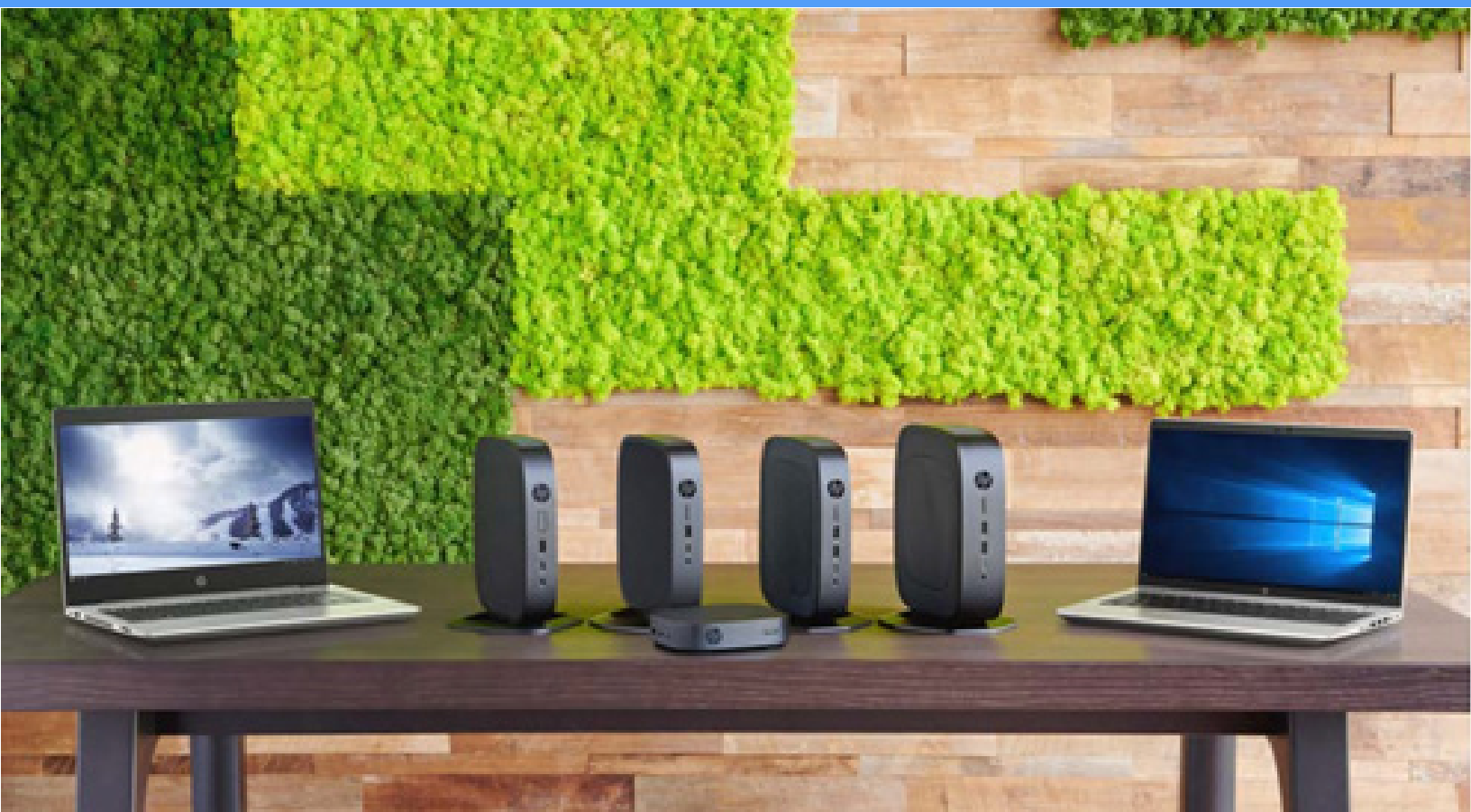


HP Thin Client Family

Datasheet



Every HP Thin Client is purpose built with ITDMs in mind. We made them easy-to-deploy and manage, long-lasting, secure, and powerful so you can effortlessly transition to VDI or cloud computing. Our versatile portfolio gives you the freedom to choose the modern endpoint solution that's right for you.

Each is available in performance configurations perfect for SMBs up to the enterprise. Built-in software simplifies deployment and management in complex environments.



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HP Thin Client Family

Datasheet

HP Thin Clients

Customize your performance, security and manageability



Choose a compact desktop thin client tailored to your diverse performance requirements and workstyles. Stand it, mount it or lay it flat to fit your workspace. All HP Thin Clients support HP's Linux®-based HP ThinPro or Windows 10 IoT Enterprise operating systems. Choose the processing power that matches your productivity needs, whether it's for mission-critical multimedia access or everyday task-based demands.

Next, support your peripherals with expansion options and a range of I/O ports. HP Thin Clients can support between two to six displays at up to UHD/4K resolutions, and ethernet, fiber-optic, and wireless connections depending on model and configuration. Get a cloud-ready and VDI-optimized thin client that's tested and certified for the top ISV providers, including Citrix®, VMware® and Microsoft.

HP Mobile Thin Clients

Superb cloud convenience and mobility



Get performance, reliability, and a rich, secure user experience for working in the office and on the go with full-featured, thin, and light HP Mobile Thin Clients. Get the job done from just about anywhere thanks to professional cloud and VDI²⁷ optimized features including critical user and management software built right in. Using either the HP ThinPro or Windows 10 IoT Enterprise operating systems with HP's unique management apps make it easy for everyone to log on and get to work with familiar tools and programs.

HP Zero Clients

Zero in on a better VMware client



HP Zero Clients are designed for VMware environments with the latest PCoIP technology ideal for graphics-intensive applications that need workstation-like performance and support for dual monitors². No operating system or moving parts mean HP Zero Clients require zero management. Deployment is simple, and viruses are history. As HP's most secure endpoints, HP Zero Clients keep your data safe in the data center; only pixels are transferred. Hardware USB authorization and support for fiber optic NICs³ add extra layers of security. Designed for fast Teradici PCoIP4, Amazon WorkspacesTM and VMware®, HP Zero Clients are a highly cost effective per seat solution with amazing performance and reliability.



HP Thin Client Operating Systems

Datasheet



HP Thin Pro

A modern, secure, and intuitive Linux® computing experience

Deliver secure desktop virtualization that's as easy and comfortable for IT as it is for end users with the stunningly redesigned HP ThinPro. Leap forward with a beautifully reimagined operating system that is amazingly easy to navigate and ideal for virtual desktop and web browser applications. Setup and configuration are painless for IT with a streamlined start-up wizard and configuration instructions. Connect quickly with Citrix®, VMware®, Microsoft® RDP and a default web browser. Protect data with an operating system that attracts few viruses and has a locked file system to deter unauthorized updates, customizable user settings and permissions, a firewall and includes HP Smart Zero Core.



HP Zero and Smart Zero Core

Seriously simple

Configure it and forget it. It really is just that easy with the smarter HP zero client experience provided by HP Smart Zero Core technology.

Everyone wins with an easy-to-navigate ecosystem for end-users and simple setup and maintenance for IT that doesn't require specialized administrative support. Switch up your virtualized environment without new requirements or installations and maintain connection flexibility across cloud and web-based applications, compatible browsers and top VDI environments like Citrix®, VMware®, and Microsoft® RDP.



Windows 10 IoT Enterprise

A familiar user interface

Everybody knows Windows! Work efficiently with Windows 10 IoT Enterprise, the thin client operating system you're already well-acquainted with. The familiarity of a powerful Windows® desktop will help reduce the cost of training and tools and make maintenance and roll-outs a breeze for end users, application developers, and IT administrators.

For more information, visit [HP Thin Client Operating Systems](#)



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HP Thin Client Software

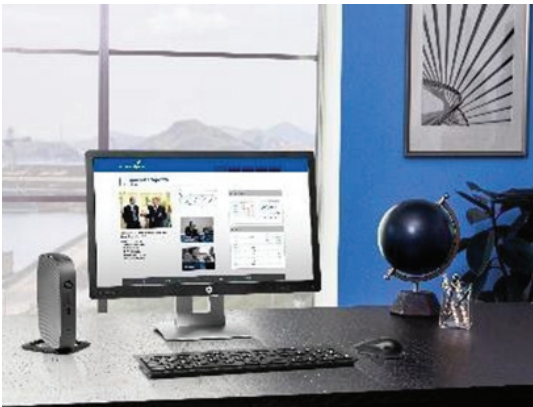
Datasheet



HP ThinPro PC Converter

Maximize the value of your existing PCs

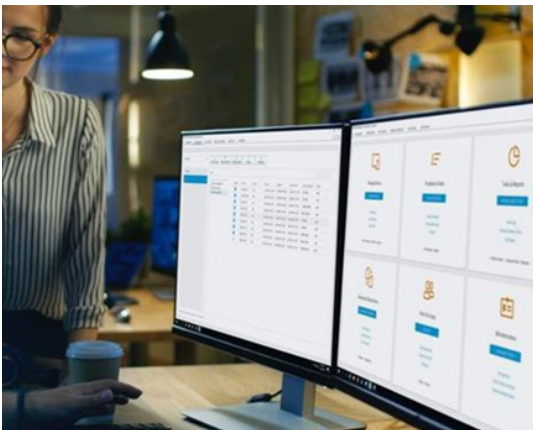
HP is all about bringing you a solution that eliminates the immediate need for an endpoint refresh by enabling your existing PC with the cloud computing benefits delivered by the HP ThinPro thin client operating system! HP ThinPro PC Converter software replaces the existing operating system on ANY manufacturer's PC with HP's ThinPro operating system⁵ converting them to an optimized cloud computing client. Your existing hardware is converted into a secure thin client that can be easily managed by HP Device Manager and protected from the usual threats associated with traditional PC operating systems. When the time does come to replace these PCs, you can seamlessly transition to industry-leading HP Thin Clients running the same software.



HP PC Converter for Windows

Reconfigured. Optimized. Secured

Realize the most flexibility by adding HP's device management tools to your existing Windows PCs. HP PC Converter for Windows is a simple Windows software bundle that installs like any other software application to optimize your PCs with all the benefits of a thin client, ensuring superb end user experience and effortless device management.



HP Device Manager

Stress-free management

HP Device Manager (HPDM) supports management of the HP Thin Client throughout the entire cycle beginning with the initial discovery and then moving on to deployment and configuration to maintenance and, finally, the client's end of life. IT can deploy gateways and FTP repositories strategically, and view and manage the entire HP Thin Client install base from anywhere through a network connection. You can do it all with a single software application: track, configure, upgrade, clone, and manage up to thousands of thin client devices.



HP Thin Client Software

Datasheet



HP EasyShell

Quick. Simple. Customized.

Customize your user experience easier than ever with HP Easy Shell⁶. Make the most of your cloud infrastructure, particularly kiosk and single app use cases, by controlling the intuitive interface and level of protection to fit your needs.



HP True Graphics

Truly astounding cloud-based multimedia.

Experience breakthrough video playback, smooth graphics and impressive high-speed performance from your cloud-based multimedia with HP True Graphics⁷ for both HP ThinPro and Windows 10 IoT equipped thin clients. Power through more applications, redirect H.264 content and add heavy compute programs to your current environment with a solution that offloads tasks from the CPU.



HP Remote Graphics Software

Work virtually anywhere.

Access your workstation or server-based graphics-rich applications and collaborate remotely in real time from any PC, thin client or windows tablet with HP Remote Graphics Software (RGS)⁸.

For more information, visit [HP Thin Client Software](#)



HP Thin Clients

Datasheet

	HP t430	HP Pro t550	HP t638	HP Elite t655	HP t740
Processor ⁹	Intel® Celeron® Processor N4020 (1.1 – 2.8 GHz, 2 cores)	Intel® Celeron® processor J6412 (2-2.6 Ghz, 4 cores)	AMD Ryzen™ R1505G SoC (2.4 – 3.3 GHz, 2 cores)	AMD Ryzen™ Embedded R2314 processor (2.1GHz – 3.5GHz, 4 cores)	AMD Ryzen™ V1756B SoC (2.35 – 3.6 GHz, 4 cores)
Flash storage	Up to 64 GB	Up to 256 GB	Up to 128GB M.2 SATA	Up to 512 GB	Up to 512 GB
System memory ^{11, 14}	Up to 4 GB DDR4 SDRAM	Up to 16GB DDR4 SDRAM	Up to 8 GB DDR4 SDRAM	Up to 32 GB DDR4 SDRAM	Up to 32 GB DDR4 SDRAM
Maximum resolution ^{10, 18, 20}	2 x UHD (3820 x 2160) @ 30hz	2 x UHD (3820 x 2160) @ 30hz	2 x UHD (3820 x 2160) @ 30hz	3 x UHD (3820 x 2160) @ 60hz	6 x UHD (3820 x 2160) @ 60hz
Max. number of displays	2	2	2	3	6 ¹⁵
Video outputs	• 1 x DisplayPort™ / USB-C® • 1 x DisplayPort™ • 1.2 1 x HDMI	• 2 x DisplayPort™ 1.2 • 1 x DisplayPort™ / USB-C® (opt) • 1 x HDMI (opt) • 1 x VGA (opt)	• 1 x HDMI • 1 x VGA	• 3 x DisplayPort™ 1.2 • 1 x DisplayPort™ / USB-C® (opt) • 1 x HDMI (opt) • 1 x VGA (opt)	• 4 x DisplayPort™ 1.2 • 2 x DisplayPort™ 1.2 (opt)¹⁵
Local area network ²⁰	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)
Wi-Fi ¹³	Intel® Wireless-AC 9260	• Intel Wi-Fi 6 AX200 2x2 + BT® 5 • Realtek 8852AE Wi-Fi 6 + BT® 5.2	• Intel Wi-Fi 6 AX200 2x2 + BT® 5 • Realtek 8852AE Wi-Fi 6 + BT® 5.2	• Realtek 8852AE Wi-Fi 6 + BT® 5.2 • Realtek 8852BE Wi-Fi 6 + BT® 5.3	• Intel Wireless-AC 9260 + BT® 5 • Intel Wi-Fi 6 AX200 2x2 + BT® 5 • Realtek 8852AE Wi-Fi 6 + BT® 5.2
Wi-Fi® antennas	Internal	Internal External (opt)	Internal External (opt)	Internal External (opt)	Internal External (opt)
Fiber Optic NIC	N/A	N/A	N/A	• AT-27M2/SC-AA Fiber NIC 100FX • AT-29M2/LC-AA Fiber NIC 1000SX • AT-29M2/SC-AA Fiber NIC 1000SX	• AT-2711 FX/SC PCIe Fiber Adapter 100Mb/s • AT-2914 SX/LC PCIe Fiber Adapter • AT-2914 SX/SC PCIe Fiber Adapter
Legacy ports	N/A	• 1 x powered serial (opt) • 2 x serial (opt)	• 1 x powered serial (opt) • 2 x serial (opt)	• 1 x powered serial (opt) • 2 x serial (opt)	1 x powered serial (opt)
USB	• 3 x USB-A • 1 x USB-C®	• 6 x USB-A • 2 x USB-A (opt) • 1 x USB-C® • 1 x USB-C® (opt)	6 x USB-A	• 6 x USB-A • 1 x USB-C® • 1 x USB-C® (opt)	• 6 x USB-A • 1 x USB-C®
Expansion	N/A	N/A	N/A	N/A	1 x PCIe low profile slot
Operating system	• HP ThinPro • Windows 10 IoT Ent 2016 • Windows 10 IoT Ent 2019	• HP ThinPro • Windows 10 IoT Ent 2021 • IGEL OS	• HP ThinPro • Windows 10 IoT Ent 2019	• HP ThinPro • Windows 10 IoT Ent 2021 • IGEL OS	• HP ThinPro • Windows 10 IoT Ent 2019 • IGEL OS
Included applications	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Tools (HP ThinPro) • HP Easy Shell (Windows) • Mozilla Firefox (HP ThinPro) • Internet Explorer (Windows)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Tools (HP ThinPro) • HP Easy Shell (Windows) • Mozilla Firefox (HP ThinPro) • Internet Explorer (Windows)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Tools (HP ThinPro) • HP Easy Shell (Windows) • Mozilla Firefox (HP ThinPro) • Internet Explorer (Windows)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Tools (HP ThinPro) • HP Easy Shell (Windows) • Mozilla Firefox (HP ThinPro) • Internet Explorer (Windows)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Tools (HP ThinPro) • HP Easy Shell (Windows) • Mozilla Firefox (HP ThinPro) • Internet Explorer (Windows)
Included clients	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™
Dimensions	32 x 135 x 135 mm	35 x 200 x 200 mm	35 x 196 x 196 mm	35 x 196 x 196 mm	50 x 210 x 210 mm
Volume	0.6 liter	1.4 liter	1.3 liter	1.3 liter	2.2 liter
Weight	416g	1300 g	1002g	1300g	1330g



HP Thin Clients

Datasheet

	HP Elite mt645 G7	HP mt32 (APJ and AMS Only)	HP Pro mt440 G3
Processor ⁹	AMD Ryzen™ 3 5425U (2.5– 3.8 GHz, 4 cores) or AMD Ryzen™ 5 5625U (2.3GHz – 4.3 GHz, 4 cores)	AMD Ryzen™ 3 4300U (2.5– 3.8GHz, 4 cores)	Intel® Celeron 7305 (.9-1.1 GHz base frequency, 1 P-core and 4 E-cores, 5 threads)
Flash storage	128 - 256 GB PCIe NVMe M.2 SSD	128 GB M.2 SATA SSD	128 - 256 GB PCIe NVMe M.2 SSD
System memory ^{11, 14}	Dual channel DDR4-3200 SDRAM; 8 or 16 GB	Dual channel DDR4-3200 SDRAM; up to 8 GB	Dual channel DDR4-3200 SDRAM; 8 or 16 GB
Non-Touch ^{10, 18, 21} (size listed is diagonal)	• 14" FHD 250 nit (1920X1080), IPS, Anti-glare • 14" FHD 400 nit (1920X1080), IPS, Anti-glare • 14" FHD 1000 nit (1920X1080), HP Sure View Reflect + IR Cam, IPS, Anti-glare	• 13.3" FHD 250 nits (1920 x 1080), UWVA eDP anti-glare WLED-backlit bent • 13.3" FHD 400 nits (1920 x 1080), UWVA eDP+PSR anti-glare, low power bent with Ambient Light Sensor, 400 nits, for HD + IR camera (Windows only) • 13.3" FHD 1000 nits (1920 x 1080), UWVA eDP+PSR anti-glare WLED-backlit bent, 1000 nits with HP Sure View Reflect Integrated Privacy Screen, Ambient Light Sensor and HD + IR camera	• 14" FHD 250 nit (1920x 1080), IPS, anti-glare • 14" HD 250 nit (1366 x 768), SVA, anti-glare
Touch ^{10, 12, 18, 21, 22} (size listed is diagonal)	14" FHD 250 nit (1920X1080), Touchscreen, IPS, anti-glare	N/A	14" FHD 250 nit (1920 x 1080) Touchscreen, IPS, anti-glare
Video outputs ¹⁰	• 1 x HDMI 2.0 supporting 4K @ 60 Hz • 1 x DisplayPort™ 1.4 supporting 4K @ 60 Hz	• 1 x HDMI 2.0 supporting 4K @ 60 Hz	• 1 x HDMI 2.1b supporting 4k @ 60 Hz • 1 x DisplayPort™ 1.4 supporting 4K @ 60 Hz
Local area network ²⁰	Gigabit Ethernet (RJ45)	N/A	Gigabit Ethernet (RJ45)
Wi-Fi ¹³	• WLAN QFC 6900 Wi-Fi 6 160MHz +BT 5.2 WW • WLAN RT 8852BE Wi-Fi 6 +BT 5.2 WW	Intel® Wireless-AC 802.11	• WLAN Intel® Wi-Fi 6 AX211 +BT 5.2 WW • WLAN RT 8852BE Wi-Fi 6 +BT 5.2 WW
Wireless wide area network (WWAN) ¹³	Intel® XMM 7560 LTE-Advanced Pro Cat 16	Intel® XMM 7360 LTE-Advanced Cat 9	Intel® XMM 7560 LTE-Advanced Pro Cat 16
Camera	• 720p HD camera • 720p HD + IR camera²⁶	• 720p HD camera • 720p HD + IR camera²⁶	720p HD camera ²⁴
USB	• 3 x USB-A 3.1 • 1x USB-C®	• 2 x USB-A • 1 x USB-C®	• 3 x USB-A 3.1 • 1 x USB-C®
Operating system	• HP ThinPro 8.0 • Windows 10 IoT Ent 2021 • HP Smart Zero	• HP ThinPro • HP Smart Zero • Windows 10 IoT Ent 2019 • FreeDOS 3.0	• HP ThinPro • HP Smart Zero • Windows 10 IoT Ent 2021
Included applications	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Shell (Windows) • Internet Explorer (Windows) • Mozilla Firefox (HP ThinPro) • HP Easy Tools (HP ThinPro)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Shell (Windows) • Internet Explorer (Windows) • Mozilla Firefox (HP ThinPro) • HP Easy Tools (HP ThinPro)	• HP Device Manager • HP Write Manager (Windows) • HP Thin Update (Windows) • HP Easy Shell (Windows) • Internet Explorer (Windows) • Mozilla Firefox (HP ThinPro) • HP Easy Tools (HP ThinPro)
Included clients	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™	• Citrix® receiver • Microsoft Remote Desktop • VMware Horizon® View™
Dimensions	32.2cm x 21.4 cm x 2cm	1.79 x 20.45x 30.76 cm	32.19 x 21.39 x 1.99 cm
Weight ²⁵	Starting at 1.37kg	Starting at 1 kg	Starting at 1.48 kg



HP Zero Clients

Datasheet

	HP t310 G2	HP t310 Quad-Display
Processor	Teradici TERA2321 ⁴	Teradici TERA2140 ⁴
Flash storage ⁸	32 MB	32 MB
System memory ⁸	512 MB DDR3 RAM	512 MB DDR3 RAM
Display	• N/A	• N/A
Maximum resolution ¹⁸	• 1 display @ 2560 x 1600 • 2 displays @ 1920 x 1200	• 2 displays @ 2560 x 1600 • 4 displays @ 1920 x 1200
Max. number of displays	2	4
Video outputs	• 1 x DVI-I • 1 x DisplayPort™ ¹⁷	• 4 x DisplayPort™ ¹⁷
Local area network ²⁰	• Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)
USB	6 x USB-A	4 x USB-A
Host Support	• VMware Horizon View • Amazon WorkSpaces	• VMware Horizon View • Amazon WorkSpaces
Protocols	PCoIP	PCoIP
Dimensions	3.16 x 13.75 x 18.50 cm	4.48 x 13.25 x 18.30 cm
Weight	0.60 kg	0.802 kg

For more information visit hp.com/go/thin



HP Thin Client Family

Disclaimers

1. HP Easy Shell is currently available on HP Thin Clients with a Windows Embedded OS.
2. The resolutions your monitor displays and the multi-display modes (i.e. clone, spanning, extended/independent) supported in ICA, RDP or locally may vary. Number of monitors supported varies by model.
3. t310 G2 Zero Client only
4. Teradici Desktop Access one (1) year subscription included. Proof of purchase required. Trial begins on date of hardware purchase. PCoIP Zero Clients purchase must be more recent than December 1, 2017. For more information, visit teradici.com.
5. Supports any x86 hardware device (32-bit and 64-bit). License available for one device (PC or USB) to use HP ThinPro PC Converter and manage with HP Device Manager. HP Care Service maintenance and updates available for 1- or 3-year terms
6. Configurable for one protocol at a time.
7. HP True Graphics requires an HP Thin Client with an HP ThinPro 5.0 or higher operating system (combo OS with HP Smart Zero Core begins at v5.0), AMD processing technology, and a Citrix® virtual desktop infrastructure: XenApp® or XenDesktop® v7.0 or higher or Windows 10 IoT with a Citrix® 4.4 receiver and Citrix® virtual desktop infrastructure: XenApp® or XenDesktop® v7.0 or higher. HP True Graphics is preinstalled on the OS starting with HP ThinPro 5.2. See product QuickSpecs for exact compatibility.
8. HP Remote Graphics Software requires Windows and internet connection.
9. Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance will vary depending on your hardware and software configurations. Intel's® numbering, branding, and/or naming is not a measurement of higher performance. AMD's model numbering is not a measurement of clock speed.
10. The resolutions your monitor displays and the multi-display modes (i.e. clone, spanning, extended/independent) supported in ICA, RDP or locally may vary. Number of monitors supported varies by model.
11. 64 MB or more memory reserved for video. 42 GB/1 GB SKU available in North America. Up to 1 GB may not be available in 4GB configurations with 32-bit operating systems due to system resource requirements. Flash and RAM maximum vary with OS.
12. Touchscreen is panels are an optional feature that must be configured at purchase.
13. Wi-Fi and WWAN modules are sold as optional modules and must be configured at the factory. WWAN requires a separately purchased service contract with a wireless service provider. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions. The Wi-Fi adapter provides Wi-Fi access only. WLAN requires wireless access point and Internet service is required and is not included with the purchase of a Wi-Fi adapter. Availability of public wireless access points are limited.
14. Graphics chipset uses part of the total system memory (RAM) for graphics performance. System memory dedicated to graphics performance is not available for other use by other programs.
15. An optional AMD Radeon discrete graphics solution provides two additional digital video streams for a system total of six video outputs.
16. Fiber NIC cannot be installed simultaneously with Wi-Fi.
17. The DisplayPort did not pass VESA 1.2 certification guidelines.
18. HD content required to view HD images.
19. HP Sure View G3 integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.
20. The term 10/100/1000 or Gigabit Ethernet (GbE) 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
21. Resolutions are dependent upon monitor capability, and resolution and color depth settings.
22. Touchscreen gesture support is limited on HP ThinPro/HP Smart Zero, and functionality is dependent upon application being used.
23. Based on HP's internal analysis of capabilities of HP's desktop and mobile thin client product portfolio as of August 2019. Most secure claim substantiated based on discrete Trusted Platform Modules with Common Criteria EAL4+ certification across the entire portfolio of desktop and mobile thin clients, offering HP Secure Boot preconfigured at the factory across all operating systems in the entire portfolio with an integrated intrusion prevention system for Linux®-based thin clients.
24. Sold separately or as an optional feature,
25. Weight may vary by configuration.
26. IR Camera not available on HP ThinPro and Smart Zero OS
27. All VDI and UC solutions are third-party and require subscriptions sold separately.

