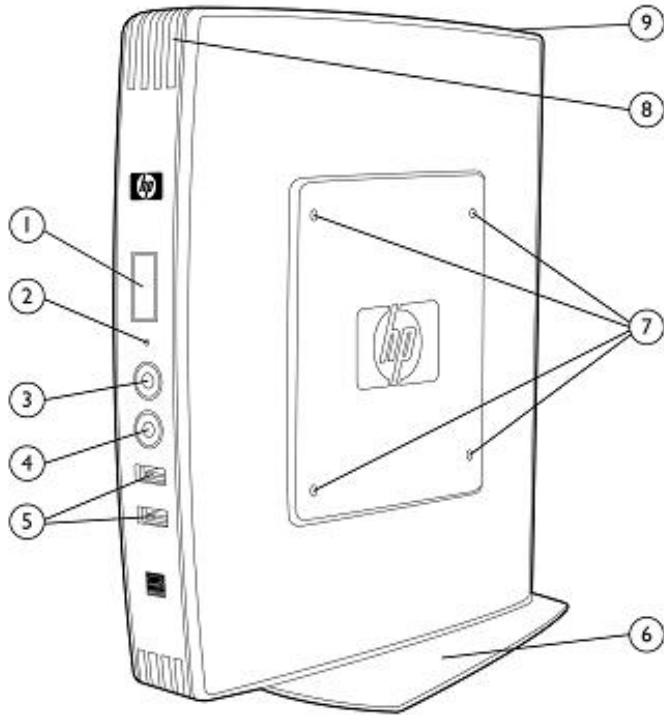
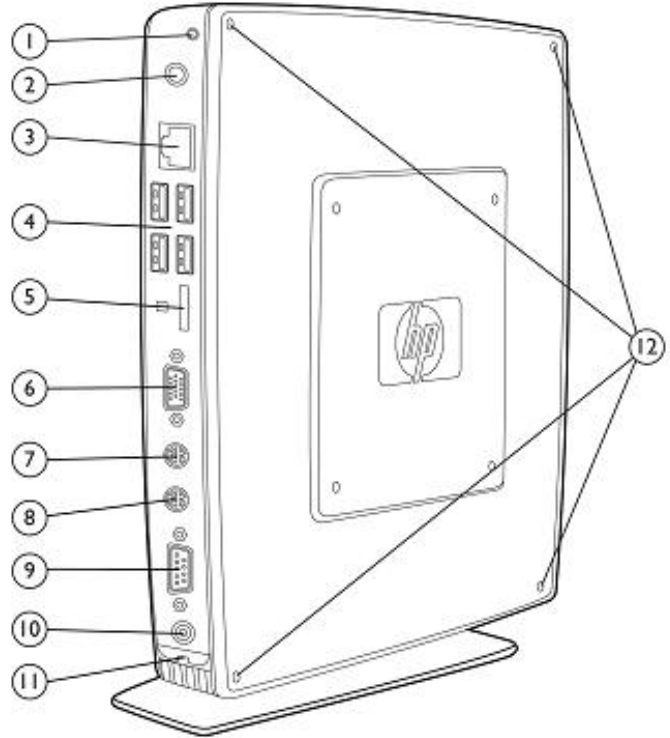


## Overview



Front

1. Power button (with integrated power indicator light)
2. Flash drive activity indicator light
3. Audio connector (headphone/speaker out)
4. Audio connector (mic in)
5. USB connectors (two)
6. Removable stand for vertical orientation
7. Mounting points for HP Quick Release or other VESA mount
8. Secure USB compartment cover
9. Cable lock slot (secures unit and secure USB compartment)

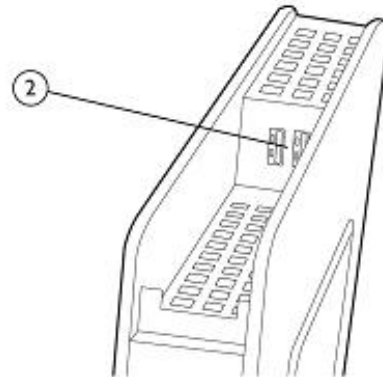
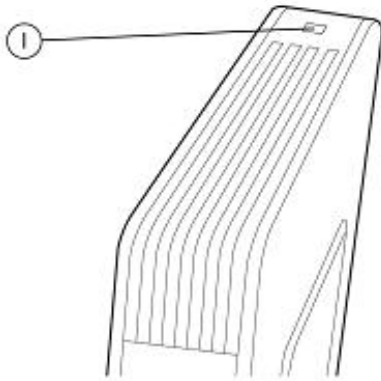


Back

1. Cabling exit from secure USB compartment
2. Wi-Fi antenna connector (depends on model)
3. Ethernet RJ-45 connector
4. USB connectors (four)
5. DisplayPort monitor output
6. VGA monitor connector
7. PS-2 keyboard connector
8. PS-2 mouse connector
9. Serial connector
10. +19V DC power input
11. Power cable retention slot
12. Mounting location for four (4) horizontal mounting feet

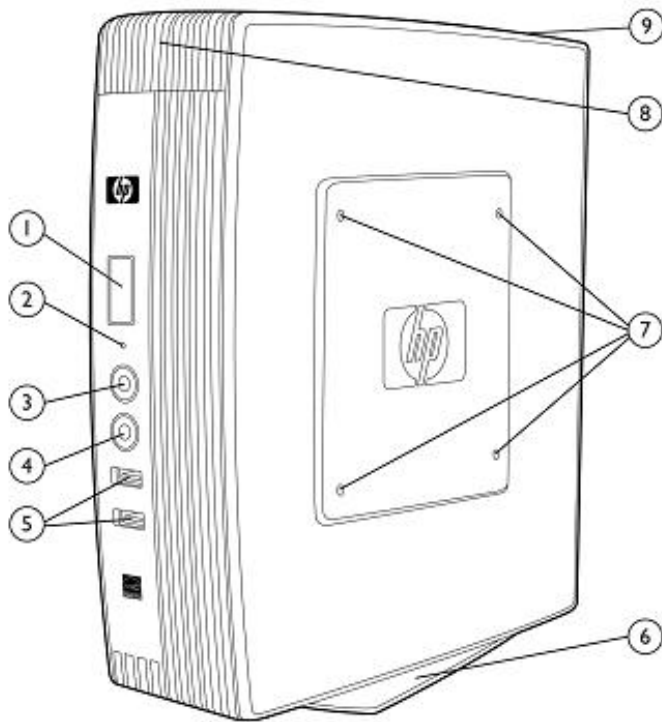
Overview

Top



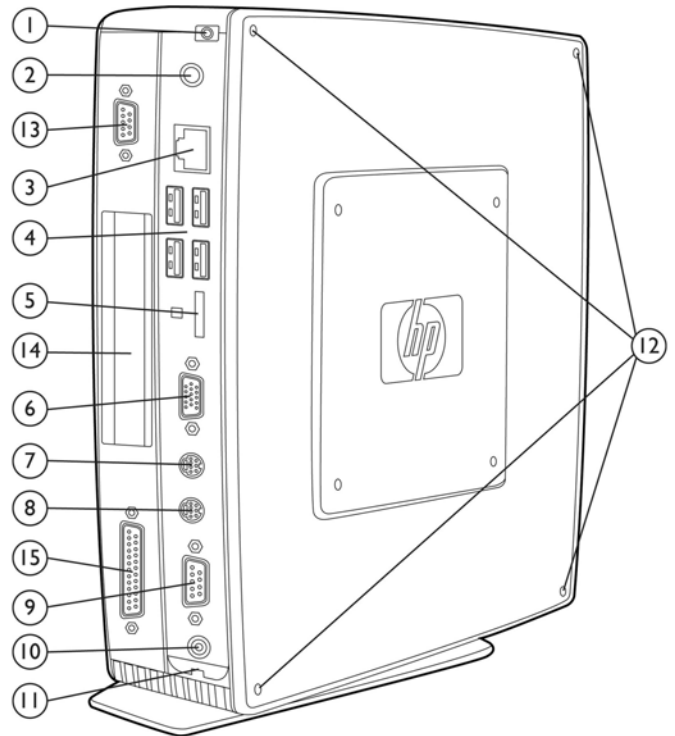
1. Cable lock slot - secures unit and secure USB compartment 2. Secure USB compartment with cover removed - 2 USB connectors

with optional Expansion Module Kit



Front

1. Power button (with integrated power indicator light)
2. Flash drive activity indicator light
3. Audio connector (headphone/speaker out)
4. Audio connector (mic in)
5. USB connectors (two)
6. Removable stand for vertical orientation
7. Mounting points for HP Quick Release or other VESA mount



Back

1. Cabling exit from secure USB compartment
2. Wi-Fi antenna connection (depends on model)
3. Ethernet RJ-45 connector
4. USB connectors (four)
5. DisplayPort monitor output
6. VGA monitor connector
7. PS/2 keyboard connector



### Overview

- |  |   |
|--|---|
| 8. Secure USB compartment - 2 USB connectors                 | 8. PS/2 mouse connector                                     |
| 9. Cable lock slot (secures unit and secure USB compartment) | 9. Serial connector   |
|  | 10. +19V DC power input                                     |
|  | 11. Power cable retention slot                              |
|  | 12. Mounting location for four (4) horizontal mounting feet |
|  | 13. Second serial connector                                 |
|  | 14. PCI/PCIe slot access                                    |
|  | 15. Parallel connector                                      |

### At A Glance

#### Hardware features:

- Intel Atom N280\* processor, with Intel GL40 chipset [\\*Intel's numbering is not a measurement of higher performance.](#)
- 1 or 2 GB flash memory provides ample storage for drivers and applications
- 1 or 2 GB DDR3/667MHz system memory (64 MB minimum reserved video)
- Available empty DDR3 SO-DIMM slot (and RAM upgrade options) for dual-channel system memory expansion
- 8 USB 2.0 ports
- Secure USB compartment is ideal for protecting USB wireless and USB Flash
- Legacy support includes parallel (via Expansion Module), serial, and PS/2 connections
- Dual monitor support options (VGA plus DVI-D through optional adapter)
- Optional Expansion Module with PCI-E X4 or PCI slot for installing a wide range of devices (includes a parallel and second serial port)
- Additional SATA II connector for adding optional secondary solid state Flash drive (16 GB available)

#### Software features:

- HP ThinPro operating system provides a single console interface for dashboard visibility to all user and administrative touch points with user and administrator logins for added security.
- HP ThinPro supports modular software updates that can be applied remotely over the network with less bandwidth overhead. This type of update mechanism also improves HP's ability to deliver time to market client-side updates from third party software partners such as Citrix, VMware and Quest.
- HP EasyConfig wizard guides administrators through one time setup and deployment, reducing the need for lengthy documentation
- ICA and RDP support for accessing Windows and Citrix resources
- VDI broker support includes VMware View, Citrix XenDesktop (with CDA mode utility), Quest vWorkspace LeoStream, HP Session Allocation Manager (SAM)
- Native HP TeamTalk terminal emulation suite and local XDMCP/X.11 for accessing legacy application resources such as mainframes and mid-range servers or Unix/Linux X-window environments
- Enhanced multimedia and USB redirection support
  - HP RDP Multimedia & USB Enhancements software
  - Citrix HDX MediaStream and Plug-n-Play
  - HP Remote Graphics Software (RGS) with USB redirection support
- HP Device Manager simplifies visibility and management for small and large thin client deployments scattered across multiple subnets and NATed environments
- The t5745 expands manageability support to include server class tools that can be used to discover, asset, shadow, configure and update a mixed environment of thin clients and PCs, i.e. HP Client Automation & Alteris (Altiris DS license not included)
- Local HP ThinState allows administrators to capture a configuration profile or complete image from any t5745 and save it to a USB key or an HP ezUpdate repository.
- Native HP ezUpdate support enables stateless configuration inheritance with a local caching option for zero touch administration and reduced overhead. This tool automates network rollouts of configuration changes, low bandwidth Add-ons



## Overview

(modular software updates) and image updates.

- Client Aggregation Support for controlling up to 4 devices with one keyboard and mouse, practical for expanding visible desktop real estate across multiple monitors (see administration guide for more details)

## Warranty:

- Protected by Hewlett-Packard Services, including a limited three-year mail-in warranty (certain restrictions and exclusions apply)



### Standard Features - Models

Standard: VU903AA#ABA	<b>Model Name</b>	HP t5745 Thin Client
	<b>Processor/Chipset</b>	Intel Atom N280* 1.66 GHz/GL40 chipset <i>*Intel's numbering is not a measurement of higher performance.</i>
Smart Buy: VU903AT#ABA	<b>Operating System</b>	HP ThinPro
	<b>Storage</b>	1 GB Flash
	<b>Memory</b>	1 GB DDR-3 SODIMM <b>NOTE:</b> 64 MB min. reserved for video
	<b>Graphics</b>	Intel GL40 graphics
	<b>Client-Side Management Support</b>	HP ThinState for image capture and redeploy ezUpdate for image/configuration inheritance HP Device Manager Agent HP Client Automation agent
	<b>Keyboard</b>	USB or PS/2 (varies by region)
	<b>Mouse</b>	USB or PS/2 (varies by region)

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Standard: VU908AA#ABA	<b>Model Name</b>	HP t5745 Thin Client
	<b>Processor/Chipset</b>	Intel Atom N280* 1.66 GHz/GL40 chipset <i>*Intel's numbering is not a measurement of higher performance.</i>
Smart Buy: VU908AT#ABA	<b>Operating System</b>	HP ThinPro
	<b>Storage</b>	2 GB Flash
	<b>Memory</b>	2 GB DDR-3 SODIMM <b>NOTE:</b> 64 MB minimum reserved for graphics memory.
	<b>Graphics</b>	Intel GL40 graphics
	<b>Client-Side Management Support</b>	HP ThinState for image capture and redeploy ezUpdate for image/configuration inheritance HP Device Manager Agent HP Client Automation agent
	<b>Keyboard</b>	USB or PS/2 (varies by region)
	<b>Mouse</b>	USB or PS/2 (varies by region)



## Options

	<b>NOTE:</b> Optional accessories are available as separate purchase.	<b>Part Number</b>
<b>Accessories</b>	HP t5740/t5745 PCIe x4 / PCI Expansion Module	AZ551AA
	HP Quick Release Kit	EM870AA
	HP Integrated Work Center Stand	GN783AA
	HP/Kensington Cable Lock	PC766A
	65 Watt External Power Supply replacement	AZ552AA
<b>Communications</b>	HP Neoware US/AP USB Wireless Adapter <sup>3</sup> (US only; not certified for use in Latin America or Canada) (Asia/Pacific: Taiwan, Australia, Malaysia, Singapore, Indonesia, Philippines) Security: WEP except 256-bit, WPA and WPA2 only	AK256AA
	HP Neoware EMEA USB Wireless Adapter <sup>3</sup> (EMEA; not certified for use in Russia or Belarus) Security: WEP except 256-bit, WPA and WPA2 only	AK257AA
	Cisco Aironet 802.11a/b/g Wireless PCI Adapter <sup>4</sup>	AIR-PI21AG-A-K9
	Allied Telesis PCIe x1 Fast Ethernet Fiber Network Interface Card <sup>4</sup>	AT-2711FX
	Allied Telesis PCI-e x1 Gigabit Fiber Network Interface Card <sup>4</sup>	AT-2972SX
<b>Input Devices</b>	HP PS/2 Standard Keyboard	DT527A
	HP USB Standard Keyboard	DT528A
	HP USB Smartcard Keyboard	ED707AA
	HP PS/2 2-Button Optical Mouse	EY703AA
	HP USB 2-Button Optical Scroll Mouse	DC172B
<b>Monitors<sup>5</sup></b>	HP L5009tm Touchscreen Monitor	VK202AA
	ELO Touch 1529L Flat Panel – USB/serial combo <sup>4,6</sup>	E926109
<b>Graphics</b>	HP DisplayPort to DVI-D Adapter	FH973AA FH973AT
<b>Storage</b>	HP 16GB SATA II IDE Solid State Flash Drive (for secondary storage) <sup>7</sup>	TBD
	HP USB External CD/DVD R/RW Drive (read only support)	FS943AA FS934UT
	Apacer 4GB AH522 USB 2.0 Flash Drive <sup>2</sup>	91.HDE2S.HP00C
<b>Memory</b>	1GB DDR3 SO-DIMM Memory Upgrade Kit (1 x 1 GB)	AZ548AA
	2GB DDR3 SO-DIMM memory Upgrade Kit (1 x 2 GB)	AZ549AA
<b>Security</b>	HP USB Smartcard Keyboard	ED707AA
	SCM USB Smart Card Reader SCR331 <sup>4</sup>	904054
	HP/Kensington Cable Lock	PC766A



### Options

Care Pack Services <sup>8</sup>	9x5 Next-Business-Day Advanced Exchange - 3 Years	331653-001; U4847E <sup>9</sup>
	9x5 Next-Business-Day On-Site Coverage - 3 Years	331655-001; U4849E <sup>9</sup>
	Hardware Installation	331686-001; U4865E

<sup>3</sup>Wireless functionality is not supported for roaming environments. Thin client must be stationary for wireless device to properly function. A standard WLAN (Wi-Fi) infrastructure with wireless access points is required and is not included.

<sup>4</sup>Option, drivers, and support are available directly from third party.

<sup>5</sup>Drivers must be installed. For a complete list of monitors compatible with HP thin clients, it is important to cross-reference the supported video resolutions of the HP thin client to the supported resolutions of the monitor. Most HP monitors have one or more supported resolutions that match HP thin client products.

<sup>6</sup>Only serial is supported.

<sup>7</sup>The secondary storage drive is not supported for the primary boot image of the thin client. HP Remote Management tools may be used to manage content on the secondary storage drive, but cannot be used to image or install the primary boot image from this drive.

<sup>8</sup>Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Restrictions and limitations apply. For details, visit: [www.hp.com/go/carepack](http://www.hp.com/go/carepack).

<sup>9</sup>U4847E is available in all regions; U4849E is available in Americas and Asia-Pacific/Japan.



## Technical Specifications

### Memory Configurations

Flash Memory	Memory Slot 1 (DDR-3)	Memory Slot 2 (DDR-3)
1 GB	1 GB	Empty
2 GB	2 GB	Empty

<b>Processor</b>	Intel Atom N280 1.66 GHz	
<b>Memory</b>	<b>Storage</b>	1 or 2 GB Resident Flash or Up to 4 GB Flash for boot drive
	<b>Memory</b>	GB DDR-3 SODIMM in standard configurations (up to 8 GB supported) <b>NOTE: MB minimum reserved for video (Intel GL40 chipset dynamically allocates video memory)</b>
<b>Graphics</b>	Intel GL40 graphics with support for two high-resolution monitors up to 2048 x 1536, or up to 32 bit color depth* Client Aggregation Support for controlling up to 4 devices with one keyboard and mouse, practical for expanding visible desktop real estate across multiple monitors (see administration guide for more details)	

Mode	Color depth	Refresh rate
640 x 480	8/16/32bit	60, 72, 75, 85
800 x 600	8/16/32bit	60, 75, 85
1024 x 768	8/16/32bit	60, 70, 75, 85
1280 x 720	8/16/32bit	60, 75, 85
1280 x 768	8/16/32bit	60, 75, 85
1280 x 1024	8/16/32bit	60, 75, 85
1400 x 1050	8/16/32bit	60, 75, 85
1440 x 900	8/16/32bit	60, 75, 85
1600 x 1200	8/16/32bit	60, 75, 85
1680 x 1050	8/16/32bit	60
1920 x 1080	8/16/32bit	60, 75, 85
1920 x 1200	8/16/32bit	60, 75
2048 x 1536	8/16/32bit	60

\* This table represents a sample of possible modes that this controller is capable of displaying but various factors such as the capability and EDID info returned by the attached monitor, the interface used (D-SUB/DisplayPort or optional DVI-D/D-SUB with dongle), and dual monitor mode may limit the availability of modes, color depth, and or refresh rate.

<b>Input/Output/Peripheral Support</b>	<b>Keyboard</b>	USB or PS/2 (varies by region)
	<b>Mouse</b>	USB or PS/2 (varies by region)
	<b>Printer</b>	Local and/or network printers (RDP, ICA, LPD)
	<b>Video</b>	Intel GL40 graphics
	<b>I/O Ports</b>	Eight USB 2.0 ports (two in front, four in rear, two in secure USB compartment), 1 VGA, 1 DisplayPort, 2 PS/2, 1 serial, 1 RJ-45, and 1 optional Expansion Module with X4 PCI-EI or PCI slot, also including 1 parallel and second serial port



## Technical Specifications

<b>Networking</b>	10/100/1000 Gigabit Ethernet (RJ-45) IPV6 Capable DHCP or Static IP support Wake on LAN (WOL) PXE
<b>Security Features</b>	Secure USB compartment with 2 USB 2.0 ports Security lock slot (cable lock sold separately) Smartcard support via PCSC Lite Framework & CCID Driver User and Administrator logins for greater content control Read-only operating system Stateless security mode (requires quick and easy setup to enable)
<b>Operating System</b>	HP ThinPro
<b>Server OS Compatibility</b>	Citrix XenApp 4.5 and 5.0 Citrix XenDesktop 3 and 4 Citrix Presentation Server 4.0 and 4.5 Windows Server 2008 Terminal Services Windows 2000/2003 Terminal Server families VMware View Manager 4 using RDP & VMware PCoIP Soft Unix/Linux Servers (XDMCP/X.11 for X Windows) Mainframes & Mid-Range Servers (see emulations below)
<b>User Interface Language Support</b>	Preinstalled: English, French, German, Spanish, Japanese, Simplified Chinese <b>NOTE: Languages are selectable from the HP ThinPro Control Panel or EasyConfig wizard</b>
<b>VDI Broker Support</b>	XenDesktop/PNagent (also applicable for XenApp) Full screen Citrix Desktop Appliance (CDA) mode VMware View Manager 4 & VMware PCoIP Soft Leostream Desktop Connection Broker vWorkspace 6 (Quest) HP Session Allocation Manager (SAM) <b>NOTE: Broker features for ThinPro OS may vary from other HP products</b>
<b>Local Web Access</b>	Iceweasel 3 with Sun JRE 1.6 (Java) & ePDFview (PDF Viewer)
<b>Legacy Host Access Support</b>	HP TeemTalk 7 Terminal Emulation Suite (see list of emulation below) XDMCP (X.11) for X-window applications SSH, Telnet & Custom Connections
<b>Multimedia &amp; USB Redirection Support</b>	HP RDP Multimedia & USB Enhancements (multimedia & USB redirection) Citrix HDX MediaStream (multimedia redirection) Citrix HDX Plug-n-Play (USB redirection) HP Remote Graphics Software (RGS) with USB redirection support

### Premium Multimedia Experience

Bit Rate	Up To 6,000 kbps
Windows Size	920x1440
Network Latency <10 ms (100 Mb LAN)	> 15 fps, smooth video/audio synchronization
Network Latency <50 ms (10/100 Mb WAN)	> 15 fps, smooth video/audio synchronization
Network Latency <90 ms (1.5 Gb VPN)	> 15 fps, smooth video/audio synchronization



### Technical Specifications

Video Codecs (Pack 1 – Preinstalled)	MPEG 1, WMV 7/8/9
Audio Codecs (Pack 1 – Preinstalled)	MP3, WMA, ALAW, MULAW
<u>OPTIONAL (requires purchase from HP Software Depot):</u>	
Video Codecs (Pack 2)	MPEG 2, MPEG 4, H2.64, DivX, Xvid
Audio Codecs (Pack 2)	AAC, AC3
Flash Option Pack	Flash Redirection

#### Device Management Support

- HP ezUpdate – Image/configuration inheritance
  - Stateless Security Mode: Automates profile deployment and minimizes proliferation of critical network access data
  - Persistent Mode: Automates profile deployment and minimizes dependency on centralized profile repository by storing profile locally for continued, or persistent use
  - Local Mode: Practical for administrators to create or edit master (corporate) profile, or to establish settings for users with unique access requirements, or for configuring devices in small (single digit) deployments with low touch administration
- HP ThinState – Capture master (corporate) image & port to USB or ezUpdate repository
- HP Device Manager – Simplifies visibility and management for small and large thin client deployments networked across multiple subnets and NATed environments
- HP Client Automation – Provides visibility and control of mixed environments of HP thin clients and HP PCs
- Altiris support for managing mixed environments of HP and non-HP desktop environments (no Altiris license included)
- VNC – Remote shadowing
- No waiting, modular software releases for low bandwidth component updates. Allows HP to quickly deliver critical client side updates from strategic third parties in-between schedule software releases.
- Debian Package Manager with Simplified GUI

See [www.hp.com/support](http://www.hp.com/support) for more detail and the most up to date list of add-ons

#### Dimensions HxWxD (approximate)

<b>Without stand</b>	10.04 x 1.73 x 8.74 in (255 x 44 x 222 mm)
<b>With stand</b>	10.39 x 1.73 x 8.74 in (266.7 x 44 x 222 mm)
<b>With Expansion Module</b>	10.04 x 2.91 x 8.74 in (255 x 74 x 222 mm)

#### Weight (approximate)

<b>With stand</b>	3.48 lb (1.58 kg)
<b>With Expansion Module</b>	4.14 lb (1.88 kg)

#### Environmental

<b>Temperature range</b>	Operating: 50° to 104° F (10° to 40° C) Operating, using Quick Release with a flat panel monitor: 50° to 95° F (10° to 35° C) Operating, using PCI Expansion Unit: 50° to 104° F (10° to 40° C) Non-operating: -22° to 140° F (-30° to 60° C)
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**NOTE:** Specifications are at sea level with altitude derating of 1° C/300m (1.8° F/1000ft) to a maximum of 3 Km (10,000 ft), with no direct, sustained sunlight. Upper limit may be limited by the type and number of options installed.

<b>Humidity</b>	20% to 80% condensing 10% to 90% non-condensing
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### Technical Specifications

	<b>Power Supply</b>	Worldwide auto-sensing 100-240 VAC, 50-60 Hz energy-saving automatic power-down, surge-tolerant, ENERGY STAR® 2.0 qualified 65-watt power supply.
<b>Regulatory Compliance</b>	<b>Ergonomics</b>	German ZH1/618; EN29241-3, approved
	<b>Safety</b>	UL 1950, CSA 950; TÜV-GS (EN60 950) approved
	<b>RF Interference</b>	FCC Class B; CE Mark; EN55022B; VCCI
<b>Warranty</b>	Three-year limited hardware warranty. <b>NOTE:</b> <a href="#">Certain restrictions apply. Consult the HP Customer Support Center for details.</a>	
<b>Emulations</b>	<b>Emulation</b>	<b>Terminal ID</b>
	ADDS A2	
	AIXTerm	
	ANSI BBS	
	AT 386	
	ATT4410	
	DG 410/412	
	HP 700-92/96	70092, 70094, 70096, 2392A, 2622A
	HZ1500	
	IBM3151	Mod11, Mod31
	IBM3270	3278-2 (24x80), 3278-3 (32x80), 3278-4 (43x80), 3278-5 (27x132), 3278-2-E (24x80), 3278-3-E (32x80), 3278-4-E (43x80), 3278-5-E (27x132), 3279-2 (24x80), 3279-3 (32x80), 3279-4 (43x80), 3279-5 (27x132), 3287-1
	IBM5250	5291-1, 5292-2, 5251-11, 3179-2, 3196-A1, 3180-2, 3477-FC (27x132), 3477-FG (24x80), 3486-BA, 3487-HA, 3487-HC, 3812-1
	SCO Console	
	Stratus V102	
	TA6530	
	TVI910	
	TVI920	
	TVI925	
	TVI950	
	TVI955	
	VT52, VT100, VT100+, VT500 (7- or 8-bit)	VT100, VT101, VT102, VT125, VT131, VT132, M2200, VT220, VT240, VT320, VT340, VT420, VT510, VT520, VT525
	VT HP220, VT UTF8	VT100, VT101, VT102, VT125, VT220, VT240, VT320, VT340, VT420, VT131, VT132, M2200, VT510, VT520, VT525
	VT PCTerm	
	Wyse PCTerm	
	WY50	
	WY50+	
	Y60	



### Technical Specifications – Environmental Data

**Eco-Label Certifications & declarations** This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:

- ENERGY STAR® Category B
- EPEAT® registered where applicable/supported, see [www.epeat.net](http://www.epeat.net) for registration status by country

Energy Consumption	115 VAC	230 VAC	100 VAC
Idle State:	10.53 W	10.59 W	10.4 W
Off Mode:	0.51 W	0.30 W	0.51 W

**NOTE:** This product is in compliance with US executive order 13221, WOL (wake on LAN) disabled.  
**NOTE:** The actual power consumption at your location could vary and is dependent on many factors including but not limited to software load on the thin client, attached peripherals, and environmental factors.

Heat Dissipation*	115 VAC	230 VAC	100 VAC
Idle State:	36.13 BTU/hr	35.93 BTU/hr	35.49 BTU/hr
Off Mode:	1.74 BTU/hr	1.02 BTU/hr	1.74 BTU/hr

\* Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

**Batteries** This product complies with ISO standards:

- EU Directive 91/ 157/ EEC
- EU Directive 93/ 86/ EEC
- EU Directive 98/ 101/ EEC

Batteries used in the product do not contain:

- Mercury greater the 5ppm by weight
- Cadmium greater than 10ppm by weight
- Lead greater than 4000ppm by weight.

Battery size: CR2032 (coin cell)

Battery type: Lithium

<b>Recycled material</b>	<b>Product</b>	<ul style="list-style-type: none"><li>● This product contains 0% recycled materials (by weight).</li><li>● This product is over 95% (by weight) recyclable when disposed of properly at end of life.</li></ul>
	<b>Packaging</b>	<ul style="list-style-type: none"><li>● The EPE foam packaging material contains at least 5% (by weight) post-consumer recycled content.</li><li>● The corrugated paper packaging materials contains at least 80% (by weight) post-consumer recycled content.</li><li>● The packaging for this product is 100% (by weight) recyclable when disposed of properly.</li></ul>

**Environment-friendly Products and Approach** **RoHS Compliance** Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis.

**Material Usage** This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment



## Technical Specifications – Environmental Data

at:

[http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen\\_specifications.html](http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html)):

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants - may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

### Packaging

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

### End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: <http://www.hp.com/go/reuse-recycle> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide



## Technical Specifications – Environmental Data

treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/recyclers>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

### Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report

<http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html>

Eco-label certifications

<http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html>

ISO 14001 certificates:

<http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html>

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