Powerfully immersive. Perfectly sized



Be ready when inspiration strikes. Packed with professional performance in an incredibly sleek PC that comfortably fits in your bag, the ZBook Studio is engineered to get you in the zone and help you stay focused. Now you can build complex assemblies, render in real time or visualize data—from anywhere.

Power to push the limits

Push your workflow further with up to an Intel® Core[™] i9 vPro CPU,^{1,9} NVIDIA RTX[™] Ada Laptop GPU or GeForce RTX[™] GPU,² and 64 GB RAM.²⁰ From 3D design to machine learning this pro grade PC delivers peak performance so you can work uninterrupted.

Immerse in your work

Get complete color accuracy and a 120Hz refresh rate with a 16:10 HP DreamColor display² or choose an OLED display for absolute blacks and extreme whites.² Customize your keyboard lighting and highlight shortcuts with RGB per-key LED backlighting.³

Create and collaborate everywhere

Follow inspiration wherever it strikes with a thin and light laptop that delivers the power to run the software you need on the go. Work and collaborate effectively with a long-lasting battery, AI Noise Suppression⁵ and Wi-Fi 6E.⁶

A work laptop you'll want to game on

Enjoy fast, smooth gameplay with an NVIDIA RTX[™] professional or GeForce RTX[™] GPU.² Highlight favorite keys and create custom key maps with Z Light Space software⁷ and a RGB keyboard with per-key LED backlighting.⁸









Windows 11

Work without compromising on performance with Windows 11⁸ combined with HP's collaboration and security technology.²⁴

Intel® Core[™] Processor

Crank up your multi-tasking and productivity with up to Intel vPro® with 13th Gen Intel® Core™ i9 processor,^{1,2,9} designed to handle complex, multithreaded apps.

NVIDIA® Graphics

With up to NVIDIA RTX[™] 40000 Ada Laptop GPU or GeForce RTX[™] 4080 Laptop GPU, accelerate rendering, graphics, and compute workflows to unlock new levels of productivity.²

Lightning-Fast Storage

Blitz through multiple tasks and ditch external drives with up to 4 TB PCIe Gen4 NVMe storage^{10,11}

Large Memory Configurations

Accelerate your workflow. Power through projects with up to 64 GB RAM¹² for fast rendering, editing, and visual effects performance.

HP DreamColor Display

Have confidence in what you see on screen with an optional HP DreamColor Display with 100% DCI-P3 color gamut and a 120Hz refresh rate you get smooth motion for high-speed videos.^{2,21}

Z Command Keyboard

Used to working on a Mac? Now you can choose the Z Command Keyboard, which replicates a Mac layout, for a seamless switch.¹³

Z Light Space

With Z Light Space software,⁷ customize your keyboard lighting with the RGB per-key LED backlighting.⁸ For commonly used software apps, like Adobe Photoshop, AutoCAD or SOLIDWORKS,¹⁴ use pre-loaded color-maps or create your own.

Easy Battery Management

Manage and monitor your battery's performance and condition and customize charging options with the easy-to-use HP Power Manager dashboard.²³

HP Vaporforce Thermals

Keep cool under any workload with HP Vaporforce Thermals,¹⁶ with curved metal blades, that protect your workstation from overheating, so you can cut through your heaviest workloads with peak processing power.

HP 16:10 Aspect Ratio

The 16:10 aspect ratio reduces the need to scroll by showing 11% more vertical content than a 16:9 aspect ratio display. See more of your project without minimizing program menus or toolbars.

HP Context Aware

HP Context Aware provides AI based optimization to maximize performance when you're working at a table, comfort when you're working from your lap, and responsiveness when you're working on the go.¹⁷



Specifications Table

Available Operating Systems	Windows 11 Pro – HP recommends Windows 11 Pro ¹ Windows 11 Home – HP recommends Windows 11 Pro for Business ¹ Windows 11 Pro (preinstalled with Windows 10 Pro Downgrade) ^{1,2} Ubuntu 22.04 LTS FreeDOS 3.0
Processor family ^{2,3,4,5,6,9}	13th Generation Intel® Core™ i9 processor; 13th Generation Intel® Core™ i7 processor; 13th Generation Intel® Core™ i5 processor
Available Processors ^{2,3,4,5,6,9}	Intel® Core™ i9-13900H (1.9 GHz E-core base frequency, 2.6 GHz P-core base frequency, up to 4.1 GHz E-core Max Turbo frequency, up to 5.4 GHz P-core Max Turbo frequency, 24 L3 MB cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology Intel® Core™ i7-13800H (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, up to 4.0 GHz E-core Max Turbo frequency, up to 5.2 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology Intel® Core™ i7-13800H (1.8 GHz E-core base frequency, 2.4 GHz P-core base frequency, up to 3.7 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads) Intel® Core™ i5-13600H (1.8 GHz E-core base frequency, up to 4.8 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads), supports Intel® vPro® Technology
Maximum memory	64 GB DDR5-4800 non-ECC SODIMM; 64 GB DDR5-5600 non-ECC SODIMM ¹¹ Memory is SODIMM. Supports dual channel memory.
Memory slots	2 SODIMM; supports dual channel
Internal storage	512 GB up to 4 TB PCIe® Gen4 x4 NVMe™ M.2 SSD ¹⁰ 512 GB up to 1 TB PCIe® NVMe™ M.2 SED SSD ¹⁰
Maximum storage capacity	Up to 4 TB
Display size (diagonal)	16"
Display size (diagonal, metric)	40.6 cm (16")
Display	16" diagonal, WQUXGA (3840 x 2400), OLED, touch, BrightView, eDP + PSR, micro-edge, Low Blue Light, 400 nits, 100% DCI-P3; 16" diagonal, WQUXGA (3840 x 2400), 120 Hz, IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 16" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 400 nits, 100% sRGB ^{15,16,27,29} 40.6 cm (16") diagonal, WQUXGA (3840 x 2400), OLED, touch, BrightView, eDP + PSR, micro-edge, Low Blue Light,400 nits, 100% DCI-P3; 40.6 cm (16") diagonal, WQUXGA (3840 x 2400), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 500 nits, 100% DCI-P3, HP DreamColor; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, eDP + PSR, micro-edge, 400 nits, 100% sRGB ^{15,16,27,29}
Available Graphics	Integrated: Intel® Iris® X ^e Graphics ^{18,20,22} Discrete: NVIDIA® GeForce RTX [™] 4080 (12 GB GDDR6X dedicated) NVIDIA® GeForce RTX [™] 4070 Laptop GPU (8 GB GDDR6 dedicated) NVIDIA RTX [™] 4000 Ada Generation Laptop GPU (12 GB GDDR6 dedicated) NVIDIA RTX [™] 4000 Ada Generation Laptop GPU (8 GB GDDR6 dedicated) NVIDIA RTX [™] 2000 Ada Generation Laptop GPU (8 GB GDDR6 dedicated) NVIDIA RTX [™] A1000 Ada Generation Laptop GPU (8 GB GDDR6 dedicated) NVIDIA RTX [™] A1000 Laptop GPU (6 GB GDDR6 dedicated) ^{12,18,22,32}
Audio	Audio by Bang & Olufsen, Quad-speaker audio (2 tweeters & 2 Quad woofers), 2 Top Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio with 200Hz Bass Roll off
Memory card device ⁵⁹	1 microSD 7.1 media card reader
Ports and connectors	Left side: 1 power connector; 1 headphone/microphone combo; 2 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, H Sleep and Charge) ¹² ; Right side: 1 Super Speed USB Type-A 5Gbps signaling rate (charging); 1 SuperSpeed USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4) ¹²



Specifications Table

Communications Communications Messe Cilicipad with mage servers. supporting multi-touch gebrase and ups Communications WLAN: Intel® WK-FI (EL AV221 (2/2) and Bluetooth® 5.3 wireless card, non-vProB ¹⁴ . Camera 720 FID IF camera ^{10.17} Bing search for E11 PH Observers PH Power, Support Ph Power, Circletains Stocker PH Power, Search for E11 PH Observers PH Power, Search for E11 PH Camera ^{10.17} Software ^{11,13,23,13,13,13,13,13,13,13,13,13,13,13,13,13}		
Communications WLAN Intel® Win Fi GE AX211 (2x2) and Bluetooth® 5.3 wineless card, vProS, Intel® Win Fi GE AX211 (2x2) and Bluetooth® 5.3 wineless card, non-ProS ¹⁴ , Camera Z00 HD R camera ^{14,17} Bits grant Bits grant </td <td>Keyboard</td> <td></td>	Keyboard	
Camera 720p H0 IR cameral ^{8-1/2} Bing search for IFL1 HF Hotek Support HE Security Assistant Native Minacast support HP Support Assistant Native Minacast support HP Camera Support HP Camera Support HP Easy Clean Software PLASEARDALASSES HP Active Dignostics HP Camera Support HP Support HP Camera	Mouse	Clickpad with image sensor, supporting multi-touch gestures and taps
Bing open for E11 Protect Cancellation Software HP Portor Cancellation Software HP Portor Cancellation Software HP Portor Cancellation Software HP Portor Mannee Advisor HP Support Assistant HP Concension Opening HP Portor Software HP Portor Mannee HP Portor Mann	Communications	WLAN:Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card, vPro®; Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card, non-vPro® ¹⁴ ;
Beter State Concellation Solvaire PF Support Assistant PF Support Assistant PF Connection Optimize myPF PF Connection Optimize PF Connection Optimize myPF PF Connection Optimize myPF PF Connection Optimize myPF PF Connection Optimize myPF PF Connection Optimize myPF PF Connection Office Conference Microsoft 365 and Office Conference HF Service Scan Microsoft 365 and Office Conference HF Service Conference HF Service Conference HF Service Scan Microsoft 365 and Office Conference HF Service Microsoft HF Director Authoritation HF Director Aut	Camera	720p HD IR camera ^{16,17}
Absolute persistence module HP Credenial Manager HP Power On Althentication Master Boot Record security Pre-boot authentication Windows Defender HP Manageability Integration Kit HP BioSphere Gen6 HP Sure Start Start Gen7 HP Sure Start Gen6 HP Sure Start St	Software ^{21,25,28,30,31,33,51,52}	HP Hotkey Support HP Noise Cancellation Software HP Performance Advisor HP Support Assistant Native Miracast support HP Connection Optimizer myHP HP Privacy Settings Data Science Stack HP Easy Clean HP PC Hardware Diagnostics Windows 10 Cloud Recovery Client HP Z Light Space HP Camera & Super Resolution Software HP Services Scan Microsoft 365 and Office (sold separately and Internet access required for activation)
HP Credential Manager HP Power On Authemication Master Boot Record security Pre-boot authemication Windows Defender HP Banagaebiliy Integration Kit HP Buro Statt Gen6 HP Sure Statt Gen6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primage Assistant Nano Security Lock Stot HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primage Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primage Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primage Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primge Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primge Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Tristed Platform Module TPM 2.0 HP Primge Assistant Gen4.6 HP Cleart Security Manager Gen7 HP Stristed Platform Module TPM 2.0 HP Tristed Platform Module TPM 2.0 HP Tristed Platform Module TPM 2.0 HP Tristed Platform 4.0 HP Stristed Platform 4.0 HP Cleart Security Software HP Cleart Security Edition ⁵⁶ Security Software LecensesHP Power Manager ¹³ HP Ower Manager ¹³ PowerHP Sim Smart 150 W External AC power adapter, HP Sim Smart 200 W External AC power adapter ⁴⁶ Battery trecharge time Suports battery fast charge: approximately 50% in 30 minutesDimensions14 02 x 954 x 0.75 in (non-touch); 14 02 x 9.54 x 0.72 in (non-touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (nouch); 21.73 x 2.71 x 1.3.58 in 552 x 69 x 345 mm (Package) <td>Available software</td> <td>HP Smart Support¹⁹</td>	Available software	HP Smart Support ¹⁹
Licenses HP Wolf Plo Security Edution Fingerprint reader Fingerprint sensor (select models) Management features HP Power Manager ¹³ Power HP Slim Smart 150 W External AC power adapter; HP Slim Smart 200 W External AC power adapter ⁴⁸ Battery type HP Long Life 6-cell, 86 Wh Li-ion polymer ^{26,47} Battery recharge time Supports battery fast charge: approximately 50% in 30 minutes Dimensions 14.02 x 9.54 x 0.76 in (non-touch); 14.02 x 9.54 x 0.72 in (touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (touch); 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halcogon ⁴⁶	Security management 8,34,35,37,38,39,43,49	HP Credential Manager HP Power On Authentication Master Boot Record security Pre-boot authentication Windows Defender HP Manageability Integration Kit HP BIOSphere Gen6 HP Sure Start Gen6 HP Sure Admin HP Image Assistant Nano Security Lock Slot HP Image Assistant Gen4.6 HP Client Security Manager Gen7 Trusted Platform Module TPM 2.0 HP Privacy Key
Management features HP Power Manager ¹³ Power HP Slim Smart 150 W External AC power adapter; HP Slim Smart 200 W External AC power adapter ⁴⁸ Battery type HP Long Life 6-cell, 86 Wh Li-ion polymer ^{26,47} Battery recharge time Supports battery fast charge: approximately 50% in 30 minutes Dimensions 14.02 x 9.54 x 0.76 in (non-touch); 14.02 x 9.54 x 0.72 in (touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (touch); 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halcogon ⁴⁶	Security Software Licenses	HP Wolf Pro Security Edition ⁵⁶
Power HP Slim Smart 150 W External AC power adapter; HP Slim Smart 200 W External AC power adapter ⁴⁸ Battery type HP Long Life 6-cell, 86 Wh Li-ion polymer ^{26,47} Battery recharge time Supports battery fast charge: approximately 50% in 30 minutes Dimensions 14.02 x 9.54 x 0.76 in (non-touch); 14.02 x 9.54 x 0.72 in (touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (touch); 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halogoga ⁴⁶	Fingerprint reader	Fingerprint sensor (select models)
Battery type HP Long Life 6-cell, 86 Wh Li-ion polymer ^{26,47} Battery recharge time Supports battery fast charge: approximately 50% in 30 minutes Dimensions 14.02 × 9.54 × 0.76 in (non-touch); 14.02 × 9.54 × 0.72 in (touch); 35.6 × 24.2 × 1.9 cm (non-touch); 35.6 × 24.2 × 1.8 cm (touch); 21.73 × 2.71 × 13.58 in 552 × 69 × 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halcogon ⁴⁶	Management features	HP Power Manager ¹³
Battery recharge time Supports battery fast charge: approximately 50% in 30 minutes Dimensions 14.02 x 9.54 x 0.76 in (non-touch); 14.02 x 9.54 x 0.72 in (touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (touch); 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halcogon ⁴⁶	Power	HP Slim Smart 150 W External AC power adapter; HP Slim Smart 200 W External AC power adapter ⁴⁸
Dimensions 14.02 x 9.54 x 0.76 in (non-touch); 14.02 x 9.54 x 0.72 in (touch); 35.6 x 24.2 x 1.9 cm (non-touch); 35.6 x 24.2 x 1.8 cm (touch); 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Haloscon ⁴⁶	Battery type	HP Long Life 6-cell, 86 Wh Li-ion polymer ^{26,47}
Dimensions 21.73 x 2.71 x 13.58 in 552 x 69 x 345 mm (Package) Weight Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.) Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Hologoga ⁴⁶	Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes
Ecolabels EPEAT® Gold registered in the U.S. ⁴⁵ Sustainable impact Low Halosco ⁴⁶	Dimensions	
Sustainable impact	Weight	Starting at 3.81 lb; Starting at 1.73 kg; (Weight varies by configuration and components.)
	Ecolabels	EPEAT® Gold registered in the U.S. ⁴⁵
	Sustainable impact specifications	Low Halogen ⁴⁶



Messaging Footnotes

¹ Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily

¹ 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.
² Optional feature that must be configured at purchase.
³ RGB keyboard is an optional feature that must be configuration, loaded applications, letstr, US, Germany and France only.
⁴ Battery life will vary depending on the product model, configuration, loaded applications, letstrues, use, wireless functionality and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See MobileMark18 battery headmark lifetric flappen central control customers? OBI (or activitiend dottient).

benchmark https://bapco.com/products/mobilemark-2018/ for additional details. ⁵ Al Noise Reduction is delivered automatically through Windows update or can be downloaded from https://support.hp.com/us-en/drivers

⁵ AI Noise Rebuction is belivered automatically informatically information with internal PC speakers, microphone and analog headsets. The DNN when available. Requires Windows 10 or higher, compatible with internal PC speakers, microphone and analog headsets. The DNN Noise Reduction setting can be configured through the Application HP Audio Control.
⁶ Wi-Fi 6E is an optional feature that must be configured at purchase. Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
⁷ J I into Economy Towner 10 or binder.

⁷ Z Light Space requires Windows 10 or higher. ⁸ RGB keyboard is an optional, configurable feature. Available only in the US, UK, Germany and France only. ⁹ ML STD testing 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. Accidental Damage or damage under these test conditions requires an optional HP Accidental Damage Protection Care Pack. ²⁰ 64GB Memory is an optional, configurable feature.

2⁹ Memory is an optional, configurable feature. ⁸ 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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com .

⁹ For full Intel® vPro® functionality, Windows 10 Pro 64 bit, a vPro supported processor, vPro enabled chipset, vPro enabled wired LAN and/or WLAN card and TPM 2.0 are required. Some functionality requires additional 3rd party software in order to run. See http://intel.com/vpro

http://intel.com/wpro.
1²¹ Por storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB (for Windows) is reserved for system recovery software.
1³¹ Optional, configurable feature.
1³² Up to 64GB memory is an optional, configurable feature.
1³² Loromand Keyboard is an optional, configurable feature.
1³² Command Keyboard is an optional, configurable feature.

France only. ¹⁴ Software sold separately
¹⁵ Applies to HP PCs, Workstations and Displays manufactured after January 2019. Based on most Gold and Silver EPEAT®

November 2023

replaces to the FLS, who statuted and usingly simulated to the functional status and a status of the FLS with the function of the function of

GFX. ¹⁷ HP Context Aware requires Windows 10 or higher and an Intel processor. ¹⁸ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁸ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military un ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military und ¹⁰ Testing is no int results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental

Damage Protection Care Pack. ²¹ All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. 23 HP Power M

²⁴ HP power Manager requires Windows 10 and higher and can be downloaded from the Microsoft Store.
²⁴ HP conferencing features require Windows and the latest myHP app, available over the air or for download via sofpaq on the HP ort website. Planned availability in spring 2023.

Technical Specifications Footnotes

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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for

updates. See http://www.windows.com . ² This system is preinstalled with Windows 10 Pro software and also comes with a license for Windows 11 Pro software and provision for recovery 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

uninstall one version and install the other version. You must back up all data (files, photos, etc.) before uninstalling operating systems to avoid loss of your data.
³ Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.
⁴ Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See
http://www.intel.com/technology/turboboost for more information.
⁵ 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 . ⁶ Intel vPro® requires Windows 10 Pro 64 bit or higher, a vPro supported processor, vPro enabled chipset, vPro enabled wired LAN

and/or Wi-Fi 6E WLAN and TPM 2.0. Some functionality requires additional 3rd party software in order to run. Features of vPro® ⁸ HP Tamper Lock is an optional feature that must be configured at the factory and requires a supervisor password be established prior

use. ⁹ 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. ¹⁰ For storage drives, CB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB (for Windows) is reserved the comparement of the software configuration.

for system recovery software

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.
¹² Multi-Function USB-C port works with Discrete Graphics and Intel(r) Iris Xe Graphics. Note: For Nvidia Discrete Gfx, it can support HDMI 2.1 except GPU of QN20-P1 SKU(HDMI2.0 support).
¹³ Manage and monitor your battery's performance and condition and customize charging options with the easy-to-use HP Power Manager dashboard.
¹⁴ WuE16 F requires a WiE16 F router cold senarately. In function in the 6CHz band, Availability of nublic wireless access points limiter.

Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported. ¹⁵ UHD content required to view UHD images.

16 HD content required to view HD images

The boline in equine to view the integes. 17 Windows Hello face authentication utilizes a camera specially configured for near infrared (IR) imaging to authenticate and unlock Windows devices as well as unlock your Microsoft Passport. 18 Both UMA and Discrete configurations support 4 independent displays (both Intel and NVIDIA Graphic cards, UMA/DIS mode need to close lid or only 3 displays max are supported externally. Max. resolution = 8K@60Hz (miniDP) 4K@60Hz (Type-C output port using a Type C-to-DP adapter), 4K@60Hz (Type-C output port using a Type C-to-DP adapter), OR 4K @60Hz (DP1) & 2.5K @60Hz (DP2) & FHD (VGA) OR 4K @60Hz (one DP Port) & 4K @60Hz (Type-C output port using a Type C-to-DP adapter).

PP Smart Support automatically collects the telemetry necessary upon initial boot of the product to deliver device-level configuration data and health insights and is available preinstalled on select products, thru HP Factory Configuration Services; or it can be downloaded. For more information about how to enable HP Smart Support or for download, please visit http://www.hp.com/smart-support

⁵⁰ Shared video memory (UMA) uses part of the total system memory for video performance. System memory dedicated to video performance is not available for other use by other programs.
²¹ HP Services Scan is provided with Windows Update on select products and will check entitlement on each hardware device to determine if an HP TechPulse-enabled service has been purchased, and will download applicable software automatically. HP TechPulse is a telemetry and analytics platform that provides critical data around devices and applications. For full system requirements or to disable this feature, please visit http://www.hpdaas.com/requirements . Not applicable in China. ²² GPU configurations may be limited to specific GPU/Memory Configurations

²⁴ HP RGB Z Command Keyboard only available in the US, UK, France, and Germany, Not available with Privacy Panel, 25 Data Science Stack is available on select skus only.

²⁰ Actual battery Wath-bours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors. ²⁰ Display options may be limited to specific CPU / GPU Configurations. ²⁰ HP Z Light space is an optional feature, requires Windows 10 or higher and must be configured at hardware purchase.

⁹ Resolutions are dependent upon monitor capability, and resolution and color depth settings.

⁰ Available on select HP PCs with Windows 10 and higher and Intel processors

³¹ Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: http://windows.microsoft.com/en_us/windows.est/project.wireless.screen-miracast.

32 Others NVIDIA dGPLI: Support HD decode DX12 HDML2.1 mDP.1.4 HDCP.2.3 via DP up to 5K@60Hz/W/o DSC) or 8K@60(With

²² Others NVIDIA dCPU: Support HD decode, DX12, HDM 2.1, mDP 1.4, HDCP 2.3 via DP up to 5K@60Hz(W/o DSC) or 8K@60(Wth DSC and requires 2 display heads) and via HDMI up to 8K @ 60Hz(With DSC and requires 2 display heads)
³³ HP Connection Optimizer requires Windows 10.
³⁴ HP BIOSphere Gen6 features may vary depending on the platform and configuration.
³⁵ 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

Garantee 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.

Autonization rappenient and entre oxiant a rin or opticate one of the rask sector toxens ³⁷ HP Manageability integration KI can be downloaded from http://www.hp.com/gol/einefmanage ³⁸ Security lock for security slot is sold separately. ³⁹ HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite ar ⁴¹ HP Sure Start Gen6 is available on select HP PCs.

dows and is available on the select HP Elite and Pro PCs

⁴⁵ Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information

⁴⁶ External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be

Iow halogen. ⁴⁷ HP Fact Charge recharges up to 50% within 30 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 50% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance. ⁴⁸ 150W Power Adapter is not available with Nvidia RTX[™] Graphics ⁴⁹ HP Sure Admin requires Windows 10 or higher, HP BIOS, HP Manageability Integration Kit from ⁴¹ the undertaintic transmoster and HP Sure Admin I ocal Access Authenticator smartphone app from the Android or Apple

⁵¹ HP Easy Clean requires Windows 10 RS3 and will disable the keyboard, touchscreen, and clickpad only. Ports are not disabled. See

⁵¹ HP Easy clean requires winners as the target in the manual constraints and the products are enhanced with HP Presence. Features vary by platform. HP conferencing features require Windows and the latest myHP app, available over the air or for download via sofpaq on the HP Support website. Planned availability in spring 2023. ⁵⁶ HP Wolf Pro Security Edition (including HP Sure Click Pro and HP Sure Sense Pro) is available preloaded on select SKUs and, discussion the LP product numbered includes a naid 1-year of 3-year fleense. The HP Wolf Pro Security Edition software is license.

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