

# HP Thin Client Family



HP thin clients are the world's most secure and comprehensive thin client portfolio for cloud computing and beyond.<sup>23</sup>

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.

## 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 up to six displays at up to UHD/4K resolutions, and can adapt to Ethernet, Wi-Fi or fiber optic networks. 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

Ultimate 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 VDI 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. No extra training is required.



## 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 monitors<sup>2</sup>. 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 NICs<sup>3</sup> add extra layers of security. Designed for fast Teradici PCoIP<sup>4</sup>, Amazon Workspaces™ and VMware®, HP Zero Clients are a highly cost effective per seat solution with amazing performance and reliability.



# HP Thin Client Operating Systems

## HP ThinPro

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



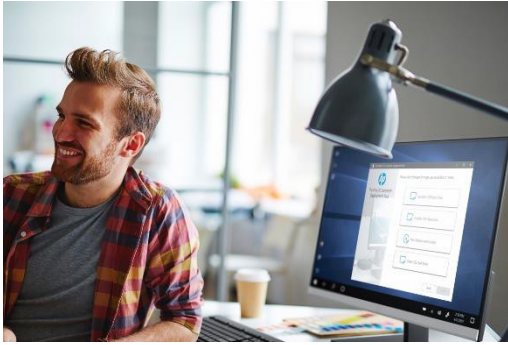
Everybody knows Windows! Work efficiently with Windows 10 IoT Enterprise, the thin client operating system you're already well-acquainted with. The familiarity of a powerful Windows® desktop will help reduce the cost of training and tools and make maintenance and roll-outs a breeze for end users, application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

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

# HP Thin Client Software

## HP ThinPro PC Converter

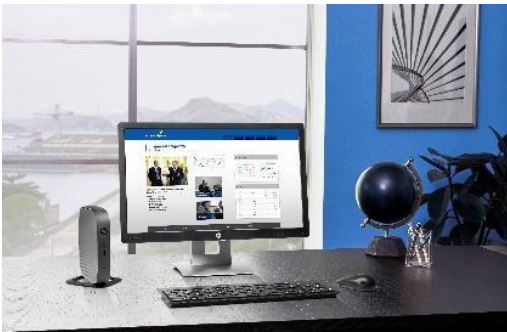
Maximize the value of your existing PCs



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 system<sup>5</sup> 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

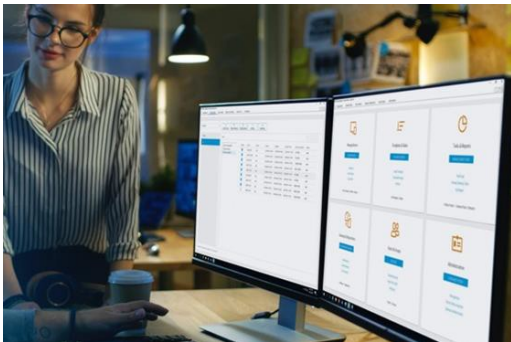
Reconfigured. Optimized. Secured



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 EasyShell

Quick. Simple. Customized.

Customize your user experience easier than ever with HP Easy Shell<sup>6</sup>. 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 Graphics<sup>7</sup> 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)<sup>8</sup>.

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

# HP Thin Clients

	HP t430	HP t530	HP t640	HP t740
<b>Processor / Memory</b>				
Processor <sup>9</sup>	Intel Celeron Processor N4000 (1.1 – 2.6 GHz, 2 cores)	AMD GX-215JJ SoC (1.5 – 2.0 GHz, 2 cores)	AMD Ryzen R1505G SoC (2.4 – 3.3 GHz, 2 cores)	AMD Ryzen V1756B SoC (2.35 – 3.6 GHz, 4 cores)
Flash storage	Up to 64 GB	Up to 512 GB	Up to 512 GB	Up to 512 GB
System memory <sup>11, 14</sup>	Up to 4 GB DDR4 SDRAM	Up to 16 GB DDR4 SDRAM	Up to 32 GB DDR4 SDRAM	Up to 32 GB DDR4 SDRAM
<b>Audio / Video</b>				
Maximum resolution <sup>10, 18, 20</sup>	UHD (3820 x 2160)	UHD (3820 x 2160)	UHD (3820 x 2160)	UHD (3820 x 2160)
Max. number of displays	2	2	3	6
Video outputs	1 x DisplayPort over USB-C 1 x DisplayPort 1.2 1 x HDMI	2 x DisplayPort 1.2 1 x VGA (opt)	3 x DisplayPort 1.2 1 x DP/USB-C (opt) 1 x HDMI (opt) 1 x VGA (opt)	4 x DisplayPort 1.2 2 x DisplayPort 1.2 (opt) <sup>15</sup>
<b>Network Connectivity</b>				
Local area network <sup>20</sup>	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)
Wi-Fi <sup>13</sup>	Intel Wireless-AC 9260	Intel Wireless-AC 3168 Intel Wireless-AC 8265	Intel Wireless-AC 9260	Intel Wireless-AC 9260
Wi-Fi antennas	Internal	Internal External (opt)	Internal External (opt)	Internal External (opt)
Fiber Optic NIC	N/A	N/A	Allied Telesis 10/100 SC <sup>16</sup> Allied Telesis GbE SC <sup>16</sup> Allied Telesis GbE LC <sup>16</sup>	Allied Telesis 10/100 SC Allied Telesis GbE SC Allied Telesis GbE LC
<b>I/O &amp; Peripheral Support</b>				
Legacy ports	N/A	1 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	5 x USB-A 1 x USB-C	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	1 x PCIe low profile slot
<b>Software</b>				
Operating system	HP ThinPro Windows 10 IoT Ent 2016 Windows 10 IoT Ent 2019	HP ThinPro Windows Embedded Std 7E Windows 10 IoT Ent 2016 Windows 10 IoT Ent 2019	HP ThinPro Windows 10 IoT Ent 2019	HP ThinPro Windows 10 IoT Ent 2019
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)
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
<b>Weights &amp; Dimensions</b>				
Dimensions	32 x 135 x 135 mm	35 x 200 x 200 mm	35 x 196 x 196 mm	50 x 210 x 210 mm
Volume	0.6 liter	1.4 liter	1.3 liter	2.2 liter
Weight	416g	963g	1002g	1330g

# HP Mobile Thin Clients

	HP mt45	HP mt21	HP mt22
<b>Processor / Memory</b>			
Processor <sup>9</sup>	AMD Ryzen 3 PRO 3300U APU (2.1 – 3.5 GHz, 4 cores)	Intel Celeron 3865u SoC (1.8 GHz, 2 cores)	Intel Celeron 5205U (1.9 GHz base frequency, 2 MB L3 cache, 2 cores)
Flash storage	128 GB M.2 SATA solid state drive	128 GB M.2 SATA solid state drive	128 GB M.2 SATA solid state drive
System memory <sup>11, 14</sup>	Dual channel DDR4 SDRAM; up to 8 GB	Dual channel DDR4 SDRAM; up to 8 GB	Dual channel DDR4 SDRAM; up to 8 GB
<b>Displays</b>			
Non-Touch <sup>10, 18, 21</sup>	<ul style="list-style-type: none"> <li>14" FHD (1920 x 1080) IPS eDP anti-glare WLED-backlit slim<sup>18</sup></li> <li>14" FHD (1920 x 1080) IPS eDP + PSR anti-glare WLED-backlit ultraslim with HP Sure View G3 Integrated Privacy Screen, with Ambient Light Sensor<sup>18, 19</sup></li> </ul>	<ul style="list-style-type: none"> <li>14" FHD UWVA (1920x 1080) anti-glare LED-backlit<sup>18</sup></li> <li>14" HD SVA (1366 x 768) anti-glare LED-backlit<sup>18</sup></li> </ul>	<ul style="list-style-type: none"> <li>14" FHD UWVA (1920x 1080) eDP anti-glare slim</li> <li>14" HD SVA (1366 x 768) eDP anti-glare slim</li> </ul>
Touch <sup>10, 12, 18, 21, 22</sup>	<ul style="list-style-type: none"> <li>14" FHD (1920 x 1080) IPS eDP anti-glare On-Cell WLED-backlit slim touch screen</li> </ul>	N/A	<ul style="list-style-type: none"> <li>14" FHD (1920 x 1080) IPS eDP slim touch-on-panel screen</li> </ul>
Video outputs <sup>10</sup>	1 x HDMI supporting 4096 x 2160 @ 60 Hz	1 x VGA supporting 2048 x 1536 @ 60 Hz 1 x HDMI supporting 4096 x 2160 @ 24 Hz	HDMI supports resolution up to 4k @ 30 Hz 1 x VGA @ 60 Hz
<b>Network Connectivity</b>			
Local area network <sup>20</sup>	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)
Wi-Fi <sup>13</sup>	Intel Wireless-AC 9260	Intel Wireless-AC 8265	Intel Wireless-AC 9560
Wireless wide area network (WWAN) <sup>13</sup>	Intel XMM 7360 LTE-Advanced Cat 9	N/A	N/A
<b>I/O &amp; Peripheral Support</b>			
Camera	720p HD camera 720p HD + IR camera	720p HD camera	720p HD camera <sup>24</sup>
USB	2 x USB-A 1 x USB-C	2 x USB-A 1 x USB-C	2 x USB-A 1 x USB-C
<b>Software</b>			
Operating system	HP ThinPro Windows 10 IoT Ent 2019	HP ThinPro Windows 10 IoT Ent 2019	HP ThinPro Windows 10 IoT Enterprise HP Smart Zero
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)
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
<b>Weights &amp; Dimensions</b>			
Dimensions	1.79 x 23.43 x 32.60 cm	1.99 x 23.8 x 33.6 cm	1.8 x 23.77 x 32.4 cm
Weight	Starting at 1.53 kg	Starting at 1.63 kg	Starting at 1.6 kg

## HP Zero Clients

	HP t310 G2	HP t310 Quad-Display	HP t310 G2 All-in-One
<b>Processor / Memory</b>			
Processor	Teradici TERA2321	Teradici TERA2140	Teradici TERA2321
Flash storage <sup>8</sup>	32 MB	32 MB	32 MB
System memory <sup>8</sup>	512 MB DDR3 RAM	512 MB DDR3 RAM	512 MB DDR3 RAM
<b>Audio / Video</b>			
Display	N/A	N/A	23.8" FHD (1920 x 1080) IPS WLED-backlit
Maximum resolution <sup>18</sup>	1 display @ 2560 x 1600 2 displays @ 1920 x 1200	2 displays @ 2560 x 1600 4 displays @ 1920 x 1200	1 ext. display @ 2048 x 1152
Max. number of displays	2	4	1 external
Video outputs	1 x DVI-I 1 x DisplayPort <sup>17</sup>	4 x DisplayPort <sup>17</sup>	1 x DisplayPort <sup>17</sup>
<b>Network Connectivity</b>			
Local area network <sup>20</sup>	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)	Gigabit Ethernet (RJ45)
<b>I/O &amp; Peripheral Support</b>			
USB	6 x USB-A	4 x USB-A	6 x USB-A 1 x VGA (in)
<b>Virtual Desktop Infrastructure Support</b>			
Host Support	VMware Horizon View VMware Horizon DaaS Amazon WorkSpaces	VMware Horizon View VMware Horizon DaaS Amazon WorkSpaces	VMware Horizon View VMware Horizon DaaS Amazon WorkSpaces
Protocols	PCoIP	PCoIP	PCoIP
<b>Weights &amp; Dimensions</b>			
Dimensions	3.16 x 13.75 x 18.50 cm	4.48 x 13.25 x 18.30 cm	21.02 x 50.55 x 54.06 cm
Weight	0.60 kg	0.802 kg	5.43 kg

For more information visit [hp.com/go/thin](http://hp.com/go/thin)



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](http://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® and 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. Only vendor to offer HP Sure Start and HP Sure View on mobile thin clients, and offering hardware-enforced memory encryption using AMD Memory Guard in a desktop thin client form factor.
24. Sold separately or as an optional feature,

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