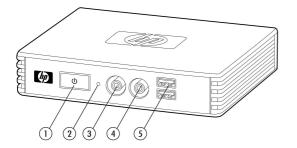
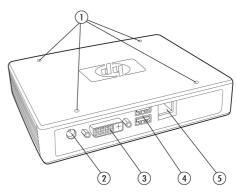
## **Overview**



#### Front

- 1. Power button with LED
- 2. Flash storage activity indicator
- 3. Audio connector (mic in)
- 4. Audio connector (headphone out)
- 5. USB 2.0 connectors (two)



#### Back

- 1. VESA standard mounting holes (four)
- 2. +12V DC power input
- 3. DVI display connector (DVI to VGA adapter incl.)
- 4. USB 2.0 connectors (two)
- 5. 10/100/1000 Ethernet RJ-45 connector

## **At A Glance**

#### Hardware features:

- 1 GHz Marvell ARM Armada 510 with integrated graphics
- 1 GB DDR3 RAM and 512 MB flash
- ENERGY STAR<sup>®</sup> 5.0, EPEAT Silver, SEPA, TGM, KOECO, PC Green Mark, EUP lot 6 tier 1 qualified
- Includes four USB 2.0 ports (two in back, two in front), front MIC in and headphone out ports

#### Software features:

- Smart client technology, just boot and connect!
- Smart Client Experience
  - O Fast boot, quick connect and responsive interaction
  - O User boots into their host environment with no local desktop complexity
  - O User preferences can be set and retained without leaving the login screen
  - O On-screen controls are streamlined to eliminate desktop clutter
- Citrix Optimization:
  - O Full screen 1080P HDX multimedia capability at an affordable price
  - O Dock bar for convenient access to multiple published applications
  - O Smooth roaming assures that your applications follow you
- Automatic Intelligence
  - Intelligence is automatically inherited by Smart Client Service
  - Support for Broadcast, Well Known DNS or DHCP Tag
  - O Leverages remote intelligence resources to minimize desktop overhead
  - Installation wizard establishes desktop environment for all devices in minutes
  - Automatic broadcast system finds Smart Client Service & delivers user desktop in seconds
  - O Profile editor allows connection changes to be made in just a few clicks



### Overview

- The remoter intelligence allows your client & host to put performance where it counts!
- Seamless updates from the cloud allow users work instead of waiting for installs
- Fall Back Intelligence (FBI)
  - O Off-line intelligence allows users to stay connected
  - O Practical for product evaluations or device demonstrations even without the Smart Client Service
  - Settings can be retained to provide fail-over access if/when cloud is down
  - O User productivity is maximized with FBI safeguards
- Uncompromised IT
  - Unique device purposing, choose from ICA-HDX or RDP or View
  - Smart Client Service integrates with host to maintain a clean IT environment
  - Your desktop attack surface is minimized with no local apps
  - O Powerful ARM chipset does what x86 can't
    - Optimized to reduce energy and cooling costs while delivering PC-like performance
    - Hardware acceleration to get the best performance for your green
    - Affordable design with great usability for fully purposed devices
    - Small form factor for workspace flexibility
- COMING SOON in 2011: Console visibility, asset information and reboot through HP Device Manager

#### Warranty:

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



## **Models and Options**

XW887AA#XXX	Model Name	HP t5335z Smart Client
	Processor	1 GHz Marvell ARM Armada 510 with integrated graphics
	Flash	512 MB
	System Memory	1 GB DDR3 RAM (224 reserved for video & graphics)
		<ul> <li>128MB reserved for the frame buffer</li> <li>96MB reserved for the multi-media decode engine</li> </ul>
	Keyboard	USB
	Mouse	USB
	Side Panels	Standard 100 mm VESA mounting holes

## Options

Accessories	<b>NOTE:</b> Options are available as separate purchase <sup>1</sup> HP Quick Release Kit HP Integrated Work Center Stand	<b>Part Number</b> EM870AA GN783AA
Security	Your desktop attack surface is minimized with no local apps HP Kensington Cable Lock	PC766A
Input Devices	HP USB Standard Keyboard HP USB 2-Button Optical Scroll Mouse	DT528A DC172B

Care Pack Services<sup>4</sup>

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

<sup>1</sup> 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.

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

<sup>3</sup> 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.

<sup>4</sup> 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. <sup>5</sup> 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.

<sup>6</sup> Option, drivers, and support are available directly from third party



## **Technical Specifications**

Hardware		
Processor	1 GHz Marvell ARM Armada 510 with integrated graphics	
Storage	512 MB Flash	
Memory	1 GB DDR3 RAM (224 MB reserved for video & graphics)	
Graphics	<ul> <li>128 MB reserved for the frame buffer</li> <li>96 MB reserved for the multi-media decode engine</li> <li>Supports high-resolution monitors up to 1920x1200, 32 bit color depth</li> </ul>	
u apines	<b>NOTE:</b> Resolutions supported by your monitor may vary. Resolutions supported through ICA, RDP or View connections may also vary. The HP t5335z graphics controller supports these resolutions:	
	<b>Resolutions</b> : DDC detection, 1920x1200, 1680x1050, 1600x1200, 1600x900, 1440x900, 1366x768, 1280x1024, 1280x960, 1280x800, 1280x768, 1280x720, 1152x864, 1024x768, 1024x600, 800x600	
Input/Output and periphe	ral support	
Keyboard	USB keyboard	
Mouse	USB mouse	
Printer	Local and/or network printers (RDP, ICA, LPD)	
Video	DVI-I digital video output (DVI to VGA adapter included)	
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	4 USB 2.0 ports , 1 RJ45, 1 DVI-I (DVI to VGA adapter Incl.), 1 headphone, 1 microphone	
Networking	10/100/1000 Ethernet (RJ-45) DHCP or Static IP support <b>NOTE:</b> No PXE support	
Security features	Your desktop attack surface is minimized with no local apps Security lock slot (cable lock sold separately)	
Server OS compatibility	Citrix XenApp 4.5 / 5 / 6 Citrix XenDesktop 4 / 5 Citrix Presentation Server 4.0 / 4.5 Windows Server 2008 / 2008 R2 Remote Desktop Services Windows 2000/2003/ Terminal Server families Windows XP / Windows Vista / Windows 7 via RDP (single connection only)	
User interface language Support	English, French, German, Spanish, Japanese, Simplified Chinese Note: Languages are selectable from the Smart Client Service installation wizard	
Citrix and Windows connectivity	Citrix ICA 11.111, RDesktop 1.6 (RDP 6 client)	
VDI broker support	XenDesktop through PNagent VMware Horizon View 4 & 4.6 (No PCoIP) <b>NOTE:</b> Broker features may vary from other HP products	
Basic multimedia and USB redirection support	Citrix HDX MediaStream (Preinstalled) Citrix HDX Plug-n-Play (Preinstalled) <u>Multimedia Experience</u> Bit Rate: Up To 3,000 kbps Windows Size: Full Screen	



## **Technical Specifications**

Device management support	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 Video Codecs (Pack 1 - Preinstalled): MPEG 1, WMV 7/8/9 Audio Codecs (Pack 1 - Preinstalled): MP3, WMA, ALAW, MULAW • HP Smart Client Service • Installation Wizard • Automatic Intelligence: • Client Kits (ICA-HDX, RDP & View) • Profile Repository (connections / settings) • Profile Editor (connections / settings)		
Dimensions	Intelligent Delivery: Broadcast, Well Known DNS, DHCP Tag 4.72 x 6.3 x 1.24 in. (120 x 160 x 31.5 mm)		
D x W x H	T. I L A O. J A T. L T III. (T L O A O O L J T. J IIIII)		
Weight	Ship Weight: 4.67 lbs. ( 2.12 kg), Stand-Alone Unit Weight: 1.06 lbs. (0.48 kg)		
Power supply*	Operating voltage range	100-240 VAC	
	Rated line frequency	50-60 Hz	
	Power output (max)	36W	
	Rated output current (max)	3A	
	Output voltage	+12V DC	
Environmental	Operating temperature range	50° to 95° F (10° to 35° 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 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.	
	<b>RF Interference</b>	FCC Class B, CE Mark, VCCI	
WarrantyThree-year limited hardware warranty.NOTE: Certain restrictions apply. Consult the HP Customer Support Center for details.		ire warranty.	
		apply. Consult the HP Customer Support Center for details.	



## 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:			
	<ul> <li>ENERGY STAR<sup>®</sup> 5.0 Cate</li> <li>IT ECO declaration</li> <li>EPEAT Silver where HP r registration status in yo</li> </ul>	egisters commercial de	sktop products. See http://	www.epeat.net for
Additional Compliance	This product is in compliance w	ith:		
	<ul><li>Restrictions of Hazardou</li><li>Waste Electrical and Electrical</li></ul>			
System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the Ultra-slim Desktop model is based on a typically configured product			
Energy Consumption		115 VAC	230 VAC	100 VAC
	Normal operation	5.87 W	6.2 W	5.81 W
	Sleep (ENERGY STAR low power mode)	n/a	n/a	n/a
	Off	0.24 W	0.28 W	0.23 W
	<b>NOTE:</b> This product is in compli <b>NOTE:</b> The actual power consu including but not limited to sof factors.	mption at your location	could vary and is depende lient, attached peripherals	nt on many factors , and environmental
Heat Dissipation	Normal operation	25 BTU/hr	26 BTU/hr	26 BTU/hr
	Sleep	n/a	n/a	n/a
	Off	1 BTU/hr	1 BTU/hr	1 BTU/hr
	<b>NOTE:</b> Heat dissipation is calcu for one hour.	lated based on the mea	sured watts, assuming the	service level is attained
Batteries	The battery(s) in this product c Batteries used in the product d		2006/66/EC	
	<ul> <li>Mercury greater the 5pp</li> <li>Cadmium greater than 1</li> </ul>			
	Battery size: CR2032 (coin cell) Battery type: Li/organic			
Additional Information	<ul> <li>This product is in compliate 2002/95/EC.</li> <li>This HP product is design Directive - 2002/96/EC.</li> <li>This product is in compliate and Toxic Enforcement A</li> <li>This product is in compliate commercial desktop proprosed Plastics parts weighing and this product contains 0%</li> <li>This product is 90% recy</li> </ul>	ned to comply with the v ance with California Pro Act of 1986). ance with the IEEE 1680 ducts. See http://www. over 25 grams used in th 6 post consumer recycle	Waste Electrical and Electrical and Electrical and Electrical and Electrical oposition 65 (State of Califord) (EPEAT) standard at the Sepeat.net for registration some product are marked per ed plastic (by wt.)	onic Equipment (WEEE) ornia; Safe Drinking Water ilver where HP registers status in your country.
		casic when property u		



### Technical Specifications – Environmental Data

#### **Packaging Materials**

- External:
  - Corrugated 921g
- Internal:

Product

- EPE Expanded Polyethylene 30g
  - Polyurethane flexible foam 2.4g
- The Corrugated packaging material is made from 80% recycled content.
- The EPE Expanded Polyethylene material is made from 10% recycled content.

**Recycled material** 

- 91% recycled system materials (by weight including thin client, power supply, keyboard and mouse)
- 94.4% recycled thin client materials (by weight including stand-alone thin client device)
- Packaging • The EPE foam packaging material contains 6.25% (by weight) postconsumer recycled content.
  - The corrugated paper packaging materials contains at least 93.75% (by weight) post-consumer recycled content.
  - The packaging for this product is 26.06% (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.

**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 •
- 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
- ٠ 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) ٠
- 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**



### Technical Specifications – Environmental Data

	<ul> <li>Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)</li> </ul>		
Packaging	HP follows these guidelines to decrease the environmental impact of product packaging:		
	<ul> <li>Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.</li> <li>Eliminate the use of ozone-depleting substances (ODS) in packaging materials.</li> <li>Design packaging materials for ease of disassembly.</li> <li>Maximize the use of post-consumer recycled content materials in packaging materials.</li> <li>Use readily recyclable packaging materials such as paper and corrugated materials.</li> <li>Reduce size and weight of packages to improve transportation fuel efficiency.</li> <li>Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.</li> </ul>		
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: 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 Corporate Environmental Information	For more information about HP's commitment to the environment: Global Citizenship Report www.hp.com/hpinfo/globalcitizenship/gcreport/index.html 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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