Overview

Introduction

The HP t5565 is an all inclusive access device designed for mainstream business. The HP t5565 offers convenient access to Windows or Citrix environments, the most common VDI ecosystems, mainframes, mid-range servers, and Unix/Linux hosts The ThinPro operating system provides a single console interface with dashboard access to all user and administrative touch points. The t5565 includes dual monitor support, legacy ports, a secure USB compartment, Gigabit Ethernet support and a choice of client side or server based remote management solutions to simplify deployment and maintenance.



Front

- 1. Secure USB compartment (2 USB connectors)
- 2. Power button with LED
- 3. Flash storage activity indicator
- 4. Audio connector (mic in)
- 5. Audio connector (headphone out)
- 6. USB connectors (2)
- 7. Vertical stand (removable)
- Insertion points for self-adhesive, horizontal positioning feet 8.
 (4)
- 9. VESA mounting points (4)



Back

- 1. Integrated wireless Ethernet antenna connector (available on some models)
- 2. 10/100/1000 Ethernet RJ-45 connector
- 3. PS/2 mouse connector
- 4. Parallel port
- 5. Power cord retention slot
- 6. Cable routing from secure USB compartment
- 7. USB connectors (2)
 - . PS/2 keyboard connector
- 9. DVI-D connector
- 10. DVI-I connector
- 11. Serial port
- 12. +19V DC power input

At A Glance Hardware features:



Overview

- VIA Nano u3500 1 GHz processor for great performance
- VX900 chipset
- 1 GB 800 MHz DDR3 RAM (64 MB reserved for video) & 1 GB Flash
- 6 USB 2.0 ports
- Secure USB compartment is ideal for protecting USB wireless and USB Flash devices or for securing USB keyboard and mouse)
- Legacy support includes parallel, serial, and PS/2 connections
- Built in dual monitor support (DVI-I and DVI-D native, with DVI-I-to-VGA adapter included in carton)
- ENERGY STAR® qualified and EPEAT® registered
- BFR/PVC free*
- Contains over 10% post-consumer recycled plastics (by weight)

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.
- 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)
- Multimedia and USB redirection support
 - o Citrix HDX MediaStream (multimedia redirection)
 - O Citrix HDX Plug-n-Play (USB redirection)
 - O HP Remote Graphics Software (RGS) with USB redirection support
 - O Preinstalled Video Codecs: MPEG 1, WMV 7/8/9
 - O Preinstalled Audio Codecs: MP3, WMA, ALAW, MULAW
 - MULTIMEDIA & USB REDIRECTION OPTION PACK (coming soon, in 1st half of 2011) NOTE: Requires purchase, contact your local HP sales person
 - O HP RDP Enhancements for Multimedia & USB Redirection through RDP
 - O Video Codecs (Pack 2): MPEG 2, MPEG 4, H2.64, DivX, Xvid
 - O Audio Codecs (Pack 2): AAC, AC3
 - O Flash Redirection
- HP Easy Tools
 - O HP Easy Update: Keep your connectivity software current
 - O HP Easy Setup Wizard: Guides administrators through one time setup
 - O HP Easy Config: Purpose your HP t5545 as an optimized VDI appliance
 - O HP ThinState: Capture your master image or settings and port to USB key or HP Automatic Update repository
 - HP Automatic Update: Update: Automate configuration changes and/or software updates to multiple devices NOTE: run devices in stateless mode, or cache settings locally in persistent mode
- HP Device Manager simplifies visibility and management for small land large thin client deployments scattered across multiple subnets and NATed environments.
- 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)
- The HP t5565 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 & Altiris (Altiris DS license not included).

Native HP TeemTalk 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



Overview

Warranty:

• HP Total Care Warranty and Services: limited three-year hardware warranty in most regions. HP Care Pack Services extend service contracts which go beyond your standard warranties. For more details visit: www.hp.com/go/lookuptool.

* HP t5565 thin clients are brominated flame retardant and polyvinyl chloride free (BFR/PVC-free); meeting the evolving definition of "BFR/PVC-free" as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen Electronics (BFR/CFR/PVC-Free)."" Plastic parts contain <1,000 ppm (0.1 percent) of bromine (if the Br source is from BFRs) and <1,000 ppm (0.1 percent) of chlorine (if the Cl source is from CFRs or PVC or PVC copolymers). All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total <1,500 ppm (0.15 percent) with a maximum chlorine of 900 ppm (0.09 percent) and maximum bromine being 900 ppm (0.09 percent). Service parts after purchase may not be BFR/PVC-free. External power supply, power cords, keyboard, mouse, and DVI-to-VGA adapter are not BFR/PVC free



Models

XR248AA#XXX	Model Name	HP t5565 Thin Client
	Processor	VIA Nano superscalar u3500 1 GHz
XR248AT#XXX (SmartBuy or Promo)	Storage	1 GB Flash
	Memory	1 GB RAM (128 MB reserved for video)
XR249AA#ABA	Graphics	VIA ChromotionHD 2.0 Integrated Graphics Processor
(TAA compliant) ²	Operating System	HP ThinPro
	Keyboard	USB or PS/2 (varies by region)
	Mouse	USB or PS/2 (varies by region)
	Side Panels	Standard 100 mm VESA mounting holes
XR250AA#XXX	Model Name	HP t5565 Thin Client with Integrated Wi-Fi
	Processor	VIA Nano superscalar u3500 1 GHz
XR250AT#ABA (Smart Buy or Promo)	Storage	1 GB Flash
(Sman buy or Fromo)	Memory	1 GB RAM (128 MB reserved for video)
XR251AA#ABA	Graphics	VIA ChromotionHD 2.0 Integrated Graphics Processor
(TAA compliant)	Integrated Wireless ³	Atheros 802.11 a/b/g/n Wi-Fi adapter with dual-band multi-position adjustable external antenna
		Encyption: 64 and 128-bit WEP, WPA, WPA2, AES, TKIP Authentication: EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, LEAP
		NOTE: This document represents only those wireless features qualified on HP Thin Clients in a test lab environment. Actual features may vary based on your specific WLAN infrastructure. Wireless functionality is not supported in roaming environments as the thin client must be stationary for wireless to properly function. This document does not reflect features tested or enabled for an HP thin client customer via PCCS (customized specials).
	Operating System	HP ThinPro
	Keyboard	USB or PS/2 (varies by region)
	Mouse	USB or PS/2 (varies by region)
	Side Panels	Standard 100 mm VESA mounting holes

² Product complies with U.S. Trade Agreement (TAA). Available in U.S only.
 ³ A standard WLAN (Wi-Fi) infrastructure with wireless access points is required and is not included.



Options

Accessories	NOTE: Options are available as separate purchase ¹ HP Quick Release Kit HP Integrated Work Center Stand 65 Watt External Power Supply replacement	Part Number EM870AA GN783AA AZ552AA
Communications	HP USB 802.11a/b/g Wireless Ethernet Adapter - North American Channel Configuration (U.S. only, not certified for use in Canada or Latin America)	AK256AA
	Encryption: WEP-128bit, WPA-PSK-TKIP, WPA-TLS, WPA2-PSK-TKIP, WPA2-PSK-AES, WPA2-TLS (TKIP & AES) Authentication: EAP-TLS, LEAP	
	HP USB 802.11a/b/g Wireless Ethernet Adapter - European Channel Configuration (not certified for use in Russia or Belarus)	AK257AA
	Encryption: WEP-128bit, WPA-PSK-TKIP, WPA-TLS, WPA2-PSK-TKIP, WPA2-PSK-AES, WPA2-TLS (TKIP & AES) Authentication: EAP-TLS, LEAP	
	Asia/Pacific Certification: Taiwan, Australia, Malaysia, Singapore, Indonesia, Philippines	
	NOTE: This document represents only those wireless features qualified on HP Thin Clients in a test lab environment. Actual features may vary based on your specific WLAN infrastructure. Wireless functionality is not supported in roaming environments as the thin client must be stationary for wireless to properly function. This document does not reflect features tested or enabled for an HP thin client customer via PCCS (customized specials).	
Touch Screens ⁵	HP L5009tm Touchscreen Monitor ELO Touch 1529L Flat Panel - USB/serial combo ⁶	VK202AA E926109
Security	HP USB Smartcard Keyboard SCM USB Smart Card Reader SCR331 ² HP Keyed Cable Lock (BFR/PVC free)	ED707AA 904622 BV411AA
Input Devices	HP PS/2 Standard Keyboard HP USB Standard Keyboard HP USB Smartcard Keyboard	DT527A DT528A ED707AA
	HP PS/2 2-Button Scroll Mouse HP PS/2 2-Button Optical Scroll Mouse HP USB 2-Button Optical Scroll Mouse	DD440B EY703AA DC172B



Options

Care Pack Services⁴

9x5 Next-Business-Day Advanced Exchange - 3 Years

9x5 Next-Business-Day On-Site Coverage - 3 Years

¹ The warranties for HP branded products are set forth in the express limited warranty statements accompanying such products. Although third-party products may work effectively on HP thin clients, these third-party products are provided "AS IS." HP does not support or warrant third-party products, including the interoperability of such products with HP thin clients. However, third-party manufacturers and vendors may provide their own warranties and support directly to you. Please contact the manufacturers or vendors for hardware or software support on their products.

² This is a third-party product. Product, warranty and support available directly from third-party vendor.

³ Wireless access point and Internet service sold separately. Roaming not supported. See Administrator's Guide for supported wireless features. Not certified in Korea, Malaysia, New Zealand, Pakistan, or Taiwan.

⁴ Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. HP Care Pack Services extend service contracts beyond the standard warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at:

www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at: www.hp.com/hps/carepack. ⁵ May require installation of drivers. 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.

⁶ Option, drivers, and support are available directly from third party.



Technical Specifications

Hardware	
Processor	VIA Nano u3500 1 GHz
Chipset	VIA VX900 Media System Processor north/south bridge unified chip
Storage	1 GB Flash
Memory	1 GB DDR3 SODIMM (128MB reserved for video)
Graphics	VIA ChromotionHD 2.0 Integrated Graphics Processor Supports high-resolution monitors up to 2048 x 1536 or up to 24 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)
Monitor resolutions	800 x 600, 960 x 600, 1024 x 768, 1152 x 864 1280 x 720, 1280 x 768, 1280 x 800, 1280 x 960,1280 x 1024 1360 x 768, 1366 x 768, 1368 x 768 1400 x 1050,1440 x 900 1600 x 1200, 1600 x 1024, 1680 x 1050 1920 x 1080, 1920 x 1200, 1920 x 1440 2048 x 1536

NOTE: The resolutions your monitor displays and the multi-display modes (i.e., clone, spanning, extended/independent) supported in ICA, RDP or locally may vary. The graphics controller supports these resolutions.

Input/output and peripheral support			
Keyboard	USB or PS/2, varies by region		
Mouse	USB or PS/2, varies by region		
Printer	Local and/or network printers (RDP, ICA, LPD)		
Video	DVI-I & DVI-D digital video output (plus included DVI-I-to-VGA adapter)		
Audio output	Internal amplified speaker, 1/8-inch mini-jack, 24-bit stereo, 192-kHz sample rate		
Audio input	1/8-inch microphone mini-jack, 20-bit stereo, 96-kHz sample rate		
I/O ports	6 USB 2.0, 1 serial, 1 parallel, 2 PS/2, 1 RJ45, 1 DVI-I, 1 DVI-D, 1 headphone, 1 microphone. (1 DVI- I-to-VGA adapter included in carton)		
Networking	10/100/1000 Ethernet (RJ-45) DHCP or Static IP support Wake on LAN (WOL) PXE (requires bios change)		
Wireless LAN*	Atheros 802.11a/b/g/n WIFI Adapter		
(select models)	PCI-Express Half Mini Card		
	Supports 64 and 128-bit WEP, WPA, WPA2, AES, TKIP, 802.1x authentication types EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, LEAP		
	* Wireless features, performance and support may vary depending on environmental variables such placement, settings and firmware of your access points. Please contact your wireless vendor for support of your wireless environment.		
Security Features	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		
Operating System	HP ThinPro		
Server OS Compatibility	Citrix XenApp 4.5 and 5.0		



Technical Specifications

	Citrix XenDesktop 3 and 4 Citrix Presentation Server 4.0 and 4.5 Windows Server 2008 / 2008 R2 Remote Desktop Services Windows 2000/2003 Terminal Server families Unix/Linux Servers (XDMCP/X.11 for X Windows) Qualified on Linux Enterprise Server 11 Mainframes & Mid-Range Servers (see emulations below)		
User Interface Language Support	Preinstalled: English, French, German, Spanish, Japanese, Simplified Chinese NOTE: Languages are selectable from the HP ThinPro Control Panel or Easy Config wizard		
Citrix and Windows Connectivity	Citrix ICA 11.111, RDesktop 1.6 (RDP 6 client)		
VDI Broker Support	XenDesktop through PNagent or CDA mode Full screen Citrix Desktop Appliance (CDA) mode VMware View Manager 4 & VMware PCoIP Soft (download View 4.5 agent at HP.com) Leostream Desktop Connection Broker vWorkspace 7 (Quest) HP Session Allocation Manager (SAM) 3.1 NOTE: Broker features for ThinPro OS may vary from other HP products		
Local Web Access	Local web browser with Sun JRE 1.6 (Java) & ePDFview (PDF Viewer)		
Legacy Host Access Support	HP TeemTalk 7.2 Terminal Emulation Suite (see list of emulation below) XDMCP (X.11) for X-window applications SSH, Telnet & Custom Connections		
Multimedia & USB Redirection Support	Citrix HDX MediaStream (multimedia redirection) Citrix HDX Plug-n-Play (USB redirection) HP Remote Graphics Software (RGS) 5.4 with USB redirection support		
Device management support	 HP Easy Tools: HP Easy Setup: Configuration setup wizard HP Easy Config: Purpose your HP t5325 as an optimized VDI appliance HP Easy Update: Automatically check for and install new software updates HP ThinState: Capture master image or settings and port to USB key or Automatic Update repository HP Automatic Update: Automate configuration changes and/or software updates to multiple devices NOTE: Run devices in stateless mode, or cache settings locally in persistent mode NOTE 2: New on-boot logic detection and Easy Deploy features coming soon (1 st half of 2011) HP Device Manager - Simplifes visibility and management for small land 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 (Altiris DS license NOT included) VNC - Remote shadowing HP Add-on support provides no waiting, modular software releases for low bandwidth component updates Debian Package Manager with Simplified GUI 		
Emulations	See www.hp.com/support for more detail and the most up to date list of add-ons HP TeemTalk Terminal Emulation 7 supports these emulations. SSH/SSL is supported in terminal		



Technical Specifications

emulation mode allowing users to secure their connections to the host.

Emulation	isers to secure their connections to the host Terminal ID
ADDS Viewpoint A2	ADDS-A2
AlXTerm	aixterm
ANSI BBS	ansi
AT&T AT 386	at386-m
AT&T Dataspeed 4410	att4410
Bull BQ3107	VIP7700, VIP7760
Data General Dasher 410/412	dg410
Hewlett Packard HP700- 92/96	2392A, 2622A, 70092, 70094, 70096
Hazeltine 1500	HZ1500
IBM 3151	11, 11-28, 31, 31-28
IBM 3270	3278-2 (24x80 Mono), 3278-3 (32x80 Mono), 3278-4 (43x80 Mono), 3278-5 (27x132 Mono), 3278-5 (27x132 Mono), 3278-2-E (24x80 Color), 3278-3-E (32x80 Color), 3278-5-E (27x132 Color), 3279-2 (24x80 Color), 3279-3 (32x80 Color), 3279-4 (43x80 Color), 3279-5 (27x132 Color), 3287-1 (Printer) 3179-2 (24x80 Color), 3180-2 (27x132 Mono Msg), 3196-A1 (24x80 Mono), 3477-FC (27x132 Color Msg), 3486-BA (24x80 Mono), 3487-HA (27x132 Mono Msg), 3487-HA (27x132 Mono), 3487-HA (27x132 Color), 3812-1 (Printer), 5251-11 (24x80 Mono), 5291-1 (24x80 Mono), 5291-1 (24x80 Mono), 5291-1 (24x80 Mono), 5291-1 (24x80 Mono), 5291-1 (DBCS Printer), 5555-B01 (DBCS 24x80 Mono), 5555-C01 (DBCS 24x80 Color)
McDonnell Douglas Prism-	· · ·
8, Prism-12 McDonnell Douglas Prism-	tty
9 Prime PT250	pt250



Technical Specifications

	SCO Console	ansi
	Siemens 97801	97801
	Stratus V102	v102
	Tandem TA6526, TA6530	
	Televideo 910	TVI910
	Televideo 920	TVI920
	Televideo 925	TVI925
	Televideo 950	TVI950
	Televideo 955	TVI955
	Unisys T27	UNISYS-TD830
	Viewdata 40	VIEWDATA - 40
	Viewdata 80	VIEWDATA - 80
	Viewdata Split	VIEWDATA - SPLIT
	DEC VT PCTerm	VT-PCTERM
	DEC VT100	m2200, vt100, vt101, vt102, vt125, vt131, vt132, vt220, vt240, vt320, vt340, vt340, vt420, vt510, vt520, vt525
	DEC VT100+	VT100+
	DEC VT500 7-bit	m2200, vt100, vt101, vt102, vt125, vt131, vt132, vt220, vt240, vt320, vt340, vt340, vt420, vt510, vt520, vt525
	DEC VT500 8-bit	m2200, vt100, vt101, vt102, vt125, vt131, vt132, vt220, vt240, vt320, vt340, vt340, vt420, vt510, vt520, vt525
	DEC VT 52	m2200, vt100, vt101, vt102, vt125, vt131, vt132, vt220, vt240, vt320, vt340, vt340, vt420, vt510, vt520, vt525
	VT HP220	vt220
	VT UTF8	VT-UTF8
	Wyse WY370	WYSE-370
	Wyse WY50	WYSE-50
	Wyse WY50+	WYSE-50
	Wyse WY60	WYSE-60
	Wyse PCTerm	WYSE-PCTERM
Dimensions	Without stand	8.25 x 2.30 x 8.5 in (209.55 x 58.42 x 215.90 mm)
H x W x D	With stand	8.65 x 2.30 x 8.5 in (219.70 x 58.42 x 215.90 mm)
Weight (approximate)	With stand	3.00 lbs (1.36 kg)
Power supply		00-240 VAC, 50-60 Hz energy-saving automatic power-down, surge-tolerant, fied 65-watt power supply supplying 19VDC
Environmental	Operating temperature range	50° to 104° F (10° to 40° C)
	Non-operating temperature range	-22° to 140° F (-30 to 60° C)
	Humidity (non- condensing)	10% to 90% operating/5% to 95% non-operating
Regulatory Compliances	Product Safety	International: IEC60950-1, 12:2005, with CB Certificate and all National Deviations



Technical Specifications			
		US and Canada: UL 60950-1 / CAN/CSA 22.2 No. 60950-1-03, 07:2006, Bi-National Standard for ITE Safety in the US and Canada and is published jointly by UL and CSA. Europe: EN 60950-1, 06:2003, Information Technology Equipment	
	Ergonomics	The product has been tested and found to comply with all applicable GS ergonomic requirements.	
	RF Interference	FCC Class B, CE Mark, VCCI	
Warranty	Carranty Three-year limited hardware warranty.		
	NOTE: Certain restrictions apply. Consult the HP Customer Support Center for details.		



Technical Specifications – Environmental Data

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

- ENERGY STAR® Category B
- EPEAT® registered where applicable/supported, see www.epeat.net for registration status by country
- BFR/PVC-free product*

* HP t5565 thin clients are brominated flame retardant and polyvinyl chloride free (BFR/PVC-free); meeting the evolving definition of "BFR/PVC-free" as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen Electronics (BFR/CFR/PVC-Free)." Plastic parts contain <1,000 ppm (0.1 percent) of bromine (if the Br source is from BFRs) and <1,000 ppm (0.1 percent) of chlorine (if the Cl source is from CFRs or PVC or PVC copolymers). All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total <1,500 ppm (0.15 percent) with a maximum chlorine of 900 ppm (0.09 percent) and maximum bromine being 900 ppm (0.09 percent). Service parts after purchase may not be BFR/PVC-free. External power supply, power cords, keyboard, mouse, and DVI-to-VGA adapter are not BFR/PVC free

Additional Compliance

This product is in compliance with:

- This product complies with the requirements of the European Union's Ecodesign Directive 2009/125/EC and its associated implementing measures.
- Restrictions of Hazardous Substances (RoHS) directive 2002/95/EC.
- Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC.
- California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).
- Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.

Energy Consumption		115 VAC (60Hz)	230 VAC (50Hz)	100 VAC (60Hz)
	Idle State:	10.90 W	11.29 W	11.08 W
	Off Mode:	0.40 W	0.45 W	0.39 W
NOTE: These power measurements made without integrated wireless Ethernet option ins NOTE: This product is in compliance with US executive order 13221, WOL (wake on LA Off Mode measurements made with WOL disabled. NOTE: The actual power consumption at your location could vary and is dependent on including, but not limited to, software load on the thin client, attached peripherals, and e factors.			on LAN) disabled. ent on many factors	
Heat Dissipation	Idle State:	37.19 BTU/hr	38.52 BTU/hr	37.81 BTU/hr
	Off Mode:	1.36 BTU/hr	1.54 BTU/hr	1.33 BTU/hr
	NOTE: Heat dissipation is cal attained for one hour.	culated based on the me	asured watts, assuming the	service level is
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



Technical Specifications – Environmental Data • Lead greater than 4000ppm by weight. Battery size: CR2032 (coin cell) Battery type: Lithium **Recycled** material Product • This product contains at least 10% recycled materials (by weight). This product is at least 90% (by weight) recyclable when disposed of properly at end of life. • The EPE foam packaging material contains at least 5% (by weight) Packaging post-consumer recycled content. The corrugated paper packaging materials contains at least 80% (by weight) post-consumer recycled content. • The packaging for this product is 100% (by weight) recyclable when disposed of properly. **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. From July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive). 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 at: 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) HP follows these guidelines to decrease the environmental impact of product packaging: Packaging Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.





Technical Specifications – Environmental Data

End-of-life Management and Recycling	 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. Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: www.hp.com/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 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: 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	For more information about HP's commitment to the environment:
Corporate Environmental	Global Citizenship Report www.hp.com/hpinfo/globalcitizenship/gcreport/index.html
mormanon	Eco-label certifications
	www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html
	ISO 14001 certificates:
	www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html

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