

HP BIOSphere Gen4¹⁵

HP DriveLock & Automatic DriveLock¹⁶

BIOS Update via Network

Secure Erase¹⁷

Absolute Persistence Module¹⁸

Pre-boot Authentication

HP Wireless Wakeup

Software

HP Native Miracast Support¹⁴

HP Connection Optimizer

HP 3D DriveGuard

HP Hotkey Support - CMIT

HP Jumpstart

HP Support Assistant¹⁹

HP Noise Cancellation Software

HP School Pack



Technical Specifications

HP Host Based MAC Address Manager
Buy Office (sold separately)

Manageability Features

HP Driver Packs²¹
HP System Software Manager (SSM)
HP BIOS Config Utility (BCU)
HP Client Catalog
HP Manageability Integration Kit Gen2²²
Ivanti Management Suite²³

Client Security Software

HP Client Security Suite Gen4²⁴ including:
HP Security Manager (including Credential Manager, HP Password Manager²⁵, HP Spare Key)
HP Device Access Manager²⁶
HP Power On Authentication
Windows Defender²⁷

Security Management

Secure Erase²⁸
TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)²⁹
SATA 0,1 port disablement (viaBIOS)
RAID configurations³⁰
Serial, USB enable/disable (viaBIOS)
Power-on password (viaBIOS)
Setup password (viaBIOS)
Support for chassis padlocks and cable lock devices
HP Sure Click³¹

14. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.

15. HP BIOSphere Gen4 requires Intel(R) or AMD 8th Gen processors. Features may vary depending on the platform and configurations.

16. HP Drive Lock & Automatic Drive Lock is not supported on NVMe drives

17. HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method.

18. Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

19. HP Support Assistant requires Windows and Internet access.

21. HP Driver Packs not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.

22. HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.

23. Ivanti Management Suite subscription required.

24. HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.



Technical Specifications

- 25. HP Password Manager requires Internet Explorer or Chrome or FireFox. Some websites and applications may not be supported. User may need to enable or allow the add-on / extension in the internet browser.
- 26. HP Device Access Manager requires HP Client Security Suite Gen4
- 27. Windows Defender Opt in and internet connection required for updates.
- 28. HP Secure Erase - For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88. Supported on ProBook 400 G4 platforms under Hard Drive utilities within F10 BIOS.
- 29. Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).
- 30. RAID configuration is optional and does require a second hard drive.
- 31. HP Sure Click is available on most HP PCs and supports Microsoft® Internet Explorer and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.

POWER

Power Supply

- HP Smart 45 W External AC power adapter³²
- HP Smart 65 W EM External AC power adapter³²
- HP Smart 45 W USB Type-C™ adapter³²

Primary Battery

- 3-cell, 48 Wh Long Life Li-ion (90% in 90 minutes)^{33,34}

Power Cord

- 3-wire plug - 1m

Battery life

- Up to 15 hours³⁵

- 32. Availability may vary by country.
- 33. Battery is internal and not replaceable by customer. Serviceable by warranty.
- 34. Recharges the battery up to 90% within 90 minutes when the system is off or in standby mode. Power adapter with a minimum capacity of 65 watts is required. After charging has reached 90% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance.
- 35. Windows 10 MM14 battery life will vary depending on various factors including product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See www.bapco.com for additional details.

WEIGHTS & DIMENSIONS

Product Weight

- Starting at 3.18 lb (touch)³⁶
- Starting at 1.44 kg (touch)³⁶

Product Dimensions (w x d x h)

- 11.8 x 8.11 x 0.78 in
- 30 x 20.59 x 1.99 cm

- 36. Weight will vary by configuration.



Technical Specifications

PORTS/SLOTS

Ports

- 2 USB 3.1 Gen 1 Port
- 1 USB Type-C™ (Data transfer and Power delivery)
- 1 HDMI 2.0a³⁷
- 1 AC power connector
- 1 RJ-45
- 1 headphone/microphone combo jack

Expansion Slots

- 1 multi-format digital media reader
- Supports SD, SDHC, SDXC

[39. HDMI cable sold separately.](#)

SERVICE AND SUPPORT

HP Services offers 1-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty except for Long Life batteries which will have same 1-year or 3-year limited warranty as the platform. Refer to <http://www.hp.com/support/batterywarranty/> for additional battery information. On-site service and extended coverage is also available. HP Care Pack Services are optional extended service contracts that go beyond the standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: <http://www.hp.com/go/cpc>³⁸

[38. HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit \[www.hp.com/go/cpc\]\(http://www.hp.com/go/cpc\). HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.](#)



Technical Specifications

ENVIRONMENTAL & INDUSTRY

Eco-Label Certifications & declarations	<p>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:</p> <ul style="list-style-type: none"> •IT ECO declaration •US ENERGY STAR® •EPEAT® Silver registered in the United States. Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit http://www.epeat.net for more information. •TCO 		
System Configuration	<p>The configuration used for the Energy Consumption and Declared Noise Emissions data for the Notebook model is based on a Typically Configured Notebook.</p>		
Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation (Short idle)	4.28 W	4.34 W	4.12 W
Normal Operation (Long idle)	1.86W	1.92 W	1.88W
Sleep	0.42 W	0.44 W	0.42 W
Off	0.34 W	0.37 W	0.34 W
	<p>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.</p>		
Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation (Short idle)	15 BTU/hr	15 BTU/hr	14 BTU/hr
Normal Operation (Long idle)	6 BTU/hr	7 BTU/hr	6 BTU/hr
Sleep	1 BTU/hr	2 BTU/hr	1 BTU/hr
Off	1 BTU/hr	1 BTU/hr	1 BTU/hr



Technical Specifications

	Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.		
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power (L _{WAd} , bels)		Sound Pressure (L _{pAm} , decibels)
Typically Configured – Idle	2.5		14.3
Fixed Disk – Random writes	2.6		14.4
Longevity and Upgrading	<p>This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the product may include:</p> <ul style="list-style-type: none"> • 3 USB ports • 1 PC card slot (type I/II) • 1 ExpressCard/54 slot • 1 IEEE 1394 Port • 2 SODIMM memory slots • Optional expansion base docking station • 1 multi-bay II storage port • Interchangeable HDD <p>Spare parts are available throughout the warranty period and or for up to “5” years after the end of production.</p>		
Batteries	<p>This battery(s) in this product comply with EU Directive 2006/66/EC</p> <p>Batteries used in the product do not contain:</p> <p>Mercury greater the 1ppm by weight</p> <p>Cadmium greater than 20ppm by weight</p> <p>Battery size: CR2032 (coin cell)</p> <p>Battery type: lithium/manganese dioxide</p>		
Additional Information	<ul style="list-style-type: none"> • 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 1680.1 (EPEAT) standard at the Silver level, see http://www.epeat.net • Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043. • This product contains 2.5% post-consumer recycled plastic (by wt.) • This product is 96.7% recycle-able when properly disposed of at end of life. 		
Packaging Materials	External:	PAPER/Corrugated	237 g
	Internal:	PLASTIC/EPE (Expanded Polyethylene)	27 g
		PLASTIC/Polyethylene low density	13 g
		PLASTIC/Polypropylene - PP	3 g



Technical Specifications

Material Usage	<p>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):</p> <ul style="list-style-type: none"> • Asbestos • Certain Azo Colorants • Certain Brominated Flame Retardants – may not be used as flame retardants in plastics • Cadmium • Chlorinated Hydrocarbons • Chlorinated Paraffins • Formaldehyde • Halogenated Diphenyl Methanes • Lead carbonates and sulfates • Lead and Lead compounds • Mercuric Oxide Batteries • Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user. • Ozone Depleting Substances • Polybrominated Biphenyls (PBBs) • Polybrominated Biphenyl Ethers (PBBEs) • Polybrominated Biphenyl Oxides (PBBOs) • Polychlorinated Biphenyl (PCB) • Polychlorinated Terphenyls (PCT) • Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications. • Radioactive Substances • Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
Packaging Usage	<p>HP follows these guidelines to decrease the environmental impact of product packaging:</p> <ul style="list-style-type: none"> • 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	<p>HP Inc. 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.</p> <p>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.</p>
HP Inc. Corporate Environmental Information	<p>For more information about HP's commitment to the environment:</p>



Technical Specifications

	<p>Global Citizenship Report</p> <p>http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html</p> <p>Eco-label certifications</p> <p>http://www8.hp.com/us/en/hp-information/environment/ecolabels.html</p> <p>ISO 14001 certificates:</p> <p>http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14K_Certificate.pdf</p> <p>and</p> <p>http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf</p>
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SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)

Nominal Operating Voltage	19V
Average Operating Power	Win 10
Integrated graphics	Yes
Max Operating Power	UMA<45W

Temperature

Operating	32° to 95° F (0° to 35° C)
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	240 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



Technical Specifications

ENERGY STAR®	Yes ⁴¹
EPEAT® 2019	Yes, Silver in U.S. ⁴²
ICES	Yes
Australia	Yes
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

41. Configurations of the HP ProBook x360 11 G4 is ENERGY STAR® qualified are identified as HP ProBook x360 11 G4 ENERGY STAR on HP websites and on <http://www.energystar.gov>.

42. Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit <http://www.epeat.net> for more information.

DISPLAYS

Note: All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

Panel LCD 11.6 HD AG WLED SVA 45%cg 220 nits eDP Slim	Outline Dimensions (W x H x D)	278.5 x 168.5 mm (max)
	Active Area	256.125 x 144 mm
	Weight	210g max
	Diagonal Size	11.6 (inches)
	Thickness	3.0 mm (max)
	Interface	eDP1.2
	Surface Treatment	BrightView Glass
	Touch Enabled	Yes
	Contrast Ratio	400:1 (typical)
	Refresh Rate	60Hz
	Brightness	220 nit typical (panel only)
	Pixel Resolution	1366x768 (HD)



Technical Specifications

	Format	RGB
	Backlight	LED
	Color Gamut Coverage	45%
	Color Depth	6 bits
	Viewing Angle	SVA 45/45/15/35
Panel LCD 11.6 inch HD AG WLED UWVA 50percent cg 220 nits eDP slim	Outline Dimensions (W x H x D)	278.5 x 168.5 mm (max)
	Active Area	256.125 x 144 mm
	Weight	200g max
	Diagonal Size	11.6 (inches)
	Thickness	3.2 mm max
	Interface	eDP1.2
	Surface Treatment	BrightView Glass
	Touch Enabled	Yes
	Contrast Ratio	800:1 (typical)
	Refresh Rate	60Hz
	Brightness	220 nit typical (panel only)
	Pixel Resolution	1366x768 (HD)
	Format	RGB
	Backlight	LED
	Color Gamut Coverage	50%
	Color Depth	6 bits
	Viewing Angle	UWVA 85/85/85/85

STORAGE AND DRIVES

128 GB 2280 M2 SATA-3 TLC Solid State Drive	Form Factor	M.2 2280	
	Capacity	128 GB	
	NAND Type	TLC	
	Height	0.09 in (2.3 mm)	
	Width	0.87 in (22 mm)	
	Weight	0.02 lb (10 g)	
	Interface	ATA-8, SATA 3.0	
	Seek Time	Sequential Read	Sequential Write
		Up to 520 MB/s	Up to 450 MB/s
	Logical Blocks	250,069,680	
	Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]	



256 GB 2280 PCIe NVMe Value Solid State Drive	Features	DIPM; TRIM; DEVSLP	
	Form Factor	M.2 2280	
	Capacity	256GB	
	NAND Type	TLC	
	Height	0.09 in (2.3 mm)	
	Width	0.87 in (22 mm)	
	Interface	PCIe NVMe Gen3X4	
	Seek Time	Sequential Read	Sequential Write
		Up To 1700 MB/s	Up To 600 MB/s
	Logical Blocks	500,118,192	
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]		
Features	TRIM: L1.2		

Realtek 802.11a/b/g/n/ac (2x2) WiFi® and Bluetooth® 4.2 Combo	Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac
	Interoperability Frequency Band	Wi-Fi® certified 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
	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
	Security³	• 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.

Technical Specifications

	<ul style="list-style-type: none"> • WPA2 certification • IEEE 802.11i • Cisco Certified Extensions, all versions through CCX4 and CCX Lite • WAPI
Network Architecture	Ad-hoc (Peer to Peer)
Models	Infrastructure (Access Point Required)
Roaming	IEEE 802.11 compliant roaming between access points
Output Power²	<ul style="list-style-type: none"> • 802.11b: +14dBm minimum • 802.11g: +12dBm minimum • 802.11a: +12dBm minimum • 802.11n HT20(2.4GHz): +12dBm minimum • 802.11n HT40(2.4GHz): +12dBm minimum • 802.11n HT20(5GHz): +10dBm minimum • 802.11n HT40(5GHz): +10dBm minimum • 802.11ac VHT80(5GHz): +10dBm minimum
Power Consumption	<ul style="list-style-type: none"> • Transmit mode 2.0 W • Receive mode 1.6 W • Idle mode (PSP) 180 mW (WLAN Associated) • Idle mode 50 mW (WLAN unassociated) • Connected Standby 10mW • Radio disabled 8 mW
Power Management	ACPI and PCI Express compliant power management
Receiver Sensitivity³	802.11 compliant power saving mode
	802.11b, 1Mbps: -93.5dBm maximum
	802.11b, 11Mbps: -84dBm maximum
	802.11a/g, 6Mbps: -86dBm maximum
	802.11a/g, 54Mbps: -72dBm maximum
	802.11n, MCS07: -67dBm maximum
	802.11n, MCS15: -64dBm maximum
	802.11ac, MCS0: -84dBm maximum
	802.11ac, MCS9: -59dBm maximum
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 M.2 MiniCard
Dimensions	Type 2230: 2.3 x 22.0 x 30.0 mm
Weight	Type 2230: 2.8g
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)



Technical Specifications

LED Activity

LED Amber – Radio OFF; LED White – Radio ON

1. Check latest software/driver release for updates on supported security features.
2. Maximum output power may vary by country according to local regulations.
3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).

HP Integrated Module with Bluetooth 4.0/4.1/4.2 Wireless Technology

Bluetooth Specification

4.0/4.1/4.2 Compliant

Frequency Band

2402 to 2480 MHz

Number of Available Channels

Legacy: 0~79 (1 MHz/CH)

BLE: 0~39 (2 MHz/CH)

Data Rates and Throughput

Legacy: 3 Mbps data rate; throughput up to 2.17 Mbps

BLE: 1 Mbps data rate; throughput up to 0.2 Mbps

Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice channels

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)

Transmit Power

The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of +4 dBm for BR and EDR.

Power Consumption

Peak (Tx) 330 mW

Peak (Rx) 230 mW

Selective Suspend 17 mW

Electrical Interface

USB 2.0 compliant

Bluetooth Software Supported

Microsoft Windows Bluetooth Software

Link Topology

Power Management

Microsoft Windows ACPI, and USB Bus Support

Certifications

FCC (47 CFR) Part 15C, Section 15.247 & 15.249

Power Management

ETS 300 328, ETS 300 826

Certifications

Low Voltage Directive IEC950

UL, CSA, and CE Mark

Bluetooth Profiles Supported

BT4.1-ESR 5/6/7 Compliance

LE Link Layer Ping

LE Dual Mode

LE Link Layer

LE Low Duty Cycle Directed Advertising

LE L2CAP Connection Oriented Channels

Train Nudging & Interlaced Scan

BT4.2 ESR08 Compliance

LE Secure Connection- Basic/Full

LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended

Scanner Filter Policies LE Data Packet Length Extension FAX Profile

(FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free

Profile (HFP) Advanced Audio Distribution Profile (A2DP)

Wireless LAN Standards

IEEE 802.11a

IEEE 802.11b

IEEE 802.11g

IEEE 802.11n

IEEE 802.11ac

Intel® 9260
802.11a/b/g/n/ac (2x2)
WiFi® and Bluetooth®
5.0 Combo¹ Non-vPro



Technical Specifications

Interoperability	IEEE 802.11d
	IEEE 802.11e
Frequency Band	IEEE 802.11h
	IEEE 802.11i
	IEEE 802.11k
	IEEE 802.11r
	IEEE 802.11v
	Wi-Fi® certified
	802.11b/g/n
	•2.402 – 2.482 GHz
	802.11a/n/ac
	•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
Data Rates	802.11b/g/n
	•2.402 – 2.482 GHz
	802.11a/n/ac
	•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
Modulation	Direct Sequence Spread Spectrum
	BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
Security³	•IEEE and Wi-Fi® 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	Ad-hoc (Peer to Peer)
	Infrastructure (Access Point Required)
Models	IEEE 802.11 compliant roaming between access points
Roaming	• 802.11b: +18.5dBm minimum
Output Power²	• 802.11g: +17.5dBm minimum
	• 802.11a: +18.5dBm minimum
	• 802.11n HT20(2.4GHz): +15.5dBm minimum
	• 802.11n HT40(2.4GHz): +14.5dBm minimum
	• 802.11n HT20(5GHz): +15.5dBm minimum
	• 802.11n HT40(5GHz): +14.5dBm minimum



Technical Specifications

Power Consumption

- 802.11ac VHT80(5GHz): +11.5dBm minimum
- 802.11ac VHT160(5GHz): +11.5dBm minimum
- Transmit mode: 2.0 W
- Receive mode: 1.6 W
- Idle mode (PSP) 180 mW (WLAN Associated)
- Idle mode: 50 mW (WLAN unassociated)
- Connected Standby/Modern Standby: 10mW
- Radio disabled: 8 mW

Power Management

ACPI and PCI Express compliant power management

Receiver Sensitivity³

802.11 compliant power saving mode
 802.11b, 1Mbps: -93.5dBm maximum
 802.11b, 11Mbps: -84dBm maximum
 802.11a/g, 6Mbps: -86dBm maximum
 802.11a/g, 54Mbps: -72dBm maximum
 802.11n, MCS07: -67dBm maximum
 802.11n, MCS15: -64dBm maximum
 802.11ac, MCS0: -84dBm maximum
 802.11ac, MCS9: -59dBm maximum

Antenna type

High efficiency antenna with spatial diversity, mounted in the display enclosure

Form Factor

Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications

Dimensions

PCI-Express M.2 MiniCard

1. Type 2230: 2.3 x 22.0 x 30.0 mm
2. Type 1216: 1.67 x 12.0 x 16.0 mm

Weight

1. Type 2230: 2.8g
2. Type 126: 1.3g

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; LED White – Radio ON

1. Check latest software/driver release for updates on supported security features.
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3. 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).

HP Integrated Module with Bluetooth 4.0/4.1/4.2/5.0 Wireless Technology

Bluetooth Specification

4.0/4.1/4.2/5.0 Compliant

Frequency Band

2402 to 2480 MHz

Number of Available Channels

Legacy: 0~79 (1 MHz/CH)
 BLE: 0~39 (2 MHz/CH)



Technical Specifications

Data Rates and Throughput	Legacy: 3 Mbps data rate; throughput up to 2.17 Mbps BLE: 1 Mbps data rate; throughput up to 0.2 Mbps Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)
Transmit Power	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.
Power Consumption	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
Electrical Interface	USB 2.0 compliant
Bluetooth Software Supported	Microsoft Windows Bluetooth Software
Link Topology	
Power Management	Microsoft Windows ACPI, and USB Bus Support
Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
Power Management	ETS 300 328, ETS 300 826
Certifications	Low Voltage Directive IEC950 UL, CSA, and CE Mark
Bluetooth Profiles Supported	BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)

POWER

HP 45W Smart AC adapter	Dimensions (H x W x D)	3.74 x 1.57 x 1.04 in (9.5 x 4.0 x 2.65 cm)
	Weight	0.386 lb (175g) max
	Input	90 to 265 VAC
	Input Efficiency	87.74% at 115Vac and 88.4% at 230Vac
	Input frequency range	47 to 63 Hz
	Input AC current	1.4 A at 90 VAC



Technical Specifications

	Output	Output power	45W
		DC output	19.5V
		Hold-up time	5ms at 115 VAC input
		Output current protection	<8.0A
	Connector	4.5mm Barrel Type, 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 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5000m)
		Humidity	20% to 95%
		Storage Humidity	10% to 95%
	EMI and Safety Certifications	CE Mark - full compliance with LVD and EMC directives Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE. MTBF - over 200,000 hours at 25°C ambient condition.	
HP 65W EM Smart AC adapter	Dimensions	102x55x30mm	
	Weight	270g +/- 10g	
	Input	Input Efficiency	87% min at 115V/230V
		Input frequency range	47 to 63 Hz
		Input AC current	1.7 A at 90 VAC and maximum load
		Output	
		DC output	65W(19.5V/3.33A)
		Hold-up time	5 msec at 115 VAC input
		Output current limit	<11A, Over voltage protection- 29V max automatic shutdown
	Connector	4.5mm Barrel Type, 3 pin/grounded, mates with interchangeable cords	
	Environmental Design	Operating temperature	0° to 35° C
		Non-operating (storage) temperature	-20° to 85° C
		Altitude	0 to 5,000 m
		Humidity	0% to 95%
		Storage Humidity	0% to 95%
	EMI and Safety Certifications	CE Mark - 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 USB type C Straight 1.8m AC Adapter	Dimensions	94.0mm*40.0mm*26.5mm	
	Weight	192.5g +/-10%	



Technical Specifications

Input	Input Efficiency	Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec: 5V: 81.5% 9V: 86.7% 12V: 87.41% 15V: 87.8%
	Input frequency range	47 ~ 63Hz
Output	Input AC current	Max. 1.4 A at 90 Vac
	Output power	5V/15W 9V/27W 12V/36W 15V/45W
Connector	DC output	5V/9V/12V/15V
	Hold-up time	5ms at 115 Vac input
Environmental Design	Output current limit	<5.0A
	USB Type-C	
EMI and Safety Certifications	Operating temperature	32°F to 95° F (0° to 35° C)
	Non-operating (storage) temperature	4°F to 185° F (-20° to 85° C)
	Altitude	0 to 16,400 ft (0 to 5000m)
	Humidity	20% to 95%
	Storage Humidity	10% to 95%
	CE Mark - full compliance with LVD and EMC directives	
	Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV;	
	Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE.	
	MTBF - over 200,000 hours at 25°C ambient condition.	

HP 3-cell Long Life Li-Ion (48 WHr)	Dimensions (H x W x L)	7.3*94*184.47mm (0.287*3.7*7.263 inch)
	Weight	0.215kg
	Cells/Type	3cell Lithium-Ion Prismatic cell / 596080 3cell Lithium-Ion Polymer cell / 606072
	Voltage	11.4V
	Amp-hour capacity	4.212Ah
	Watt-hour capacity	48Wh
	Operating (Charging)	32° to 113° F (0° to 45° C)
	Operating (Discharging)	14° to 122° F (-10° to 60° C)
	Optional Travel Battery Available	No

COUNTRY OF ORIGIN



Technical Specifications

China



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

Type	Description	Part Number
Cases	HP Essential Top Load Case	H2W17AA#xxx
	HP Essential Backpack	H1D24AA
	HP Slim Ultrabook Top Load	F3W15AA
	HP Slim Ultrabook Backpack	F3W16AA
	HP Slim Ultrabook Messenger	F3W14AA
	HP Black 11.6 Always On Case	2MY57AA
Docking	HP USB-C Universal Dock	1MK33AA
	HP USB Travel Dock	T0K30AA
	HP USB-C Travel Dock	T0K29AA
	HP USB-C Universal Dock w/4.5mm Adapter	2UF95AA
	HP 3005pr USB3 Port Replicator	Y4H06AA
	HP USB-C Universal Dock	1MK33AA
	HP USB-C / A Universal Dock G2	5TW13AA
Input/Output	HP Comfort Grip Wireless Mouse	H2L63AA
	HP Slim USB Keyboard & Mouse Bundle	T6T83AA#xxx
	HP 3-Button Laser Mouse	H4B81AA#xxx
	HP USB Premium Mouse	1JR32AA
	HP Wireless Premium Mouse	1JR31AA
	HP Essential USB Mouse	2TX37AA#xxx
	HP USB Travel Mouse	G1K28AA
	HP Slim Bluetooth Mouse	F3J92AA#xxx
	HP Slim Wireless keyboard and mouse	T6L04AA#xxx
	HP USB-C to USB 3.0 Adapter	N2Z63AA#xxx
	HP USB-C to 3 and 4.5mm Adapter	N2Z65AA#xxx
	HP USB-C to RJ45 Adapter	V7W66AA#xxx
	HP HDMI to VGA Adapter	H4F02AA
	HP Stereo USB Headset	T1A67AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP Active Pen with Spare Tips	1FH00AA#xxx
	HP Active Pen Nib Set	3RV57AA
Power	HP 45W Smart AC Adapter 4.5mm	H6Y88AA#xxx
	HP 45W USB-C Power Adapter	1HE07AA#xxx
	HP 65W USB-C Power Adapter	1HE08AA#xxx
	HP Notebook Powerbank	N9F71AA#xxx
	65W Smart AC Adapter	H6Y89AA#xxx
Storage	HP External USB Optical Drive	F2B56AA
Security	HP Nano Keyed Cable Lock	1AJ39AA
Displays	HP ProDisplay P240VA 23.8-inch Monitor	N3H13AA
	HP ProDisplay P232 23-inch Monitor	K7X31AA



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

HP EliteDisplay E243m 23.8-Inch Collaboration Monitor	1FH48AA
HP EliteDisplay E230t 23-Inch Touch Monitor	W2Z50AA
HP EliteDisplay S14 14-inch USB-C Portable Monitor	3HX46AA



Summary of Changes

Date of change:	Version History:		Description of change:
March 26, 2019	V1 to V2	Added	Environmental Section
June 13, 2019	V2 to V3	Updated	EPEAT
November 15, 2019	V3 to V4	Added	Dock in accessories section

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