

HP Thin Client Family



Our broad portfolio lets you fine-tune your end user and cloud computing experience.

HP Thin Clients are built for speed. From HP Zero Clients to the latest quad-core processors, our portfolio has what it takes to satisfy even the most power-hungry applications.



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.¹ 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 datacentre—only pixels are transferred. Hardware USB authorisation and fibre NIC² add extra layers of security. Designed for fast PCoIP, Amazon Workspace and VMware, HP Zero Clients are an ultra-low-cost-per-seat solution with ultra performance and reliability.

HP Thin Clients

Customise your level of performance, security and manageability.

Pair the thin client form factor of your choice with the operating system of your choice, including Linux®-based **HP Smart Zero** and **HP ThinPro**, or **Windows Embedded**. Choose the processing power that matches your productivity needs, whether it's for mission-critical multimedia access, or everyday task-based demands. Support your growth with expansion options and legacy ports, choose native support for up to four digital displays, and maintain network adaptability with wired-in ethernet and Wi-Fi options. Get a cloud-ready and VDI-optimised thin client that's tested and certified for today's top ISV providers, including Citrix®, VMware® and Microsoft.



HP Mobile Thin Clients

Ultimate cloud convenience.

Mobile cloud computing is easier and more flexible than ever with HP Mobile Thin Clients. Employees can get the job done from just about anywhere thanks to professional cloud and VDI-optimised features with critical user and management software built right in. Windows-based programmes and tools make it easy for everyone to log in and get to work with familiar tools and programmes. No training required.



HP Thin Client Operating Systems



ThinPro OS

More flexibility. More freedom.

Experience true efficiency and focus on your business instead of your IT with the easy customisation, enhanced security, and simplified maintenance of the flexible, 64-bit Linux®-based HP ThinPro OS, which delivers up to 30% improved performance³ over the predecessor 32-bit version. Rest easy with an OS that attracts few virus threats and has a locked file system to help against unauthorised updates, while the HP ThinPro Certificate Manager keeps all your relevant certificates in a single certificate store. With HP ThinPro, it's easy to customise user settings, properties, and permissions, rich graphic and terminal emulation connections, and more, as well as print locally and enable concurrent virtualisation sessions.

For more information go to hp.com/go/thinpro

Smart Zero Core

The smarter zero client.

Configure it and forget it. It's that easy with the smarter HP Zero Client experience provided by HP Smart Zero technology. Everyone wins with an easy-to-navigate ecosystem for end users and simple setup and maintenance for IT that doesn't require specialised administrative support. Switch between HP Smart Zero and HP ThinPro, or customise your own experience—all from one centralised interface. HP Smart Zero supports four different Zero client experiences: Citrix® ICA®, Microsoft RDP, VMWare® Horizon™, VMware® Blast Extreme™, and a Firefox web browser.



Windows Embedded OS

A familiar interface.

Work efficiently with Windows Embedded, the thin client operating system you're already well-acquainted with. Reduce the cost of training and tools and make maintenance and roll-outs a breeze. Help prevent unauthorised updates and viruses with an integrated Write Filter. Take advantage of broad-range support for peripherals, drivers, and applications.

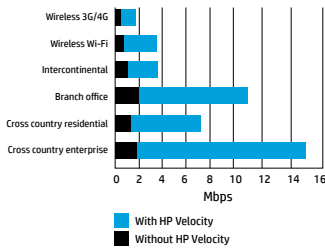


HP Thin Client Software



Network performance improvements with HP Velocity

Figure 1. Effective network performances seen by user under different network conditions.



HP Device Manager

Making your life easy to manage.

HPDM provides full life cycle management for HP Thin Clients; from initial discovery, deployment and configuration to maintenance and EOL of product. IT administrators can control and make decisions about their IT resources locally or remotely with HPDM which provides detailed asset information through a simple console “dashboard”. With just one software you can do it all—track, configure, upgrade, clone, and manage up to thousands of thin client devices.

For more information go to hp.com/go/hpdm

HP Velocity

Accelerate network performance.

Improve network performance and the end-user experience with HP Velocity software, which optimises network traffic for remote desktops and application streaming, IDs and fixes bottlenecks, and simplifies IT troubleshooting.

For more information go to hp.com/go/velocity

HP EasyShell

Quick. Simple. Customised.

Make your HP Thin Client Windows Embedded user experience easier than ever with HP Easy Shell¹⁹. Customise the intuitive interface and level of protection to fit your needs, and enjoy targeted control at a great price so you can make the most of your cloud infrastructure, VDI, and kiosk environments.

For more information go to hp.com/go/easysshell

HP True Graphics

Truly astounding cloud-based multimedia.

Experience breakthrough video playback, smooth graphics, and impressive high-speed performance of your cloud-based multimedia with HP True Graphics⁴ for Windows[®]- and Linux[®]-based HP Thin Clients. Power through more applications, redirect H.264 content, and add heavy compute programmes to your current environment with a solution that offloads tasks from the CPU.

For more information go to hp.com/go/truegraphics

HP Remote Graphics Software

Work virtually anywhere.

Access your workstation or server-based graphic-rich applications and collaborate remotely in real time from any PC, Thin Client or Windows tablet with HP Remote Graphics Software (RGS).⁵

For more information go to hp.com/go/rgs

HP Thin Clients

Series	Zero	ThinPro, Smart Zero and Windows Embedded*			
Platforms	t310/ t310 AiO	t420	t520	t630	t730
Processor and memory					
Processor	TERA2321 PCoIP Zero Client processor	AMD Radeon HD GPU	AMD GX-212JC 1.2GHz dual-core SOC APU with AMD Radeon HD Graphics ⁶	AMD GX-420GI 2.2GHz - 2.0 GHz quad-core ⁷ APU with a Radeon R6E based graphics core	AMD R-Series RX-427BB 2.7 GHz - 3.6 GHz quad-core ⁷ APU with a Radeon HD 9000 based graphics core
Flash/RAM ⁸	32 MB/512 MB SDRAM	Up to 16GB flash/ 2GB SDRAM	Up to 64GB flash/up to 16GB SDRAM	Up to 128GB flash/up to 32GB SDRAM; dual flash/dual SODIMM	Up to 128GB flash/up to 16GB SDRAM
Video and audio (All HP desktop thin clients support widescreen resolutions and headphone/mic)					
Maximum resolution ⁹	t310 1920 x 1200 2560 x 1600 ¹⁰ t310 AiO 1920 x 1080	1920 x 1200	3840 x 2160	Up to 3840 x 2160 @ 60 Hz	3840 x 2160
Monitor support ¹¹	t310 DVI-I and DVI-D t310 AiO DVI-I and VGA	1 x DVI-D; 1 x VGA	2 x DisplayPort™; 1 x VGA	2 x DisplayPort™; 1 x VGA (optional)	4 X DisplayPort™ 1.2; 6 x DisplayPort™ (optional)
Networking					
Embedded Networking Interface	Gigabit Ethernet; RJ-45 interface	Gigabit Ethernet; RJ-45 interface	Gigabit Ethernet; RJ-45 interface	Gigabit Ethernet; RJ-45 interface	Gigabit Ethernet; RJ-45 interface
Networking Options	Wake on LAN (WoL) using magic packet.	Wi-Fi with Bluetooth® adapter; internal antennas	Wi-Fi with Bluetooth® adapter; internal antennas	Wi-Fi with Bluetooth® adapter; internal antennas; Fibre NIC factory option (cannot be installed simultaneously with Wi-Fi)	Wi-Fi with Bluetooth® adapter; internal antennas; Fibre NIC factory option (cannot be installed simultaneously with Wi-Fi)
I/O and expansion					
Serial	0	0	0	1 (2nd port optional)	2
Parallel	0	0	0	0	1
PS2	0	0	0	2	2
USB	6 USB 2.0	4 USB 2.0	Total: 6 2 USB 3.0 4 USB 2.0	Total: 7 2 USB 3.0 1 USB 3.0, hidden 4 USB 2.0	Total: 9 2 USB 3.0 6 USB 2.0 1 USB 3.0, hidden
Slot expansion options ¹⁵	No	No	No	No	1 x half height PCI Express expansion slot x16 physical slot wired as a x8 (rear)
HP cable lock slot	Yes	Yes	Yes	Yes	Yes
Environmental certifications					
ENERGY STAR®	No	Yes	Yes	Yes	Yes
EPEAT® ¹⁵	No	Yes	Yes	Yes	Yes
Low Halogen ¹⁶	N/A	Yes	Yes	Yes	Yes

HP Thin Clients

Series	
Platforms	mt42
Processor and memory	
Processor	AMD A8-Pro-8600B APU with Radeon™ R6 Graphics (1.66 up to 3 GHz, 2 MB cache, 4 cores)
Flash/RAM ⁸	Up to 8 GB
Video and audio (All HP desktop thin clients support widescreen resolutions and headphone/mic)	
Maximum resolution ⁹	Up to 3200 x 2000 @ 60Hz
Monitor support ¹¹	1 X DisplayPort™ 1.2; VGA
Touchscreen support ¹²	No
Networking	
Integrated Networking	Gigabit Ethernet: HP lt4120 LTE/HSPA+ 4G Mobile Broadband ¹³ ; HP hs3110 HSPA+ Mobile Broadband ¹³
I/O and expansion	
Serial	0
Parallel	0
PS2	0
USB	1 USB 3.0 (charging)
Slot expansion options ¹⁴	(1) SD media reader (Supports SD, SDHC, SDXC); (1)SC reader; (1)Micro SIM Slot
HP cable lock slot	Yes
Environmental certifications	
ENERGY STAR [®]	TBD
EPEAT ^{®15}	TBD
Low Halogen ¹⁶	TBD

HP Thin Clients

Software specifications	Windows 10 IoT Enterprise for Thin Clients	Windows Embedded 8 Standard	Windows Embedded Standard 7E/7P [†]	HP ThinPro	HP Smart Zero Technology [‡]
Available Platforms					
	HP t520, HP t630, HP t730, HP mt42	HP t520, HP t630	HP t420†, t520, HP t630, HP t730‡, HP mt42†	HP t420, HP t520, HP t630, HP t730	HP t420, HP t520, HP t630, HP t730
Applications					
ICA/RDP	•	•	•	•	•
VDI brokers	•	•	•	•	•
HP TeemTalk Terminal Emulation	Add-on	•	•	•	
X Windows (X11R6)				•	
Java Virtual Machine	Add-on	Add-on	Add-on		
API compatibility	Win64	Win64	Win32	Linux	
Local browser	Full Internet Explorer	Full Internet Explorer	Full Internet Explorer	Mozilla Firefox	Mozilla Firefox for Smart Zero Technology
Media player	•	•	•		
PDF Reader	•	•	•	•	
ThinPrint print client (TCP/IP)	Available directly from vendor	Available directly from vendor	Available directly from vendor	•	
Security					
File protection	Unified Write Filter	Unified Write Filter	Enhanced Write filter or File based Write Filter	Read only file system	Downloads firmware at boot
Locked configuration/ accounts	•	•	•		
Firewall	Microsoft Firewall	Microsoft Firewall	Microsoft Firewall		
Smart Card support	•	•	•	•	•
Management and User Experience Software					
HP Device Manager	•	•	•	•	•
Microsoft SCCM	•		•		
Windows Embedded Device Manager			•		
HP Remote Graphics Software (HP RGS)	•	•	•	•	
HP Universal Print Driver	•	•	•		
HP Velocity	•	•	•	•	•
HP Easy Shell	•	•	•		
HP True Graphics				•	

† 7E only

‡ 7P only

Model	OS Version	VMware Horizon View HCL	Citrix Ready/HDX Ready
		Horizon View Client	XenDesktop/XenApp
t310	No Operating System	Tera2 Certified	N/A
t310 AiO	No Operating System	Tera2 Certified	N/A
t420	HP ThinPro	Certified	Verified**
t420	HP Smart Zero Core	Certified	Verified**
t420	Windows Embedded	Certified	Verified**
t520	Windows Embedded	Certified	Verified
t520	HP ThinPro	Certified	Verified
t520	HP Smart Zero Core		Verified
t630	ThinPro	Certified	Verified
t630	HP Smart Zero Core	Certified	Verified
t630	OS Windows Embedded	Certified	Verified
t730	Windows Embedded	Certified	Verified
mt42	Windows Embedded	Certified	Verified

N/A – Certification is not applicable to this device

* Availability varies by region

** The HP t420 product was verified with Citrix HDX

- 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.
- t310 only
- Based on 64-bit vs. 32-bit and tested using x11perf comparing HP ThinPro 6.1 on an HP t620 Thin Client vs, HP ThinPro 5.2 on a similarly configured HP t620 Thin Client.
- 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 WES 7E 32-bit/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.
- HP Remote Graphics Software requires Windows and internet connection.
- This system requires a 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of AMD technology. Multi-core processing available with AMD technology is designed to improve performance of this system. Given the wide range of software applications available, performance of a system including a 64-bit operating system will vary.
- Multi core processing with AMD technology is designed to improve performance of this system. Given the wide range of software applications available, performance will vary. AMD's numbering is not a measurement of clock speed.
- Maximum memory capacities assume Windows 64-bit operating systems or Linux. With Windows and Linux 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.
- 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.
- With custom single-to-dual DVI conversion cable, sold separately.
- 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.
- Touchscreen support varies by OS. Not supported by Windows Embedded Standard 7E, Windows CE, or HP Smart Zero Client Technology.
- Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. 802.11 Wi-Fi and Bluetooth combo sold separately or as an optional feature.
- Options sold separately. Availability varies by country.
- EPEAT® registered where applicable. EPEAT registration varies by country. See epeat.net for registration status by country.
- This product is low halogen except for power cords, cables and peripherals, as well as the customer-configurable 100 Mbps Fibre NIC module which is not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
- Windows Embedded Standard 7 products require 8 GB or more Flash memory.
- Configurable for one protocol at a time.
- HP Easy Shell is currently available on HP Thin Clients with a Windows Embedded OS.

For more information visit
hp.com/go/thin

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