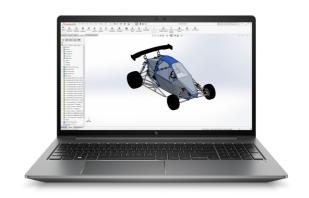
HP ZBook Power 15.6 inch G9 Mobile Workstation PC



Pro-certified power within reach.

Upgrade to professional ZBook performance and security at an unbelievably affordable price. Power up your productivity on this durable yet premium device—delivering enhanced collaboration features and prograde components to seamlessly run leading professional software applications.



*Product image may differ from actual product

HP recommends Windows 11 Pro for business

Power through professional workflows

Tackle your biggest projects and blaze through 3D modeling workloads with up to an NVIDIA RTX™
A2000 Laptop GPU.³ Eliminate slowdowns and take-on serious multitasking with up to an Intel®
Core™ i9 vPro® processor,^{1,2,3} 64GB memory⁴ and 8TB storage.^{3,5}

Durable with a premium touch

With an all-aluminum chassis and MIL-STD 810 durability,⁶ this mobile workstation is tough enough
to last, with a distinctly premium touch. See more screen, in mesmerizing clarity, with a narrow bezel
4K UHD display that makes project details pop.²

Connect. Communicate. Collaborate

Collaborate effectively from anywhere with up to 16-hours of battery life,⁸ a 720p HD camera, and AI enhanced audio softwara¹¹ that blocks background noises. And, with next-gen Wi-Fi 6E get a fast, reliable connection—even in dense Wi-Fi® environments.^{9,10}

Certified, secured and supported

- Get peace of mind with a serviceable, high-performance PC that's certified to work with professional apps and comes with HP Wolf Security for Business—protecting below, in and above the OS.¹² Simplify fleet-wide rollouts with optional management tools.
- Work anywhere without compromising on performance or security with Windows 11¹³ powered by HP's collaboration and connectivity technology.
- Blitz through multiple tasks and ditch external drives with up to 8 TB local NVMe storage^{5,14}
- Power through projects with up to 64 GB RAM⁴ for fast editing and design.
- Power through projects with up to NVIDIA® A2000 laptop GPU,³ certified for pro-apps.
- Take multitasking to the next level with up to Intel® Core™ i9 vPro® processors¹,²,³ designed to handle complex, multithreaded apps.
- Designed for ultimate durability, this ZBook undergoes brutal MIL-STD 810H⁶ tests to help ensure this PC keeps rolling through your workday.
- HP Wolf Security for Business creates a hardware-enforced, always-on, resilient defense. From the BIOS to the browser, above, in, and below the OS, these constantly evolving solutions help protect your PC from modern threats.¹²
- Strenuously tested to meet ISV certification and deliver superb performance and support with leading software providers.
- Get a fast and reliable connection in dense wireless environments with Wi-Fi 6E.¹⁰
- Help protect our shared future with PCs that drive towards increasing sustainability.
- Connect to everything you need with a wide-range of connectivity options: multiple USB 3.1 Type-A ports, Thunderbolt™ 4 with USB Type-C[®], ¹⁵ HDMI 2.0, ¹⁶ Smart Card Reader, and headphone/microphone combo jack.
- Plug in to greater connectivity at your desktop with the optional HP Thunderbolt Dock for lightningfast ThunderboltTM 4^{15,17} transfers and the flexibility to run up to two external 4K displays. ^{18,19}

HP ZBook Power 15.6 inch G9 Mobile Workstation PC Specifications Table



Sustainable impact specifications

Warranty





*Product image may differ from actual product	Windows 11 Pro ¹
	Windows 11 Pro Education ¹
Available Operating Systems	Windows 11 Home – HP recommends Windows 11 Pro for business ¹
	Windows 11 Home Single Language – HP recommends Windows 11 Pro for business ¹ FreeDOS 3.0
Processor family ^{2,3,4,5,25}	12th Generation Intel® Core™ i5 processor; 12th Generation Intel® Core™ i7 processor; 12th Generation Intel® Core™ i9 processor
Available Processors ^{2,3,4,5,16,25}	Intel® Core™ i9-12900HK with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, up to 3.8 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™ i9-12900H with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, 2.5 GHz P-core base frequency, up to 3.8 GHz E-core base frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology; Intel® Core™ i7-12800H with Intel® UHD Graphics (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 4.8 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™ i7-12700H with Intel® UHD Graphics (1.7 GHz E-core base frequency, 2.3 GHz P-core base frequency, up to 3.5 GHz E-core Max Turbo frequency, up to 4.7 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™ i5-12500H with Intel® UHD Graphics (2.0 GHz E-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.5 GHz P-core Max Turbo frequency, up to 3.5 GHz P-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 3.5 GHz P-core Max Turbo frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 3.3 GHz E-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4 GHz P-core Max Turbo frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4 GHz P-core Max Turbo frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4 GHz P-core Max Turbo frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4
Maximum memory	64 GB DDR5-4800 non-ECC SDRAM ⁷ Transfer rates up to 4800 MT/s.
Memory slots	2 SODIMM; supports dual channel ^{8,9,10}
Internal storage	256 GB up to 4 TB PCIe® Gen4 NVMe™ M.2 SSD ^{11,52}
	256 GB up to 512 GB PCle® Gen4 NVMe™ M.2 SED SSD ¹¹ up to 8 TB PCle® Gen4 x2 NVMe™ ¹¹
Display size (diagonal, metric)	39.6 cm (15.6")
Display	39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS,
	narrow bezel, anti-reflection Corning® Gorilla® Glass 5, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB; 39.6 cm (15.6") diagonal, 4K UHD (3840 x 2160), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB ^{14,21,23,24}
Available Graphics	Integrated: Intel® Iris® X ^e Graphics ^{16,32} Discrete: NVIDIA RTX™ A1000 Laptop GPU (4 GB GDDR6 dedicated); NVIDIA RTX™ A2000 Laptop GPU (8 GB GDDR6 dedicated); NVIDIA® T600 Laptop GPU (4 GB
	GDDR6 dedicated) (Discrete graphics options planned to be available at a later date and require factory configuration at the time of hardware purchase.)
Audio	HP Audio, dual stereo speakers, dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio 45
Memory card device	1 smart card reader (select models)
Ports and Connectors	Left side: 2 SuperSpeed USB Type-A 5Gbps signaling rate (charging) ⁶ ; Right side: 1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 3 SuperSpeed USB Type-A 5Gbps signaling rate (charging) ^{28,55}
Input devices	HP Premium Quiet Keyboard, spill-resistant, full-size, backlit, keyboard with a Programmable Key and numeric keypad; ClickPad Mylar with multi-touch gesture support, taps enabled as default; Microsoft Precision Touchpad with gesture support;
Communications	LAN: Intel® I219-LM GbE, vPro®; Intel® I219-V GbE, non-vPro®; WLAN: Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 M.2 combo, vPro®; Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 M.2 combo, non-vPro® 12.13; NFC Mirage WNC XRAV-1
Camera	720p HD camera; 720p HD IR camera ^{17,18}
Software	Bing search for IE11; Buy Office; HP Hotkey Support; HP Performance Advisor; HP Recovery Manager; HP Remote Graphics Software; HP Support Assistant; HP JumpStart; Native Miracast support; HP Connection Optimizer; HP Cloud Recovery; HP Admin; HP Privacy Settings; HP QuickDrop; HP Easy Clean; HP PC Hardware Diagnostics; HP ZCentral Remote Boost 2020 Software for Z workstation; Tile™ Application; HP Auto Lock and Awake; ^{15,26,35,39}
Available software	HP Smart Support ⁴³
Security management	Absolute persistence module; HP Device Access Manager; HP Power On Authentication; HP Security Manager; Integrated smart card reader; Master Boot Record security; Pre-boot authentication; HP Sure Click; Windows Defender; HP Secure Erase; HP Manageability Integration Kit; HP Sure Sense; HP Secure Platform; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Start Gen6; HP Sure Run Gen3; HP Tamper Lock; Nano Security Lock Slot; HP Client Security Suite Gen7; Trusted Platform Module TPM 2.0; Windows Secured Core; 19,22,27,30,31,34,38,47,49,50,53
Security Software Licenses	HP Wolf Pro Security Edition ⁵⁶
Fingerprint reader	Fingerprint reader (select models)
Management features	HP Power Manager ³³
Power	120 W Slim Smart external AC power adapter; 150 W Slim Smart external AC power adapter ²⁰
Battery type	HP Long Life 6-cell, 83 Wh Li-ion polymer ^{37,40}
Battery life	Up to 18 hours
Dimensions	35.94 x 23.39 x 2.28 cm
Weight	Starting at 1.93 kg; (Weight varies by configuration and components.)
Ecolabels	EPEAT® registered configurations available ⁴¹
Energy star certified (series fixed)	ENERGY STAR® certified
Contact and the form of the contract of the co	1 - 11-1 42

3 year (3/3/0) limited warranty includes 3 years of parts and labor. No on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

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Accessories and services (not included)

HP Prelude 15.6-inch Topload



Transport your work gear with a stylish and durable laptop bag thoughtfully designed with nylon fabric and a padded compartment for your laptop. The HP Prelude Topload comes with convenient handles or a crossbody strap that helps you carry it the way you want. A pop of color on the zipper is sure to brighten your day every time you open the bag.

Product number: 1E7D7AA

HP Wireless Rechargeable 950MK Mouse and Keyboard



Experience clutter-free productivity, simple, streamlined connectivity, and fast out-of-the-box HP Link-5 plug and play setup with the elegant HP Wireless Rechargeable 950MK Mouse and Keyboard.

Product number: 3M165AA

HP Stereo USB Headset G2



Plug right in and get ready to speak and hear clearly all day. With noise-cancelling, comfortable design, and easy adjustment, your sound comfort will carry you from call to call without interference or frustration.

Product number: 428K6AA

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- 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 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
- Optional, configurable feature that must be configured at purchase

- *Up to 64GB memory is an optional feature that must be configured at purchase.

 *I up to 64GB memory is an optional feature that must be configured at purchase.

 *For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of system disk is reserved for system recovery software.

 *To storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of system disk is reserved for system recovery software.

 *To storage Protection Care Pack.

 *Select household wipes can be safely used to clean HP Elite and Workstation PCs up to 1,000 wipes: See wipe manufacturer's instructions for disinfecting and the HP cleaning guide for HP tested wipe solutions at How to Sanitize Your HP Device Whitepaper (http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-7610ENW). Not applicable to HP Elite c1030 (homebook.
- 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. See MobileMark18

- ⁸ 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. See MobileMark18 battery benchmark https://bapco.com/products/mobilemark-2018/ for additional details.

 ⁹ Wi-Fi 6E is an optional feature that must be configured at purchase.

 ¹⁰ Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6Hz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. Available in countries where Wi-Fi 6E is supported.

 ¹⁰ NIN Noise Reduction is delivered automatically through Windows update or can be downloaded from https://support.hp.com/us-en/drivers. Requires Windows 10 or higher, compatible with internal PC speakers, microphone and analog headsets. The DNN Noise Reduction is etiling can be configured through the Application HP Audio Control.

 ¹² HP Wolf Security for Business requires Windows 10 or 11 Pro or higher, includes various HP security features and is available on HP Pro, Elite and Workstation products. See product details for included security features and OS requirement.

 ¹³ 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

- enabled. High speed internet and Microsoft account required. ISP ¹⁴ Optional, configurable feature. ¹⁵ SuperSpeed USB 20Gbps is not available with Thunderbolt™ 4 ¹⁶ HDMI cables are sold separately. ¹⁷ HP Thunderbolt Dock with Thunderbolt™ 4 sold separately. ¹⁸ External displays sold separately.

- Optional hybrid graphics is required to run up to two external 4K displays.

Technical Specifications Footnotes

- 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 over time for updates. See http://www.windows.com.

 * Multicrore 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.

 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 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 HDMI port-cable not included.

 7 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.

 8 Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory channels.

- 8 Maximized dual-channel performance requires SDDIMMs of the same size and speed in both memory channels.
 9 Intel® allows architectures designed with four DIMM slots to run at 320 MT/S.
 10 Howarman 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.
 11 For 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.
 12 GbE The term "10/100/1000" or "Glapht Ethernet indicates compatibility with IEEE standard 802.3ab for Glapbit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Glapbit Ethernet server and network infrastructure is required.
 13 W-FI GE requires a Wi-Fi GE router, sold separately, to function in the GGHz band. Availability of public wireless access points limited. Wi-Fi GE is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi GE is supported.
 14 HD camera feature. InfraRed feature, IPS Anti-reflection Touchscreen feature are based on the selection of display.
 15 HP Zicentral Remote Boost Sender does not come preinstalled on 2 Workstations but can be downloaded and run on all 2 desktop and laptops without license purchase through 2022. With non-Z sender devices, purchase of perpetual individual license or perpetual floating license per simultaneously executing versions and purchase of Zicentral Remote Boost Sender for non-2 Hardware requires a license and Windows 10, RHEL/CentOS (7 or 8), or UBUNTU 18.04 or 20.04 LTS operating systems. macOS (10.14 or newer) operating system and ThinPro 7.2 are only supported on the receiver side. Requires network access. The software is available for download at hp.com/ZicentralRemoteBoost .
 19 HD and HD content required to view HD images respectively.
 19 HD sure Click requires Windows 10 Pro or higher or Enterprise. See https://bit.ly/2PtLT6A_Sur

- ²¹ UHD content required to view UHD images.

- 24 HB IOS here Gen 6 features may vary depending on the platform and configuration.

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

 24 Actual brightness will be lower with HP Sure View or touch-screen.

 25 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

 26 HP Quick Drop requires Internet access and Windows 10 PC preinstalled with HP QuickDrop app and either an Android device (phone or tablet) running Android 7 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the Android HP QuickDrop app.

- higher with the iOS HP QuickDrop app.

 27 HP Sure Run Gen3 is available on select HP PCs and requires Windows 10 and higher.

 28 SuperSpeed USB 20Gbps is not available with Thunderbolt** 4.

 29 HP Performance Advisor Software HP Performance Advisor is ready and waiting to help you get the most out of your HP Workstation from day one—and every day after. Learn more or download at: https://www.hp.com/us-en/workstations/performance-
- 29 HP Performance Advisor Software HP Performance Advisor is ready and waiting to help you get the most out of your HP Workstation from day one—and every day after. Learn more or download at: https://www.hp.com/us-en/workstations/performance-advisor.html
 30 Hp Manageability Integration Kit can be downloaded from http://www8.hp.com/us-en/workstations/performance-advisor.html
 31 Absolute Persistence Module: 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 LI. S. The absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full detain. Absolute Persistence Module: Absolute Software activates a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the LI. S. The absolute Recovery Guarantee 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.

 32 The system must be populated with dual channel memory for Intel its XE. Otherwise, system uses the Intel® UHD Graphics.

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

 34 Security lock for security slot is sold separately.

 35 Wincascast 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-8/project-wireless-screen-miracast.

 36 Security lock for security slot is sold separately.

 37 Battery i

- downloaded. For more information about how to enable HP Smart Support or for download, please visit http://www.hp.com/smart-support.

 4° Dual-microphone array when equipped with optional webcam and optional world facing microphone.

 4° Secure Erase For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.

 4° HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data. Network based recovery using Wi-Fi is only available on PCs with Intel® UF. Fil Module.

 5° HP Sure Sense is available on select HP PCs and is not available with Windows10 Home.

 5° Storage Slot 1 can support both PCle Gen3 and Gen4 drives.

 5° Requires an Intel® vPro®, AMD Ryzen® "Por processor or Qualcomm® processor with SDB50 or higher and requires 8 GB or more system memory. Secured Core PC functionality can be enabled from the factory.

 5° Thunderbots® Add USB4® maximum speed of 400bps will be divided between the different data workstreams.

 5° FH Wolf Pro Security Edition including HP Sure Glick Pro and HP Sure Sense Pro is available preloaded on select SKUs and, depending on the HP product purchased, includes a paid 1-year or 3-year license. The HP Wolf Pro Security Edition software is licensed under the license terms of the HP Wolf Security Software End-User license Agreement (EULA) that can be found at: https://support.hp.com/us-en/document/sh_3875769-3873014-16 as that EULA is modified by the following: "7. Term. Unless otherwise term (Thitail Term). At the end of the Initial Term you may either (a) purchase a renewal license for the HP Wolf Pro Security Edition from HP. Sure Click Pro) is effective upon activation and will continue or either a twelve (12) month to rithry-six (36) month license term (Thitail Term). At the end of the Initial Term you may e

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