

# HP Elite t660 Thin Client

## Empower your workforce with secure server-based computing

This high-performance, reliable HP Elite t660 Thin Client workhorse enables productivity, while HP Wolf Security<sup>3</sup> features provide IT peace of mind. Built to support demanding workloads, whether in the office or working remote, this cloud device helps end users tackle daily tasks, while versatile configurations help optimize workspaces.

### Seamless performance with an Intel® CPU<sup>1</sup>, SSD, and 4K support.

Experience peak productivity with an Intel® U300E 5-core CPU<sup>1</sup> and up to 512GB NVMe SSD options.<sup>2</sup> Supports up to four 4K displays<sup>3</sup>, with an optional one at 5K<sup>3</sup>, providing stunning visuals along with the power to handle demanding applications and multitasking.

### Defend your data with HP BIOS & Wolf Security.

Fortify security with the inherently secure HP Elite t660 Thin Client, featuring a choice of operating system.<sup>4</sup> Enhanced by HP BIOS and Wolf Security<sup>5</sup> and coupled with case intrusion detection to help ensure your information remains safe.

### Effortless, secure collaboration for hybrid work.

Efficiently manage projects with optimized UC solutions, streamlining communications and collaboration to enhance project efficiency and success. Enjoy top-notch performance and robust security with Microsoft Teams, Zoom, Skype, Citrix WebEx, and more.<sup>6</sup>



\*Product image may differ from actual product

## Sustainability in action

### Outer box packaging 100% sustainably sourced<sup>8</sup>

The EPEAT® registered<sup>7</sup> and ENERGY STAR® certified HP Elite t660 Thin Client uses 100 percent sustainably sourced and recyclable outer box packaging.<sup>8</sup>



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## Featuring

### **Robust, simple, and secure cloud client manageability**

Boost productivity, enhance security, and simplify cloud client management with HP Wolf Cloud Endpoint Manager. Purpose-built for mission-critical devices, our cloud-based solution helps IT secure endpoints and delight users with minimal effort.<sup>9</sup>

### **Multitask efficiently with 5-core processing power from Intel®**

Provide a future-forward CPU with the performance to handle everyday tasks while maintaining energy efficiency. This Intel® U300E processor<sup>1</sup> features 5 cores for improved multitasking across applications optimized for multi-core processors.<sup>1</sup>

### **Protected by HP Wolf Security.**

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.<sup>5</sup>

### **Choose fast and efficient Wi-Fi 6E or upgrade to Wi-Fi 7**

Device portability with reliable, fast connectivity determines where you can work. Connect in dense wireless environments with low latency gigabit data rate Wi-Fi 6E. Or, choose Wi-Fi 7 for increased data rates and reduced latency.<sup>10,11,12</sup>

### **Multiple displays for an expansive and immersive visual experience**

Enhance productivity working across multiple screens. The HP Elite t660 TC supports up to four 4K displays for stunning definition. Replace a 4K with a 5K display using an optional flex port for even sharper and more detailed images.<sup>3,13</sup>

### **Handle data with agility**

Quickly access and transfer data with up to 32GB14 DDR5 memory. Combine with the USB 4 port on the front panel for fast signaling data rates.<sup>13,14</sup>

### **Major unified communications platforms support**

Bring your teams together to collaborate through text, voice, and video with support for whichever major unified communications platform that suits your company's needs. HP Elite t660 TC supports Microsoft Teams, Zoom, Cisco Webex, and more.<sup>6</sup>

### **Optimized for effective collaboration**

Collaborate with the confidence that HP tests the HP Elite t660 TC to ensure hardware and software compatibility with unified communications systems—supporting voice, video, screen sharing, multitasking, and virtual backgrounds.

### **Make IT security a breeze**

Ease the burden of IT admins in Windows environments with HP Write Manager, a simple write filter solution that works across multiple Windows versions and helps prevent unauthorized changes.

### **Help secure critical data**

The firmware Trusted Platform Module (TPM) provides hardware-based encryption keys to help secure your data, e-mail, and user credentials.<sup>15</sup>

### **Boost productivity with updated thin client performance**

Help increase performance and productivity with the upgraded HP Elite t660 Thin Client. Enjoy support for up to 4 high-res displays and fast wireless connectivity in a quiet, fanless design—making work seamless and efficient.

### **Self-healing BIOS**

Firmware attacks can completely devastate your device. Stay protected with HP Sure Start with Runtime Intrusion Detection, the self-healing BIOS that automatically recovers itself from attacks or corruption.<sup>16</sup>



# HP Elite t660 Thin Client

## Technical specifications

Available Operating Systems	Windows 11 IoT Enterprise 2024 LTSC <sup>1</sup> HP ThinPro <sup>1,2</sup> IGEL OS <sup>1,2</sup> HP Smart Zero Core <sup>1,2</sup>
Browser	Mozilla Firefox (for models with HP ThinPro); Microsoft Edge (for models with Windows 11 IoT Enterprise LTSC 2024)
Available Processors <sup>3,4</sup>	Intel® Processor U300E (1.1 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 5 cores, 6 threads)
Maximum memory	32 GB DDR5-5200 MT/s; <sup>6</sup> Transfer rates up to 5200 MT/s
Memory slots	2 SODIMM
Internal storage	32 GB up to 512 GB Flash memory <sup>5</sup>
Display support	Up to 4 displays with three DisplayPort™ 1.4 video 3 DP outputs provided at the back of the system, 1 optional Type-C® card via option port.
Available Graphics	Integrated: Intel® Graphics <sup>15</sup>
Audio	Internal amplified speaker system for basic audio playback
Ports and connectors	Front: 2 USB Type-A 5Gbps signaling rate; 1 3.5 mm audio jack; 1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge) ; Back: 1 USB Type-A 10Gbps signaling rate; 1 USB Type-A 5Gbps signaling rate; 2 USB 2.0 Type-A; 3 DisplayPort™ 1.4; 1 RJ-45; 1 audio-in/out ; Optional Ports: 1 HDMI; 1 VGA; 1 Dual serial; 1 Fiber NIC (LC/SC connector); 1 Power serial; 1 external antenna port; 2 USB Type-A 5Gbps signaling rate; 1 USB Type-C® 5Gbps signaling rate (USB Power Delivery, DisplayPort™)
Input devices	HP USB 320K wired keyboard; HP 125 Wired Keyboard; HP Wired 320M Mouse; HP 125 USB Black Wired Mouse
Communications	LAN: Allied Telesis AT-27M2/SC-AA Fiber NIC 100FX; Allied Telesis AT-29M2/LC-AA Fiber NIC 1000SX; Allied Telesis AT-29M2/SC-AA Fiber NIC 1000SX <sup>7</sup> ; WLAN: Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card; Intel® Wi-Fi 7 BE200 (2x2) and Bluetooth® 5.4 wireless card, non-vPro®
Software	HP Device Manager; HP Easy Shell <sup>14</sup> ; HP Easy Tools; HP ThinUpdate; HP True Graphics; HP Write Manager; Microsoft AVD
Security management	HP Sure Start <sup>10</sup> ; HP Sure Admin <sup>11</sup> ; HP Secure Erase <sup>12</sup> ; HP Thin Update; HP Device Manager; HP Easy Tools; HP Smart Zero Client Services; HP USB Port Manager; HP Management Integration Kit for Microsoft System Center Configuration Management Gen 4; HP User State Tool
Security Software Licenses	HP Wolf Pro Security Edition <sup>13</sup>



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## Technical specifications

Power	45 W external Smart AC power adapter, up to 87% efficiency; 65 W external Smart AC power adapter, up to 88% efficiency
Dimensions	3.5 x 20 x 20 cm; (Vertical orientation.)
Weight	1.15 kg (without stand); 1.2 kg (with stand); (Weight will vary depending on configuration.)
Ecolabels	EPEAT® registered configurations available <sup>17</sup>
Energy star certified	ENERGY STAR® certified
Sustainable impact specifications	Low halogen; 80% recycled aluminum in the rear plate; 15% recycle SGCC steel chassis; 50% ocean-bound plastic in fan enclosure <sup>18,19,20</sup>



# HP Elite t660 Thin Client

## Footnotes

### Messaging Footnotes

- <sup>1</sup> 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.
- <sup>2</sup> Optional feature that must be configured at the time of purchase. For hard drives and solid-state drives, GB=1billion bytes.
- <sup>3</sup> 4k content required to view 4K images. 5K content required to view 5K images. Displays sold separately and not included.
- <sup>4</sup> HP Elite t660 Thin Client offers Windows 11 IoT LTSC 2024, HP ThinPro 8.1, and HP Smart Zero Core. Operating system must be configured at the time of purchase.
- <sup>5</sup> HP Wolf Security for Business is available via download from [https://www.hp.com/us-en/security/endpoint-security-solutions.html?jumpid=ps\\_us\\_go\\_mk\\_se\\_cm018303\\_con\\_x](https://www.hp.com/us-en/security/endpoint-security-solutions.html?jumpid=ps_us_go_mk_se_cm018303_con_x) Windows 10 or 11 Pro and higher is required. Various HP security features are included and are available on HP Pro, Elite, Workstation, and RPOS products. See product details for included security features.
- <sup>6</sup> Internet access required and not included.
- <sup>7</sup> EPEAT® status varies by country. Visit <http://www.epeat.net> for more information.
- <sup>8</sup> 100% of HP paper-based packaging is from recycled or certified sustainable sources. HP paper and fiber based packaging for PCs, displays, home and office print, and supplies is reported by suppliers as recycled or certified, with a minimum of 97% by volume verified by HP. Packaging is the box that comes with the product and all paper-based materials inside the box. Packaging for commercial, personal systems accessories, and spare parts is not included.
- <sup>9</sup> Requires Windows 11 IoT Enterprise LTSC 2024 or later or HP ThinPro 8.1 Operating System or later on endpoint and Internet access. Planned availability for Summer 2024. Visit <https://www.hp.com/us-en/solutions/cloud-computing/thin-client-software.html> for Terms of Service datasheet, feature listings and configuration requirements as they become available.
- <sup>10</sup> Wi-Fi 6E requires a Wi-Fi 6E router, sold separately to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
- <sup>11</sup> Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 7 (802.11BE) functionality requires compatible Windows 11 OS, compatible processor, and separately purchased Wi-Fi 7 router to support backwards compatibility with prior 802.11 specs. Available in countries where Wi-Fi 7 is supported. The specification for 802.11BE is a draft specification and is not final. If the final specification differs from the draft specification, it may affect the ability of the device to communicate with other 802.11BE devices.
- <sup>12</sup> Wi-Fi® supporting gigabit data rate is achievable with Wi-Fi 7 (802.11BE) when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.
- <sup>13</sup> Optional feature that must be configured at the time of purchase.
- <sup>14</sup> Actual throughput may vary.
- <sup>15</sup> TPM 2.0 is limited on HP ThinPro/HP Smart Zero, and functionality is dependent upon use of a customer-enabled application that can locate the TPM chip.
- <sup>16</sup> HP Sure Start is available on select HP devices. See product specifications for availability.

### Specification Footnotes

- <sup>1</sup> 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. ISP fees may apply, and additional requirements may apply over time for updates. See <http://www.windows.com> .
- <sup>2</sup> Not all features are available with HP ThinPro, Smart Zero Core, IGEL and No OS.
- <sup>3</sup> 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.
- <sup>4</sup> Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost> for more information.
- <sup>5</sup> 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.
- <sup>6</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.
- <sup>7</sup> Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited.
- <sup>8</sup> Wi-Fi 6E requires a Wi-Fi 6E router, sold separately to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
- <sup>9</sup> Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 7 (802.11BE) functionality requires compatible Windows 11 OS, compatible processor, and separately purchased Wi-Fi 7 router to support backwards compatibility with prior 802.11 specs. Available in countries where Wi-Fi 7 is supported. The specification for 802.11BE is a draft specification and is not final. If the final specification differs from the draft specification, it may affect the ability of the device to communicate with other 802.11BE devices.
- <sup>10</sup> HP Sure Start is available on select HP PCs and requires Windows 10 and higher.
- <sup>11</sup> HP Sure Admin requires Windows 10 or 11 Pro or higher, HP BIOS, HP Manageability Integration Kit from <http://www.hp.com/go/clientmanagement> and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.
- <sup>12</sup> HP 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™.
- <sup>13</sup> 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, RPOS and Workstation products. See product details for included security features.
- <sup>14</sup> HP Easy Shell is currently available on Windows Embedded Standard 7E, Windows Embedded Standard 7P, Windows Embedded 8 Standard, Windows Embedded 8.1 Industry Pro, Windows 10 IoT Enterprise 2016 LTSC, and Windows 10 IoT Enterprise 2019.
- <sup>15</sup> 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.
- <sup>16</sup> HP services are sold separately and are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.
- <sup>17</sup> Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit [www.epeat.net](http://www.epeat.net) for more information.
- <sup>18</sup> External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
- <sup>19</sup> Recycled metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal parts over 25 grams.
- <sup>20</sup> Percentage of ocean-bound plastic contained in each component varies by product.

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