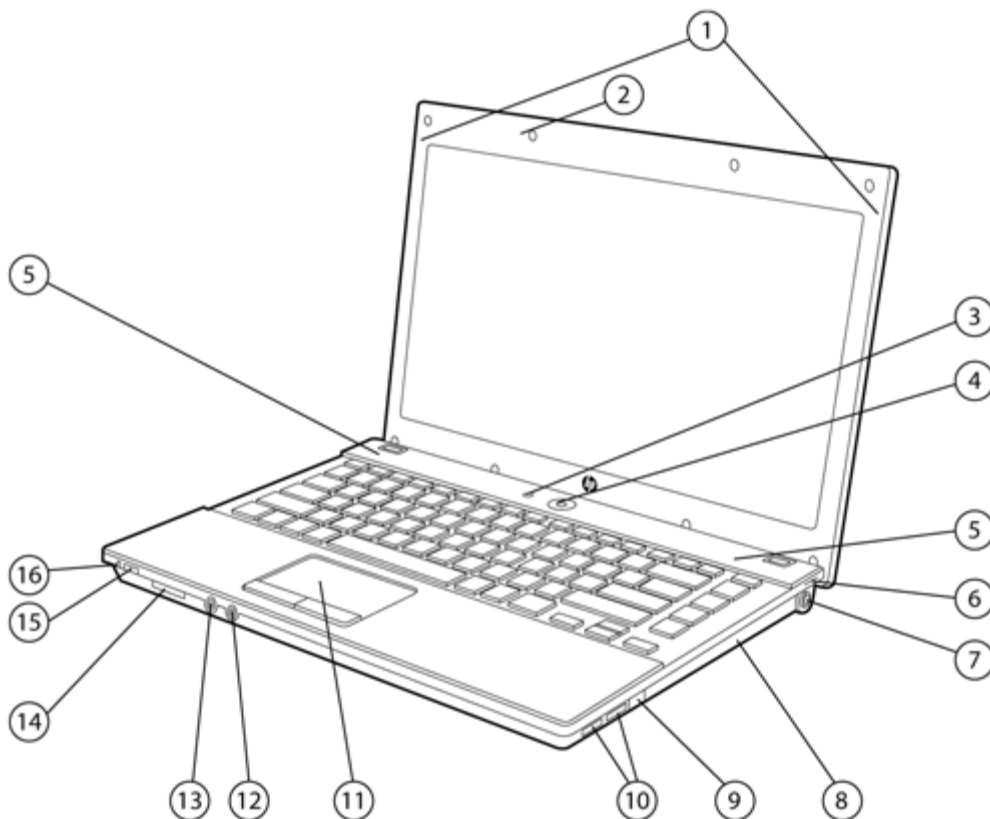


QuickSpecs

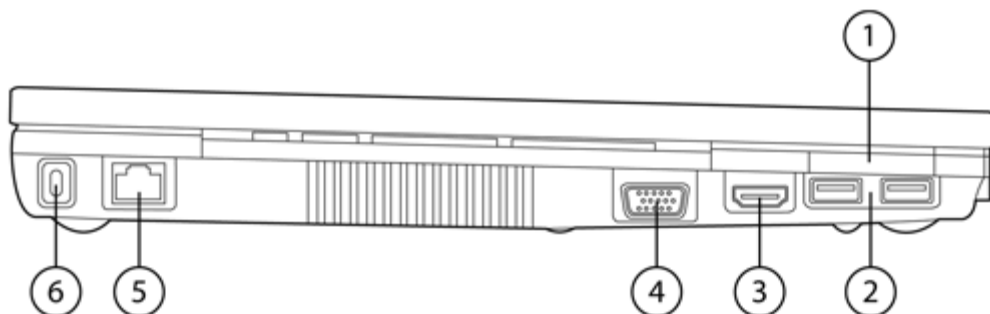
HP 4410t Mobile Thin Client

Overview

HP 4410t Mobile Thin Client



- | | |
|---|--|
| 1. WLAN antennas | 9. RJ-11/modem port |
| 2. Integrated microphone | 10. (2) USB 2.0 ports |
| 3. HP Info Center button with LED indicator | 11. Touchpad with scroll zone |
| 4. Power button with LED indicator | 12. Stereo microphone in |
| 5. Stereo speakers | 13. Stereo headphone/line out |
| 6. Battery charging LED indicator | 14. Media Card Reader |
| 7. Power connector | 15. Wireless switch with LED indicator |
| 8. Optical drive | 16. Internal Storage Activity LED |



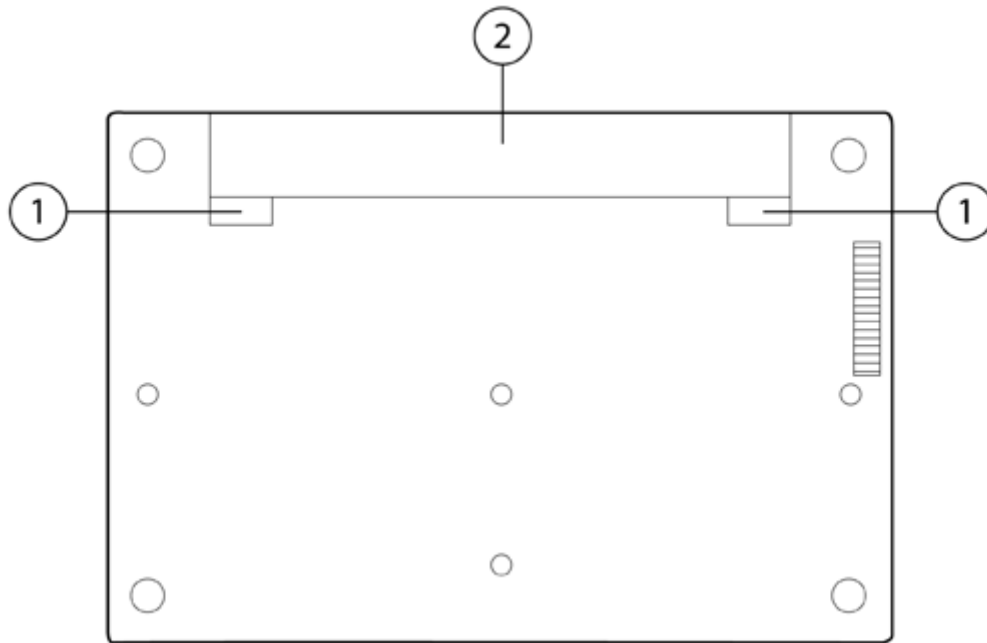
- | | |
|------------------------|---|
| 1. ExpressCard/34 slot | 4. VGA connector (external monitor/projector) |
| 2. (2) USB 2.0 ports | 5. RJ-45/Ethernet port |
| 3. HDMI port | 6. Kensington Lock slot |



QuickSpecs

HP 4410t Mobile Thin Client

Overview



1. Battery release latches

2. Battery bay

At A Glance

- Genuine Windows Embedded Standard featuring File Based Write Filter, Enhanced Write Filter, RDP 6.1, Internet Explorer 7, Windows Media Player 11
- Intel® Celeron® processor
- 1 GB or 2 GB Solid State Module for durability and increased battery life
- Integrated 802.11 a/b/g/n draft 2.0 or b/g wireless connectivity
- Thin, lightweight design starting at 4.3 lb/1.95 kg and 1.23 in/31.3 mm thin at front
- Full-sized spill-resistant keyboard
- Widescreen 14.0-inch diagonal HD LED-backlit display with 16:9 aspect ratio
- Integrated Media Card Reader
- VGA and HDMI ports for dual external-monitor support
- Optional integrated DVD-ROM drive
- Compatible with HP USB 2.0 Docking Station and HP Essential USB Port Replicator



QuickSpecs

HP 4410t Mobile Thin Client

Standard Features

Processors	Intel Celeron Processor 575 (2.00 GHz, 1 MB L2 cache, 667 MHz FSB)* NOTE: Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode. * Intel's numbering is not a measurement of higher performance.	
Operating System	Preinstalled Supported	Genuine Windows Embedded Standard Genuine Windows XP Embedded SP3
Chipset	Mobile Intel GL40 Express Chipset , 667 MHz front side bus	
Graphics	Mobile Intel Graphics Media Accelerator 4500MHD integrated graphics with up to 512 MB of shared video memory Microsoft DirectX 9 capable	
Display	Internal External	14.0-inch diagonal LED-backlit HD anti-glare (1366 x 768 resolution) Up to 32-bit per pixel color depth VGA port supports resolutions up to 1600 x 1200 at 75 Hz, and lower resolutions at up to 100 Hz. HDMI 1.3 port supports direct connection to high-definition displays with up to 1920 x 1080 resolution and 7-channel audio with one convenient cable (not included). NOTE: Resolutions are dependent upon monitor capability, and resolution and color depth settings.
Memory	Standard Maximum Dual-channel	800 MHz DDR2 SDRAM; two slots supporting dual channel memory 1 GB or 2 GB Upgradeable to 3 GB Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots. NOTE: 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.
Communications	Marvell Ethernet (10/100/1000 NIC)* 56K V.92 modem** * The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required. ** Designed for downloads from 56K modem compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions.	



QuickSpecs

HP 4410t Mobile Thin Client

Standard Features

Modem availability is subject to country regulatory approval.

Wireless Devices	Secure, integrated wireless LAN options featuring support for the latest industry standards. Wireless LAN is factory configurable only.	
	All 802.11 integrated wireless LAN options	<p>Wi-Fi certified*</p> <p>Wired Equivalent Privacy (WEP) support up to 128-bit keys</p> <p>Wi-Fi Protected Access (WPA) and WPA2 support</p> <p>802.1x authentication support, including EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, and LEAP</p> <p>Advanced Encryption Standard (AES) support</p> <p>Dual antennas integrated in the display enclosure</p>
	Broadcom 4322AGN 802.11a/b/g/draft-n Wi-Fi Adapter	<p>Integrated support for 802.11a, b, g, and n draft 2.0*</p> <p>Cisco Compatible Extensions support</p> <p>Up to 300 mbps data rate</p>
	Broadcom 4312G 802.11b/g WiFi Adapter	<p>Integrated support for 802.11 b and g</p> <p>Cisco Compatible Extensions support</p> <p>Up to 54 mbps data rate</p>

* The specifications for 802.11n draft 2.0 are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11n WLAN devices.

Keyboard	The HP spill-resistant keyboard is designed using a Mylar film that minimizes the risk of damage to sensitive components underneath. The 101/102-key compatible keyboard features a full-pitch key layout with desktop keyboard features, such as the isolated inverted-T cursor control keys, editing keys, both left and right control and alt keys, and 12 function keys. US and International key layouts are available. Other features include hotkeys for instant access to power conservation and brightness, and 19.05 x 19.05 mm key pitch (center-to-center spacing).
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Pointing device	Touchpad with scroll zone, two pick buttons
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Expansion card slots	ExpressCard/34 slot	Supports ExpressCard/34 (34 mm x 75 mm x 5 mm) card sizes
	Media Card Reader	Supports SD (Secure Digital), MMC (MultiMedia Card), Memory Stick, Memory Stick Pro, Memory Stick Duo*, xD-Picture card

* Memory Stick Duo Adapters are required and sold separately. Inserting a Memory Stick Duo Card directly into your notebook could damage the memory card and/or notebook.

Storage	Internal Storage Device	1 GB or 2 GB Solid State Module
	Optional Fixed Optical Drive	DVD-ROM Drive

Interfaces	External monitor	One (VGA)
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QuickSpecs

HP 4410t Mobile Thin Client

Standard Features

HDMI	One – 1.3 compliant
Stereo microphone in	One
Stereo headphone/line out	One
Power connector	One
RJ-11/modem	One
RJ-45/Ethernet	One
USB 2.0	Four
LED status indicators	Seven

Audio/Visual	High Definition Audio support Integrated stereo speakers Integrated microphone Stereo headphone/line out Stereo microphone in
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Software (Preinstalled)	Enhanced Write Filter File Based Write Filter Internet Explorer 7 Windows Media Player 11 TeamTalk Emulation Symantec Endpoint Security Microsoft Remote Desktop Protocol (RDP) 6.1 Microsoft Firewall Citrix XenApp 11 VMWare View 3.1 WinDVD
Manageability Solution	HP ThinState Tools HP Device Manager HP Client Automation Altiris Deployment Solution (Full License)
HP Virtual Client Essentials	HP Remote Desktop Protocol Enhancements HP Remote Graphics Software (RGS) HP Session Allocation Manager (SAM)
Additional software available from the web	.NET Framework 2.0 Universal Print Driver (UPD) Adobe Acrobat Reader Citrix XenDesktop Broadcom Wireless Utility

Security	Standard Features	Setup Password Power-On Password Kensington Lock Slot
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QuickSpecs

HP 4410t Mobile Thin Client

Standard Features

Power Supply	External 65-watt Smart AC adapter, 6-foot (1.8-meter) power cord included; total length including external AC adapter is 12 feet (3.66 meter) HP Fast Charge*	
	* HP Fast Charge recharges your battery up to 90% within 90 minutes when the system is off.	
Battery	Primary battery	6-cell (47 WHr) Li-Ion battery
Battery Life	Primary battery	Up to TBD hours
	NOTE: Battery life will vary depending on the product configuration, product model, applications loaded on the product, power management settings of the product, and the product features used by the customer. As with all batteries, the maximum capacity of this battery will decrease with time and usage.	
System Standby Time	Up to 1 week	
Power Conservation	Standby ACPI compliance	
Docking	HP USB 2.0 Docking Station	
	Uses a single USB cable to pass through video, audio, LAN, and USB signals. Allows easy connection of a monitor, mouse, external keyboard, printer, LAN cable, speakers and other accessories. Connect up to four concurrently working USB devices.	
	HP Essential USB Port Replicator	
	Uses a single USB cable to pass through audio, LAN, and USB signals. Allows easy connection of a mouse, external keyboard, printer, LAN cable, speakers and other accessories. Connect up to five concurrently working USB devices.	
Service and Support	HP Services includes a one-year standard parts and labor warranty, pick-up or carry-in, and toll-free 7 x 24 hardware technical phone support (depending on model). Warranty upgrades are also available. 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: http://www.hp.com/go/lookuptool . Additional HP Care Pack Services information by product is available at: http://www.hp.com/hps/carepack . NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details. http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp .	



QuickSpecs

HP 4410t Mobile Thin Client

Options

Memory	HP 1 GB (DDR2 800 MHz) SODIMM	KT292AA
	HP 2 GB (DDR2 800 MHz) SODIMM	KT293AA
Expansion	HP USB 2.0 Docking Station	FQ834AA
	HP Essential USB Port Replicator	AQ731AA
	HP Basic Adjustable Stand	AL549AA
Power	HP 65W Smart AC Adapter	ED494AA#xxx
	HP 90W Smart Combo Adapter	AJ652AA#xxx
Carrying Cases	HP Basic Carrying Case	AJ078AA
	HP Basic Backpack	AM863AA
	HP Basic Messenger	AP355AA
	HP Value Nylon Case	RR314AA
	HP Universal Nylon Case	RR315AA
	HP Executive Leather Case	RR316AA
	HP Deluxe Nylon Backpack	RR317AA
	HP Deluxe Roller Case	GD405AA
Security	HP/Kensington MicroSaver Security Lock	PC766A
Input/Output Devices	HP USB/PS2 Optical 2-Button Scroll Mouse	DC369A
	HP USB Optical Travel Mouse	RH304AA
	HP Mobile Audio Speakers	FS944AA



QuickSpecs

HP 4410t Mobile Thin Client

Memory

800 MHz DDR2 SDRAM

Two DIMM slots supporting dual channel memory

DIMM sizes supported: 1 GB and 2 GB

- Standard Memory
- 1 GB (1 GB x 1)
 - 2 GB (2 GB x 1)

Optional Memory Upgrades Support for up to 3 GB of memory with the installation of optional DDR2 SDRAM memory kits. Both memory slots are user accessible. Please refer to the Hardware and Software Guide for installation procedures. Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.

Up to	Slot 1	Slot 2
2 GB	1 GB	1 GB
3 GB	2 GB	1 GB

NOTE: This chart does not represent all possible memory configurations. Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed. With Windows 32-bit operating systems, the amount of usable memory is dependent upon your configuration, so that above 3 GB all memory may not be available due to system resource requirements.

Memory Upgrades	HP 1 GB (DDR2 800 MHz) SODIMM	KT292AA
	HP 2 GB (DDR2 800 MHz) SODIMM	KT293AA



QuickSpecs

HP 4410t Mobile Thin Client

Storage

Removable Media Drive Support

	Quantity Supported	Drive Bay
DVD-ROM Drive	One	Fixed optical drive bay

Internal Storage Device

	Quantity Supported	Drive Bay
1 GB Solid State Module	One	Hard Drive Bay
2 GB Solid State Module	One	Hard Drive Bay



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

System Unit	Dimensions (HxWxD)	1.23 in (at front) x 13.21 in x 9.30 in 31.3 mm (at front) x 335.6 mm x 236.2 mm
	Weight	Starting at 4.3 lb (1.95 kg)
	NOTE: Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components.	
Stand-Alone Power Requirements (AC Power)	Nominal Operating Voltage	18.5 V
	Average Operating Power	18.5 W
	Max Operating Power	< 65W
Temperature	Operating	32° to 95° F (0° to 35° C) (not writing optical) 41° to 95° F (5° to 35° C) (writing optical)
	Non-operating	-4° to 140° F (-20° to 60° C)
Cooling	Active	
Relative Humidity	Operating	10% to 90%, non-condensing
	Non-operating	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
Shock	Operating	125 G, 2 ms, half-sine
	Non-operating	200 G, 2 ms, half-sine
Random Vibration	Operating	0.75 grms
	Non-operating	1.50 grms
Altitude (unpressurized)	Operating	-50 to 10,000 ft (-15.24 to 3,048 m)
	Non-operating	-50 to 40,000 ft (-15.24 to 12,192 m)
Industry Standard Certifications	UL	Yes
	CSA	Yes
	FCC Compliance	Yes
	ICES	Yes
	Australia / NZ A-Tick Compliance	Yes
	CCC	Yes
	Japan VCCI Compliance	Yes
	MIC	Yes
	BSMI	Yes
	CE Marking Compliance	Yes
	BNCI or BELUS	Yes
	CIT	Yes
	GOST	Yes
	Saudi Arabian Compliance (ICCP)	Yes
	SABS	Yes



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

UKRSERTCOMPUTER Yes

For accessibility information on HP products, please visit: <http://www.hp.com/accessibility>.

HP 65W Smart AC Adapter	Dimensions	4.17 x 1.85 x 1.1 in (10.6 x 4.7 x 2.8 cm)		
	Weight	0.62 lb (280 g)		
	Input	100 to 240 VAC		
		Input Efficiency	83% min at 115 VAC	
		Input frequency range	47 to 63 Hz	
	Output	Input AC current	1.7 A at 90 VAC, 0.85 A at 180 VAC	
		Output power 65W	65W	
		DC output	18.5V	
		Hold-up time	5 msec at 115 VAC input	
		Output current limit	<11A, Over voltage protection- 29V max automatic shutdown	
	Connector	3 pin/grounded, mates with interchangeable cords		
	Environmental Design	Operating temperature	32° to 104° F (0° to 40° C)	
		Non-operating (storage) temperature	-4° to 149° F (-20° to 65° C)	
		Altitude	0 to 10,000 ft (0 to 3,048 m)	
Humidity		20% to 80%		
EMI and Safety Certifications	Storage Humidity	10% to 90%		
	CE Mark – full compliance with LVD and EMC directives; Worldwide safety standards – IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals – C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE; MTBF – over 200,000 hours at 25°C ambient condition.			

6-Cell (47 WHr) Lithium-Ion battery	Dimensions (H x W x L)	0.8 x 2.3 x 8.0 in (2.0 x 5.8 x 20.3 cm)		
	Weight	0.710 lb (0.322 kg)		
	Cells/Type	6-cell Lithium-Ion		
	Energy	Watt-hour Capacity	47 WHr	
	Temperature	Operating (Charging)	32° to 113° F (0° to 45° C)	
		Operating (Discharging)	14° to 140° F (-10° to 60° C)	
		Non-operating	-4° to 140° F (-20° to 60° C)	
	Battery Re-Charge Time	System in OFF mode or Standby	2.5 hours	
		System ON	3 to 5 hours (depending on system power consumption)	
		HP Fast Charge Technology	Charges the battery up to 90% within 90 minutes when system is OFF	



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

Displays

14.0-inch LED-backlit HD (1366 x 768) anti-glare	Active Area (W x H)	12.16 x 6.85 in (30.9 x 17.4 cm)	
	Diagonal Size	14.0 in (35.6 cm)	
	Surface Treatment	Anti-glare	
	Contrast Ratio	300:1 (typical)	
	Refresh Rate	60 Hz	
	Brightness	200 nit (typical)	
	Pixel Resolution	Pitch	0.226 mm
		Format	1366 x 768
		Configuration	RGB Stripe
	Backlight	LED	
	PPI	112 ppi	
	Viewing Angle	±30° Horizontal, ±10° Vertical (minimum) 30/30/20/10 (Left/Right/Down/Up) (minimum) or 45/45/35/25 (Left/Right/Down/Up) (typical)	

Internal Storage Devices

1 GB Solid State Module (SSM)	Interface	SATA II, 3.0 Gbps
	Connector	7-pin SATA male connector 15-pin SATA power connector
	Capacities	1 GB
	Transfer mode	up to PIO mode-4, Multiword DMA mode-2, UDMA mode-5
	Sustained Read	up to 45 MB/sec
	Sustained Write	up to 20 MB/sec
	ECC Support	up to 8 bits correction per 512 bytes (BCH)
	Low Power Consumption (5.0V)	Active mode: 260 mA Idle mode: 120 mA
	Product types	Serial ATA 2.5
	Orientation	180D

2 GB Solid State Module (SSM)	Interface	SATA II, 3.0 Gbps
	Connector	7-pin SATA male connector 15-pin SATA power connector
	Capacities	2 GB
	Transfer mode	up to PIO mode-4, Multiword DMA mode-2, UDMA mode-5
	Sustained Read	up to 54 MB/sec
	Sustained Write	up to 33 MB/sec



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

ECC Support	up to 8 bits correction per 512 bytes (BCH)
Low Power Consumption (5.0V)	Active mode: 260 mA Idle mode: 120 mA
Product types	Serial ATA 2.5
Orientation	180D

Removable Storage Drives

DVD-ROM Drive	Access Times	Random	< 110 ms CD (typical) < 110 ms DVD (typical)
	Max Data Transfer Rate	24X CD-ROM 8X-DVD	Up to 3,600 KB/s Up to 10,800 KB/s
	Transfer Mode	UDMA Mode 5	
	Interface	Gen 1 SATA	
	Supported Media (read)	CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM	
	Supported Media (write)	None	
	Max Media Capacity (read)	8.5 GB	
	Transport	Tray Loading	

Audio

Hardware	Implementation	ADI 1984AJCPZ High Definition CODEC
	Full Duplex	Yes
	Microphone In	Stereo
	Headphone/Line Out	Stereo
	Integrated Microphone	Yes

Audio Output Quality	Frequency Response	20 Hz – 20 kHz
	Signal to Noise Ratio	>85 dB
	Total Harmonic Distortion	0.01%
	Noise Floor	-110 dB
	Play/Record Sampling Rate(s)	8 kHz – 48kHz



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

DAC	16, 20 or 24-bit
ADC	16 or 20-bit

Integrated Stereo Speakers	Power Rating	1.5 Watts
	Impedance	4 Ohms

Communications

Integrated Marvell 10/100/1000 NIC	Ethernet Features	10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) 1000 Mbit/s operation (1000BASE-T; IEEE 802.3z and 802.3ab; IEEE 802.3 clauses 34-42) Auto-Negotiation (Automatic Speed Selection) Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s IEEE 802.1p QoS (Quality of Service) Support IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)
	Power Management	ACPI compliant – multiple power modes Situation-sensitive features reduce power consumption
	Performance Features	TCP/IP/UDP Checksum Offload (configurable)
	Manageability	Wake-on-LAN from standby (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only) PXE 2.1 Remote Boot Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite
	Interface	PCI Express x1
	NIC Device Driver Name	Marvell Yukon 88E8072 PCI-E Gigabit Ethernet Controller

V.92 56K Data/Fax Modem	Form Factor	MDC 1.5 Daughtercard
	Power Management Support	APM Revision 1.2, ACPI
	Approvals/Certifications	UL, CSA, NEMKO, CCIB, Industry Canada, FCC Part 68, CTR21, FCC Part 15 Class B, Canadian ICES-003 Class B, C.I.S.P.R.22, Australian ACA, CE Mark, Other Countries
	Data Mode Capabilities	V.92 data V.8bis V.80 V44, V.42bis, MNP5 (Compression)



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

V.42 (LAPM, MNP2-4) (Error Correction)

Optional symbol rates:

2800, 3429

Asymmetric Symbol rates

Synchronous primary channel data signaling rates:

3600, 31200

Automatic rate re-negotiation

V.34

V.32bis

V.32

V.23

V.22bis

V.22

V.21

Bell 212A

Bell 103J

Fax Mode
Capabilities

TIA/EIA-578-B (Class 1)

T.30, T.4 (Group 3)

V.17

V.29

V.27ter

V.21 Channel 2

Command Set

V.250 (Partial)

TIA-602

Identification: +GMI, +GMM, +GMR

Port control: +IPR, +ICF, +IFC, +ILRR

Modulation: +MS, +MR, +MA

Error control: +ES, +ER, +EB, +ESR, +ETBM

Data compression: +DS, +DR

V.251

Broadcom 4312G
802.11b/g WiFi
Adapter

Wireless LAN

IEEE 802.11b

Standards

IEEE 802.11g

Interoperability

Wi-Fi certified

Cisco Compatible Extensions Program compliant with Microsoft

Windows XP (details at: <http://www.hp.com/go/notebooks/WLAN>)

Frequency Band

2.4 GHz

Data Rates

802.11b: 1, 2, 5.5, 11 Mbps

802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps

Modulation

Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK, OFDM

Security¹

Supports 64- and 128-bit WEP, WPA, WPA2, hardware-accelerated AES, 802.1x authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, EAP-FAST.

Support for Cisco Security Features (proven compatibility with Cisco)



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

	Aironet infrastructure products through the Cisco Compatible Extensions Program Version 4) with Microsoft Windows XP.	
Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.	
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK	
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)	
Roaming	IEEE 802.11 compliant roaming between access points	
Output Power (for CCK) ²	17 dBm , nominal	
Output Power (for OFDM; power varies by data rate) ²	15 dBm , nominal	
Power Consumption	Idle associated: 250 mW Idle unassociated: 150 mW Transmit: 2.0 W (max) Receive: 2.0 W (max)	
Power Management	ACPI compliant power management 802.11 compliant power saving mode	
Receiver Sensitivity ³	54 Mbps: -71 dBm, 11 Mbps: -85 dBm , 1 Mbps: -95 dBm	
Antenna type	High efficiency dual band antenna with spatial diversity, mounted in the display enclosure	
Form Factor	PCI-Express Half-MiniCard	
Weight	0.013 lb (6 g)	
Dimensions	0.19 x 1.06 x 1.18 in (4.75 x 26.8 x 30 mm)	
Operating Voltage	3.3v +/- 10%	
Temperature	Operating	14° to 149° F (-10° to 65° C)
	Non-operating	-40° to 176° F (-40° to 80° C)
Humidity	Operating	10% to 90% (non-condensing)
	Non-operating	5% to 95% (non-condensing)
Altitude	Operating	0 to 10,000 ft (3,048 m)
	Non-operating	0 to 50,000 ft (15,240 m)
LED Activity	LED Off – Radio OFF; Solid LED On – Radio ON	

1. Check latest software/driver release for updates on supported security features.
2. Maximum output power may vary by country according to local regulations.
3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CCK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).
4. WLAN supplier's client utility is required for Cisco Compatible Extensions support with Microsoft Windows XP. WLAN may also be compatible with certain third-party software supplicants.



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

Broadcom 4322AGN Wireless LAN 802.11a/b/g/draft- n WiFi Adapter	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n (draft 2.0)* * The specifications for 802.11n draft 2.0 are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11n WLAN devices.
Interoperability	Wi-Fi certified (802.11abg only) Cisco Compatible Extensions Program compliant (802.11abg only) with Microsoft Windows XP (details at: http://www.hp.com/go/notebooks/WLAN)
Frequency Band	2.4 GHz and 5 GHz
Data Rates	802.11b: 1, 2, 5.5, 11 Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n (draft): 6, 6.5, 9, 12, 13, 13.5, 18, 19.5, 24, 26, 27, 36, 39, 40.5, 48, 52, 54, 58.5, 65, 78, 81, 104, 108, 117, 121.5, 130, 135, 162, 216, 243, 270, 300 Mbps
Frequency Support	20 MHz: 2.4 GHz and 5 GHz bands 40 MHz: 2.4 GHz and 5 GHz bands
Modulation	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM
Security ¹	Supports 64- and 128-bit WEP, WPA, WPA2, hardware-accelerated AES, 802.1x authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, EAP-FAST. Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program Version 4) with Microsoft Windows XP.
Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
Roaming	IEEE 802.11 compliant roaming between access points
Output Power (for CCK) ²	17 dBm
Output Power (for OFDM; power varies by data rate) ²	15 dBm
Power Consumption	Idle associated: 250 mW Idle unassociated: 150 mW Transmit/Receive 20 MHz channel: 2.0 W (max)



QuickSpecs

HP 4410t Mobile Thin Client

Technical Specifications

	Transmit/Receive 40 MHz channel: 2.0 W (max)	
Power Management	ACPI compliant power management 802.11 compliant power saving mode	
Receiver Sensitivity ³	270 Mbps: -61dBm, , 54 Mbps: -72 dBm, 11 Mbps: -85 dBm , 1 Mbps: -92 dBm	
Antenna type	High efficiency dual band antenna with spatial diversity, mounted in the display enclosure	
Form Factor	PCI-Express Half-MiniCard	
Weight	0.013 lb (6 g)	
Dimensions	0.19 x 1.06 x 1.18 in (4.75 x 26.8 x 30 mm)	
Operating Voltage	3.3v +/- 10%	
Temperature	Operating	14° to 149° F (-10° to 65° C)
	Non-operating	-40° to 176° F (-40° to 80° C)
Humidity	Operating	10% to 90% (non-condensing)
	Non-operating	5% to 95% (non-condensing)
Altitude	Operating	0 to 10,000 ft (3,048 m)
	Non-operating	0 to 50,000 ft (15,240 m)
LED Activity	LED Off – Radio OFF; Solid LED On – Radio ON	
	<ol style="list-style-type: none"> 1. Check latest software/driver release for updates on supported security features. 2. Maximum output power may vary by country according to local regulations. 3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CCK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation). 4. WLAN supplier's client utility is required for Cisco Compatible Extensions support with Microsoft Windows XP. WLAN may also be compatible with certain third-party software supplicants. 	

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