HP Thin Client Family

Simple, flexible, true PC performance. HP thin clients are innovated with the latest, standards-based hardware, open software platforms and complete, global solutions.

The simple and flexible performance of HP's thin clients delivers rich, responsible user connectivity to client virtualization or cloud computing environments. Designed with the latest standards-based hardware, leading client virtualization software, and complete manageability tools, HP thin clients help simplify IT while providing adaptive flexibility.

HP Zero Clients

Zero in on a better VMware client.

Don't settle for sub-par performance in your VMware environment. The HP t310 Zero client is designed for uncompromised performance and higher security. With up to 5x increased imaging performance than its predecessor[1], the t310 supports two high-resolution (1900x1200) monitors or one ultra-high-resolution (2560x1600) monitor[5]*, making it ideal for applications that need workstation-like performance. It's also HP's most secure endpoint available. Your data stays safe in your datacenter—only pixels are transferred. Hardware USB authorization and an optional fiber NIC add extra layers of security. Deploying the t310 in your current environment is easy. The Tera 2 PCoIP silicon is optimized for VMware, so no operating system updates or CODECs to manage.

*With optional Dual link 2560x1600 adapter

HP Smart Zero Clients

Simple, reprogrammable, and affordable zero clients for client virtualization.

HP Smart Zero Clients support multiple protocols and can be reprogrammed on the fly. They deliver a no-compromise, intelligent zero client experience for remote and cloud computing environments. At the heart of the HP t410 is the Texas Instruments System on a Chip (SOC) that integrates the ARM CPU, graphics chipset, digital signal processor (DSP), and other components in a single package. HP takes full use of the SOC enabling the HP t410 to be a zero client that can be quickly reconfigured to run any of the three major Client Virtualization protocols and run a web browser. Platforms available include the t410 and t410 AiO.

HP Flexible Thin Clients

Powerful performance with security you want.

For performance and flexible alternatives to the PC, HP Flexible Thin Clients deliver a feature-rich thin client with significant performance and smart design. With an easy set-up, flexible thin clients provide powerful performance with more security, expansion options, and a PC-like multimedia experience. Built with dual-core or quad-core processors[2] and 4GB or more DDR3 RAM memory capacity[3], flexible thin clients provide a more robust, dependable thin client experience. Enjoy native support for dual digital displays with the option of up to four displays and hardware accelerated multimedia. Quick-configuration tools and optional integrated enterprise-class wireless[4] or fiber networking make IT experiences easier. Choose the new Microsoft Windows Embedded 8 Standard, Microsoft Windows Embedded Standard 7, Microsoft Windows Embedded Standard 2009, Microsoft Windows CE, HP ThinPro operating system, or HP Smart Zero Technology. With HP Easy Tools wizard-based utilities, you can connect to remote applications and desktops with ease, including Microsoft RemoteFX, Citrix HDX, VMware Horizon View through PCoIP. Platforms available are: HP t510, HP t620, HP t620 PLUS and HP t820.

1 Based on comparison between Tera 1 and Tera 2

2 Dual core processing is designed to improve performance of this system. Given the wide range of SW applications available, performance will vary. AMD's numbering is not a measurement of clock speed. Intel's numbering is not a measurement of higher performance.

3 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.

4 Wireless access point and Internet service required and is not included. Availability of public wireless access points limited.

5 With optional cable

HP Mobile Thin Client

Thin, light mobility with reliable security, efficient manageability and convenient accessibility.
Hit the road with reliable security and efficient manageability with the HP mt41 Mobile Thin Client. Connect wherever you have access to the cloud[4] with this thin, light and conveniently accessible mobile device. Rest easy with multiple security features and quick access to shared data, all within an enterprise-grade durable design.

HP Software

We know that the best hardware in the world needs the best software.
HP complements our globally consistent hardware offerings with HP Virtual Client Essentials, a robust portfolio of thin computing management, user experience, and security and connectivity software. HP Easy Tools dramatically simplifies device deployment, task automation, compliance management, and policy-based security management so you can manage up to thousands of devices with ease.

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. So, kick back and relax. We do the hard work so you can focus on your key business initiatives. Device deployment, task automation, compliance management, and policy-based security management.

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

HP Velocity

Accelerate Network Performance
HP Velocity gives you a rich virtualization experience even in the most challenging network environments. HP Velocity dynamically adjusts with changing network conditions to maintain the best user experience when working on unmanaged networks such as WAN and Wi-Fi. It is especially suited for teleworkers, branch and remote offices, Wi-Fi and high latency environments.

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

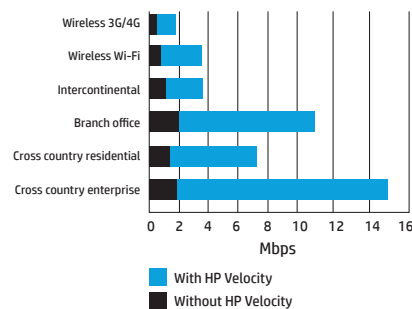**Network performance improvements with HP Velocity**

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

HP Thin Client Portfolio

Series	Zero	Smart Zero	Flexible			Mobile
Platforms	t310	t410/t410 AiO	t510	t620/t620 PLUS	t820	mt41
Processor and memory						
Processor	TERA2321 PCoIP Zero Client processor[1]	Texas Instruments TMS320 DM8148 ARM® Cortex™—A8	VIA Dual-Core Eden X2 U4200 1 GHz	AMD GX-217GA Dual-Core APU with AMD Radeon HD 8280E graphics (1.65 GHz); AMD GX-415GA Quad-Core[12] APU with AMD Radeon HD 8330E (1.5 GHz); AMD GX-420CA Quad- Core APU with AMD Radeon HD 8400E graphics (2 GHz)	Intel® Core™ i5-4570S Quad Core 2.9 GHz Processor with Intel HD 4600 Graphics Intel® Pentium™ G3220 3.0 GHz with Intel HD Graphics	AMD Dual-Core A4-5150M APU with Radeon HD 8350G Graphics (2.7 GHz; 1 MB L2 cache)[11]; AMD Dual-Core A4-4300M APU with Radeon HD 7420G Graphics (2.5 GHz; 1 MB L2 cache)[11]
Flash/RAM[3]	32 MB/512 MB	4GB/1GB eMMC 2 GB eMMC	1-16 GB/4 GB	16 GB/4-16GB	16 GB SSD/4-16 GB	1-8 GB / 4 GB
Video and audio (All HP desktop thin clients support widescreen resolutions and headphone/mic)						
Maximum resolution[7]	1920 x 1200 2560 x 1600[5]	t410 AiO 1366 x 768 t410 1920 x 1200	1920 x 1200	2560 x 1600	2560x1600	2560 x 1600
Monitor support[6]	DVI-I and DVI-D	VGA, DisplayPort 1.1a -t410 Only Built in Monitor only - t410 AiO	DVI-I and DVI-D native; DVI-I-to VGA adapter included in carton	2 x DisplayPort 1.2, or 1 x DisplayPort 1.2 and 1 x VGA (some models) PLUS: optional graphics configurations up to 4 monitors	2 x DisplayPort 1.2 ports plus VGA port support up to 3 monitors when configured with an Intel Core i5 CPU and utilizing the on-board Intel® HD 4600 Graphics card.	Dual: VGA and DisplayPort v1.2 High-definition displays
Touchscreen support[8]	No	No	Yes	Yes	Yes	No
Networking						
Integrated Networking	10/100/1000 Mbit/sec Ethernet	10/100/1000 Mbit/sec Ethernet 10/100 Ethernet when using Power over Ethernet (POE)	10/100/1000 Mbit/sec Ethernet	10/100/1000 Mbit/sec Ethernet	10/100/1000 Mbit/sec Ethernet	10/100/1000 Mbit/sec Ethernet; Broadcom 802.11 a/b/g/n with dual antennas[4]
Networking Options	100Mbps Mini-PCIe SC Fiber NIC, Wake on LAN (WoL) using magic packet.	N/A	Broadcom 802.11 a/b/g/n with dual antennas on select models[4]	Broadcom 802.11 a/b/g/n with dual antennas on select models[4]; Broadcom 802.11ac[13] with dual internal antennas: HP 100 Mbps Mini-PCIe SC Fiber NIC factory-installed option (cannot be installed simultaneously with Wi-Fi)	Broadcom 802.11 a/b/g/n with dual antennas on select models[4] HP 100 Mbps Mini-PCIe SC Fiber NIC factory option (cannot be installed simultaneously with Wi-Fi)	HP lt4111 LTE/EV-DO/HSPA+ Mobile Broadband; HP lt4112 LTE/HSPA+ Mobile Broadband
I/O and expansion						
Serial/Parallel PS2/USB	0/0/0/4	0/0/0/4	1/1/2/6	Standard: 1/0/2/8 (2x USB 3.0; 4x USB 2.0; 2x USB 2.0 hidden) PLUS chassis: 2/2/2/8 (2x USB 3.0; 4x USB 2.0; 2x USB 2.0 hidden) (2x USB 3.0; 4x USB 2.0)	0/0/2/10 (6xUSB 2.0, 4xUSB 3.0)	0/0/0/4 3x USB 3.0; 1 x USB 3.0 charging
Slot expansion options[9]	No	No	No	Standard: No PLUS: 1 HH PCIe x16 card slot (x4 channels)	No	1 SD/MMC Media Reader
HP cable lock slot	Yes	Yes	Yes	Yes	Yes	Yes
Environmental certifications						
ENERGY STAR®	N/A	Yes	Yes	Yes	Yes	Yes
EPEAT® [10]	N/A	Yes	Yes	Yes	Yes	Yes
Low Halogen*	N/A	Yes	Yes	Yes	Yes	Yes

*This product is low halogen except for power cords, cables and peripherals, as well as the customer-configurable 100 Mbps Fiber NIC module which is not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

3 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.
4 Wireless access point and Internet service required and is not included. Availability of public wireless access points limited.
5 With optional cable.
6 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.
7 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.
8 Touchscreen support varies by OS. Not supported by Windows Embedded Standard 7E, Windows CE, or HP Smart Zero Client Technology
9 Options sold separately. Availability varies by country.
10 Configurations of the HP t620 and HP t620 PLUS Flexible Thin Clients that are ENERGY STAR® qualified are identified on HP websites and on www.energystar.gov. EPEAT® registered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country.
11 This system requires a separately purchased 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of AMD technology. (language in red only used if the OS is not x64) 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 and a dual-core processor will vary. AMD's numbering is not a measurement of clock speed.
12 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.
13 The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the thin client to communicate with other 802.11ac WLAN devices.

HP Thin Client Portfolio

Software specifications	Windows Embedded 8 Standard	Windows Embedded Standard 7[14]	Windows Embedded Standard 2009	Windows Embedded CE 6.0	HP ThinPro	HP Smart Zero Technology[15]
Applications						
ICA/RDP	•	•	•	•	•	•
VDI brokers	•	•	•	•	•	•
HP Remote Graphics Software	•	•			•	
HP TeemTalk Terminal Emulation	•	•	•	•	•	
X Windows (X11R6)					•	
Java Virtual Machine	Add-on	Add-on	Add-on	Add-From server		
API compatibility	Win64	Win32	Win32	CE	Linux	
Local browser	Full Internet Explorer	Full Internet Explorer	Full Internet Explorer	Basic 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	Enhanced Write filter or File based Write Filter	Enhanced Write filter or File based Write Filter	Limited access file system	Read only file system	Downloads firmware at boot
Locked configuration/ accounts	•	•	•	•		
Firewall	Microsoft Firewall	Microsoft Firewall	Microsoft Firewall			
Smart Card support	•	•	•	•	•	•
Management						
HP Device Manager	•	•	•	•	•	•
Microsoft SCCM		•				
Windows Embedded Device Manager		•				
Other						
HP Universal Print Driver	•	•				
HP Velocity	•	•	•	•	•	•
Available Platforms	HP t610, HP t620/t620 PLUS (coming soon), HP t820 (coming soon)	HP t510, HP t620, HP t620 PLUS, HP t820 and mt41	HP t510	HP t510	HP t510, HP t620, HP t620 PLUS	HP t410, t410 AiO, HP t510, HP t620

		VMware Horizon View HCL	Citrix Ready/HDX Ready					Microsoft
Model	OS Version	Horizon View Client 2.0/5.x	XD7	XD 5.6	XA 6.5	Zero Client	ViaB 5.x	RemoteFX Logo
t310	No Operating System	Tera2 Certified	N/A	N/A	N/A	N/A	N/A	N/A
t410	HP Smart Zero Client	Certified	In progress	HDX	HDX	Certified	In progress	Certified
t410 AiO	HP Smart Zero Client	Certified	In progress	HDX	HDX	Certified	In progress	Certified
t510	HP Smart Zero Client	Certified	HDXP	HDXP	HDXP	Certified	Certified	N/A
t510	HP Thin Pro	Certified	HDXP	HDXP	HDXP	N/A	Certified	N/A
t510	Windows Embedded Standard 2009	Certified	HDXP	HDXP	HDXP	N/A	Certified	N/A
t510	Windows Embedded Standard 7	Certified	HDXP	HDXP	HDXP	N/A	Certified	Certified
t620	HP Smart Zero Client	Certified	In progress	In progress	In progress	In progress	In progress	In progress
t620	HP Thin Pro	Certified	In progress	In progress	In progress	N/A	In progress	In progress
t620	Windows Embedded Standard 7	Certified	In progress	In progress	In progress	N/A	In progress	Certified
t820	Windows Embedded Standard 7	Certified	HDXP	HDXP	HDXP	N/A	Certified	Certified
mt41 mobile	Windows Embedded Standard 7	Certified	HDXP	HDXP	HDXP	N/A	Certified	Certified

HDX – HDX Ready
HDXP – HDX Premium Ready
N/A – Certification is not applicable to this device

For more information visit
hp.com/go/thin