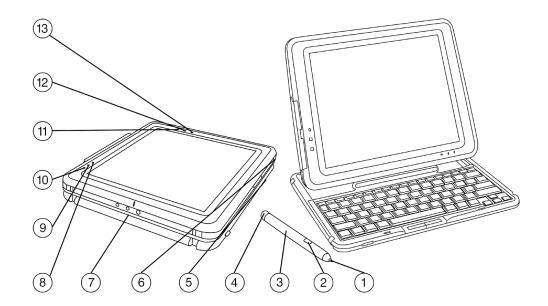
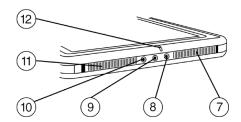
Overview



- 1. Pen Tip
- 2. Pen Button
- 3. Pen Barrel
- 4. Pen Tether Eyelet
- 5. Battery Bay
- Power Switch
- 7. Mobile Keyboard (attached)

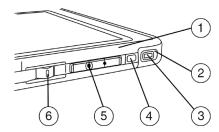
- 8. AC Adapter Light
- 9. Battery Light
- 10. Wireless LAN/Bluetooth™ Activity Light
- 11. Tablet PC Input Panel Launch
- 12. Journal Launch Button
- 13. Rotate Button

Front View



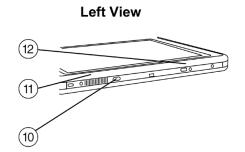
- 1. Integrated Antenna
- 2. Power Switch
- 3. Power/Standby Light
- 4. Display Toggle (F4) Button
- 5. Windows Security Button (CTRL+ALT+DEL)
- 6. Jog Dial

Right View

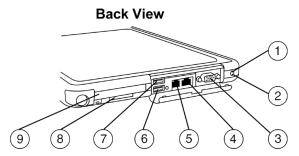


- 7. Speaker (1 of 2)
- 8. Microphone Jack
- 9. Headset Jack
- 10. Audio-out Jack
- 11. Speaker (1 of 2)
- 12. Microphone

Overview



- 1. AC Power Connector
- 2. Integrated IR
- 3. External Monitor Connector
- 4. RJ-45 Network Jack
- 5. RJ-11 Telephone Jack
- 6. External Multibay Connector (USB 2.0)



- 7. USB 2.0 Connector
- 8. Secure Digital (SD) Slot
- 9. PC Card Slot
- 10. Keyboard Connector
- 11. Antenna (not visible from outside of tablet PC)
- 12. Integrated Bluetooth

At A Glance

- Award-winning design
- Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2
- Intel® Pentium® M and Celeron® M Ultra Low Voltage processors
- Intel 855PM Chipset with rich graphics from NVIDIA GeForce 4 Go 420 32MB (4X AGP)
- Durable magnesium casing
- Weighs 3.1 lb(1.4 kg) with keyboard 4.0 lb(1.8 kg)
- Approximately 0.8 in(2.0 cm) thin
- 10.4-inch XGA TFT display with sparkle-free glass
- Starting with 256 MB or 512 MB of SDRAM upgradeable to 2 GB
- Storage available ranging from 30 GB to 80 GB
- Integrated mini PCI 56K modem plus 10/100 NIC
- Type III Mini PCI integrated WLAN 802.11b, 802.11b/g and 802.11a/b/g WLAN options
- Integrated Bluetooth[™] on select models
- Dedicated Secure Digital (SD) slot for removable media
- Integrated If
- Battery-free, pressure sensitive pen for the ultimate writing experience (application must support pressure sensitivity)
- Additional HP Security Lock Slot

What's Special

- Flexible design with great performance!
- Ultra-light weight and portable
- Warm swap battery support
- Innovative keyboard attachment
- Docking with or without keyboard
- Easy transitions with multi-monitor docking profiles
- Magnesium alloy case and high quality digital pen with tether



Standard Features

Processor and Chipset

Intel Pentium M 733* (Ultra Low Voltage 1.1-GHz processor, 2-MB cache and 400-MHz Front Side Bus) Intel Pentium M 713* (Ultra Low Voltage 1.1-GHz processor, 1-MB cache, 400-MHz Front Side Bus) Intel Pentium M Ultra Low Voltage 1.0-GHz processor with 1-MB cache and 400-MHz Front Side Bus Intel Celeron M 353* (Ultra Low Voltage 900-MHz speed, 512-KB cache, 400-MHz front side bus)

Mobile Intel Celeron M Ultra Low Voltage 800-MHz processor with 512-KB cache and 400-MHz Front Side Bus

Intel 855PM chipset

NOTE: Not available in all regions.

*NOTE: Intel's numbering is not a measurement of higher performance.

Operating System	Pre-installed	Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2		
Display	Internal	10.4-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal) NOTE: All products have at least 100 degree wide viewing angle. SKUs available with 160 or 100-degree viewing angle.		
	External	Up to 32-bit per pixel color depth Supports 640 x 480, 800 x 600, 1024×768 , 1280×768 , 1280×1024 , or 1600×1200 resolutions up to 100 -Hz refresh rate, dependent upon monitor capability, and resolution and color depth settings		
Memory	Standard 512-MB (33:	3-MHz) SDRAM on select models with Pentium M processor		
	Standard 256-MB (266-MHz) SDRAM on select models with Celeron M processor			
	Maximum 2-GB (333-MHz) SDRAM			
	NOTE: Memory is upgradeable to 2 GB with 1 GB (333-MHz) DRAM in each memory slot. One memory slot is available for user configuration. The other slot is factory configured or can be upgraded through an HP authorized service provider.			
		on-industry standard nature of some third-party memory modules, we strongly recommend using only modules to ensure compatibility.		
Graphics	NVIDIA GeForce 4 Go	o 420 with 32MB (4X APG)		
Audio	16-bit stereo sound			
	2 stereo speakers Headphone out, micro	ophone jack, and headset jack		
Communications	Type III Mini PCI integrated WLAN			
	Internal MDC 56K high speed modem			
	Internal 10/100 NIC			
	Integrated Bluetooth (on select models)			
	NOTE: Designed only to allow faster downloads from high speed compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions.			
	NOTE: Communicati	ion availability is subject to country regulatory approval.		

Command Controls Buttons

The tablet PC comes with Command Control Buttons designed to increase customer productivity by providing one-touch access to rotate screen, favorite Internet destinations, files, or applications.

- 3 programmable pen activated buttons (on top front panel)
- 3 programmable side buttons (Qmenu, Esc, and Tab commands)
- 2 additional specific function buttons (Windows security (Ctrl+Alt+Del) and Display toggle)



Standard Features

Keyboard 95% of full-sized 101-key compatible keyboard with isolated, inverted-T cursor control keys, and right-control key

NOTE: A USB Keyboard is required to unbundle software and edit BIOS settings and may be required to install software.

Pointing Device Battery-free digital pen with tether (one-year warranty)

Detachable keyboard with pointstick

NOTE: Handwriting recognition software is available in Microsoft Windows XP Tablet PC Edition.

PC Card Slots One Type II PC Card Slot that supports both 32-bit CardBus and 16-bit PCMCIA Cards

Removable Media One Secured Digital (SD) slot

Storage Internal Hard Drive 30-GB, 40-GB (4200 rpm) or 40-GB, 60-GB, 80-GB (5400 rpm) SMART Hard Drives

NOTE: External MultiBay or Tablet PC Docking Station required for MultiBay drives.

Multimedia Integrated 16-bit Sound Blaster Pro-compatible stereo audio

2 Integrated stereo speakers and microphone

Stereo Headphone-out

Mono Headphone-out/Microphone in

Software MPEG1 support

DVD movie playback software available with

DVD-ROM Drive with DVD movie playback

DVD/CD-RW Combo Drive

DVD+RW Drive

NOTE: Voice recognition software available in Microsoft Windows XP Tablet PC Edition. An external boom microphone is recommended for voice recognition.

Interfaces PC Card Slot 1, Type II

Secured Digital (SD) Slot 1 removable media (not SDIO)

External Monitor/Projector 1 Analog VGA

Stereo Headphone 1, 3.5 mm stereo headphone jack

Mono Headphone/

Microphone

1, 2.5 mm headset jack

Stereo Microphone in 1, 3.5 mm microphone jack

Modem 1 RJ-11 NIC 1 RJ-45

USB 2.0 Port 2, 1 with support for External MultiBay

LED Status Indicators 3 (Power connection, battery charge, and wireless active)

AC Power 1 Fast Infra-red (VFIR) 1



Standard Features

Security Setup Password with pen support

Power-On Password with pen support

DriveLock – requires password to access hard drive

Enabled by PC Card options

BIOS WLAN lock – prevents the replacement with unauthorized WLAN cards

2 HP Security locks – physically secure unit while in tablet, docking, or notebook modes

Software Pre-installed Software HP Mobile Printing for Notebooks

HP Help and Support (XP Only) Safety and Comfort Guide Adobe Acrobat® Reader v. 5.10 Microsoft Reader v. 2.5

Zinio Reader v.1.4 Sun Java 1.4

Windows Media Player 9 for XP

HP Tablet PC Tour

Intervideo WinDVD Playback Software v. 4 (Pre-loaded)

Recommended Availability of recommended software applications or services may vary by region and may

software/services require additional purchase and/or subscription
FranklinCovey PlanPlus (30 day trial period)

MindJet MindManager 2002 for Tablet PC (21 day trial period)

Alias SketchBook Pro (15 day trial period)

Zinio (see Digital Magazine icon on Tablet PC desktop for more information)
ScanSoft Omniform Filler 5.1 and Dragon Naturally Speaking Standard Edition 7.1

(available as a special configuration)

Additional software HP Client Manager Software

available through the web HP ProtectTools Smart Card Security Manager

QuickLook for the HP Tablet PC TC1100 series

*NOTE: Software is loaded on the hard drive and must be installed by running the Software Setup utility.

System Recovery Each unit is shipped with a recovery CD kit containing Operating System Recovery and Driver/Application Recovery CDs.

These CDs allow users to either recover or repair the tablet's operating system and select drivers without losing personal data. The Operating System CD also provides the option of reinstalling the operating system software provided with the

tablet.

Power Supply 65W External AC Adapter

Battery 40W/Hr internal main rechargeable Lithium-Ion battery (one-year warranty). The HP Compaq Tablet PC TC1100 6-cell primary Lithium-Ion battery provides up to 4.5 hours of battery life.

primary Lithium-Ion battery provides up to 4.5 hours of battery life.

NOTE: Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a HP

Compaq TC1100 with an Intel Pentium M processor 733 1.1 GHz CPU, Windows XP Tablet Edition, 10.4-inch XGA LCD, 512-MB RAM, 40-GB HDD, 6-cell Lithium-Ion battery, and NIC/modem, achieved an overall Business Winstone® 2002 BatteryMark score of 4h 38m Business Winstone 2002 BatteryMark Version 1.0 units. Winstone® is a registered trademark and BatteryMark™ is a trademark of Ziff Davis Publishing Holdings Inc. in the U.S. and other countries. Copyright 2002 Ziff Davis Media Inc. All Rights Reserved. System parameters followed test recommendations: panel brightness 50%, power management scheme - Laptop/Portable, hard drive, standby and video timers set to never, not external devices connected and all wireless turned off.

Bridge battery - Allows user to swap main battery with the system in standby mode.

Battery Re-Charge Time System in OFF mode or Standby 3 hours

System ON (depending on system power consumption) 3-5 hours

Standard Features

Power Conservation

Instant-on via Standby Hibernation

ACPI compliant

MultiBay Devices

or Docking Station)

Under Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2, MultiBay devices may be hot swapped. (with optional External MultiBay Writeable drives should only be swapped with power off. The Common MultiBay devices are compatible across TC1000 and TC1100 tablets, and multiple business notebook platforms enabling a lower total cost of ownership.

Wireless Devices

The HP tablet TC1100 supports a range of secure, integrated wireless LAN options featuring support for the latest industry standards. Integrated Bluetooth is also an option and can be combined with any one of the supported wireless LAN options.

All integrated wireless

LAN options

Wi-Fi certified

Cisco Compatible Extensions support

Wired Equivalent Privacy (WEP) support up to 128bit keys

Wi-Fi Protected Access (WPA) support

Integrated support for 802.11a, b and a

802.1x standards support including EAP-TLS, Protected

EAP (PEAP) and Cisco-EAP (LEAP)

Dual antennas integrated in the display enclosure

HP W500 802.11a/b/g

Up to 54mbps throughput performance Advanced Encryption Standard (AES) support

Intel PRO/Wireless 2100 802,11b wireless LAN

Intel® Centrino™ mobile technology Integrated support for 802.11b

Up to 11mbps throughput performance

Intel PRO/Wireless 2200BG 802.11 b/g

wireless LAN

Intel® Centrino™ mobile technology Integrated support for 802.11b/g Up to 54mbps throughput performance

Intel PRO/Wireless 2915ABG 802.11 a/b/g wireless LAN

Intel® Centrino™ mobile technology Integrated support for 802.11a/b/g Up to 54mbps throughput performance

Docking

The HP Tablet PC Docking Station provides simple and convenient port management MultiBay drives. Features include NIC pass through, four USB 2.0 including 1 Powered External USB MultiBay connector, VGA, line in/line out, and MultiBay slot. The docking solutions are compatible across TC1000 and TC1100 tablets enabling a lower total cost of ownership.

Service and Support

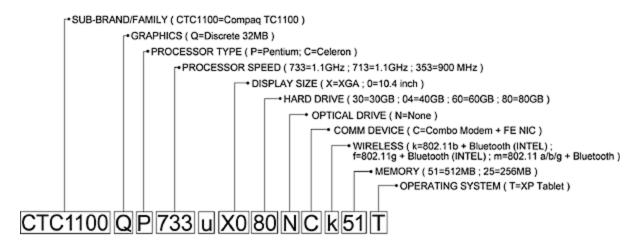
HP Services includes a One-Year or Three-year, Worldwide Limited Warranty, pick-up or carry-in (in select countries) and toll-free 7 x 24 hardware technical phone support.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.



Standard Features

The Etymology of a Model name:



Models

Commercial - Regional Value SKU for Americas, EMEA, APD

CPU Intel Celeron M Ultra Low Voltage 800 MHz with 400-MHz Front Side Bus and 512-KB

cache

Operating SystemMicrosoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2Display10.4-inch color TFT XGA with 1024 x 768 resolution (100 degree viewing angle)MemoryStandard256-MB 266-MHz DDR SDRAM with one open slot

Maximum 1-GB 333-MHz DDR SDRAM in each slot

(2 GB maximum)

Hard Drive 30 GB

Discrete Video Memory NVIDIA – GeForce 4 Go 420 32MB (4X AGP)

Communications Internal MDC 56K high speed modem, NIC 10/100, Intel Pro/Wireless WLAN 802.11b,

Bluetooth

Input Device Tablet PC Pen with tether, HP Tablet PC Keyboard with Pointstick

Battery 6-cell Lithium-Ion

Commercial - "Centrino" Semi-Global SKU for Americas, EMEA, APD CPU Intel Pentium M Ultra-Low Voltage 1.0 GB with 400-MHz Front Side Bus and 1-MB cache

Centrino'

Operating SystemMicrosoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2Display10.4-inch color TFT XGA with 1024 x 768 resolution (160 degree viewing angle)MemoryStandard512-MB 333-MHz DDR SDRAM with one open slot

Maximum 1-GB 333-MHz DDR SDRAM in each slot

(2 GB maximum)

Hard Drive 40 GB

Discrete Video Memory NVIDIA – GeForce 4 Go 420 32MB (4X AGP)

Communications Internal MDC 56K high speed modem, NIC 10/100, Intel Pro/Wireless WLAN 802.11b,

Bluetooth

Input Device Tablet PC Pen with tether, HP Tablet PC Keyboard with Pointstick

Battery 6-cell Lithium-Ion

DC389B

QuickSpecs

256-MB 333-MHz RAM Memory Upgrade

Options

Memory

Memory	230-IMB 333-IMB IZ KAIM Memory Opgrade	DC309B
	512-MB 333-MHz RAM Memory Upgrade	PA525A
	1-GB 333-MHz RAM Memory Upgrade	DC890B
	NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly HP branded memory modules to ensure compatibility.	recommend using only
MultiBay Devices	DVD+RW/CD-RW Drive	DG189A (worldwide orders through 11/04) DG189B(worldwide orders beginning 12/04)
	24X Combo DVD/CD-RW Drive	DC364A (worldwide orders through 11/04) DC364B (worldwide orders starting 12/04)
	8X DVD Drive	DC352A
	24X Max CD-ROM Drive	DC351A
	MultiBay Diskette Drive	DC362A
	NOTE: MultiBay devices may only be used in External MultiBay or Docking Station MultiBay.	
MultiBay Storage	60-GB MultiBay Hard Drive (5400 rpm)	DC894A
	80-GB MultiBay Hard Drive (5400 rpm)	DC920A
	NOTE: MultiBay hard drive options may only be used in External MultiBay or Docking Station Mu	ltiBay.
Other Storage Devices	USB Diskette	DC361B
	Digital Drive with 128-MB SD card	DL702A
	External 40-GB USB hard drive	DQ549A
Expansion Bases	Tablet PC Docking Station	DC911A#xxx
	External MultiBay	DC373B
Power	Tablet PC Lithium-lon battery pack (internal)	DC907A
Common Power Solutions	Battery Charger	DF933A#XXX
	65W AC Adapter	DC359A#XXX
	90W Auto Adapter	DC303B
	90W Aircraft Cables	DC899A



Options

Input Devices	Tablet PC Mobile Keyboard	PC875A#XXX
	Tablet PC Pen with tether	DG937A
	Tablet PC Pen with eraser	DM685A
	USB/PS2 External Keyboard	DC852A#XXX
	USB/PS2 2-Button Mouse	DC369A
	HP Travel Mouse	F2100A
	External 10-Key Numeric Keypad (carbon)	DC854A
Security	Security Cable Lock	PC766A
	Smart card reader	DC350B
	Smart card bulk pack	DR032A
Useful Accessories	4-port USB 2.0 Hub	DG954A
Cases	HP Entry Value	DC914A
	Executive Leather	PA847A
	HP Sport Backpack	DG102A
	Tablet Portable Grip	DK504A
	Tablet Rugged Case	DK503A
	Customize a luxury case for your Tablet PC. Choose from thousands of unique possibilities. Order online at www.casesonline.com .	



Memory

HP Compaq Tablet PC TC1100

Standard memory plus optional memory for the Celeron model. Not all configurations shown.

Memory		Factory or HP authorized service provider configured	User configurable
Standard	256 MB	256 MB (266 MHz)	Empty
Optional	512 MB	256 MB (266 MHz)	256 MB (333 MHz) ¹
Optional	768 MB	256 MB (266 MHz)	512 MB (333 MHz) ²
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)

Standard memory plus optional memory for the Pentium-M model. Not all configurations shown.

Memory		Factory or HP authorized service provider configured	User configurable
Standard	512 MB	512 MB (333 MHz)	Empty
Optional	768 MB	512 MB (333 MHz)	256 MB (333 MHz)
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)

¹ Memory will run at 266 MHz.

² Memory will run at 266 MHz.

Technical Specifications

System Unit	$\textbf{Dimensions} \; (H \; x \; W \; x \; D)$	10.4-inch TFT panel display	$10.8 \times 8.5 \times 0.8$ in (27.4 x 21.6 x 2.0 cm)	
	Weight	Approximate	3.1 lb (1.4 kg) Tablet PC only	
			4 lb (1.8 kg) Tablet PC with keyboard	
	Stand-Alone Power	Nominal Operating Voltage	14.8 VDC	
	Requirements	Peak Operating Power	40 W	
	Temperature	Operating	50° to 95° F (10° to 35° C)	
		Non-operating	-4° to 140° F (-20° to 60° C)	
	Relative Humidity	Operating	10% to 90% relative humidity, non-condensing	
		Non-operating	5% to 90% relative humidity, 101.6° F (38.7° C) maximum wet bulb temperature	
	Shock	Operating	10 G, 11 ms, half-sine	
		Non-operating	60 G, 11 ms, half-sine	
	Vibration	Operating	0.5 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate	
		Non-operating	1.0 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate	
	Maximum Altitude	Operating	0 to 10,000 ft (3,048 m), (14.7 to 10.1 psia)	
	(unpressurized)	Non-operating	0 to 30,000 ft (9,144 m), (14.7 to 4.4 psia)	
10.4-Inch Color TFT XGA	Dimensions (H \times W)	9.29 x 6.82 in (23.6 x 17.3 cm)	
Display	Diagonal Size	10.4 in (26.41 cm)		
	Mounting	Internal Panel Supports, Flange Mounted		
	Number of Colors	Up to 16.8M		
	Contrast Ratio	150:1		
	Brightness	140 nits typical		
	Pixel Resolution	Pitch	0.264 x 0.264 mm	
		Format	1024 x 768	
		Configuration	RGB stripe	
	Backlight	Edge Lit		
	Character Display	80 x 25		
	Wide Viewing Angle	100-degree wide viewing angle configuration	e or 160-degree ultra wide viewing angle, depending on	
Memory (optional)	Slot 1	256-MB 266-MHz DDR	Standard with Celeron SKUs (may also use 333 MHz)	
	(Factory and HP authorized service provider configurable	256-MB 333-MHz DDR		
	only)	512-MB 333-MHz DDR	Standard with Pentium SKUs	
		1-GB 333-MHz DDR		
	Slot 2 (available)	256-MB 333-MHz DDR		
		512-MB 333-MHz DDR		
		1-GB 333-MHz DDR		
External AC Adapter	Weight	0.62 lb (0.28 kg)		
	Power Supply (Input)	Operating Voltage	90 to 260 VAC RMS	
		Operating Current	1.7 A RMS	

Technical Specifications

Internal Lithium-Ion	Weight	0.65 lb (0.30 kg)	
Battery Pack	Cells	6-cell Lithium-Ion	
	Energy	Voltage	11.1 V
		Amp-hour capacity	3.6 Ah
		Watt-hour capacity	40 Wh
	Temperature	Operating (Charging)	32° to 104° F (0° to 40° C)
		Operating (Discharging)	14° to 122° F (-10° to 50° C)
		Non-operating	-4° to 140° F (-20° to 60° C)
	Battery Re-Charge Time	System in OFF mode or Standby	3 hours
		System ON (depending of system power consumption)	3 to 5 hours
Tablet PC Pen(s)	Pen with tether (standard)	Dimensions (Length)	5.1 in (130.1 mm)
		Weight	0.66 oz (18.7 g)
	Pen with eraser (optional)	Dimensions (Length)	5.1 in (130.1 mm)
		Weight	0.66 oz (18.7 g)
MultiBay DVD+RW/CD-	MultiBay Drive	Dimensions (H x W x D)	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)
RW Drive (optional)		Weight	0.55 lb (0.25 kg)
	Center Hole Diameter	15 mm	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	0.74 μm	
	Access Times	Random CD	< 175 ms
	(typical reads, including settling)	Full-Stroke CD	< 285 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	
	Data Transfer Rate	DVD+R (2X max write)	2700 KB/s
	(typical, including settling)	DVD+RW (2X max write)	2700 KB/s
		CD-R (16X max write)	2400 KB/s (150 KB/s at 1X CD rate)
		CD-RW (8X max write)	1200 KB/s (150 KB/s at 1X CD rate)
		CD-ROM (24X max read)	3600 KB/s (150 KB/s at 1X CD rate)
		DVD (8X max read)	10,800 KB/s (1352 KB/s at 1X DVD rate)
		Normal PIO Mode 4	16.6 MB/s
		(single burst)	
	Start-up Time	< 15 seconds	
	Stop Time	< 6 seconds	



Technical Specifications

MultiE	Bay DVD/CD-RW
Drive	(optional)

Dimensions 0.5 x 5.22 x 5.46 in (1.35 x 13.28 x 13.88 cm)

Weight 0.551 lb (250 g)

Access Times Random <110 ms CD

<130 ms DVD

Full Stroke <210 ms CD

<225 ms DVD

Max data transfer rate 24X CD-ROM 3,600 KB/s

> 8X DVD 10,800 KB/s 24X CD-R 3,600 KB/s 24X CD-RW 3,600KB/s

Transfer Mode Multiword DMA Mode 2

Interface **EIDE**

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)

Media Capacity 4.7 GB Transport Tray Loading

MultiBay CD-RW Drive (optional)

MultiBay Drive

Dimensions (H x W x D)

CD-R, CD-RW

0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)

Weight 0.74 lb (0.34 kg)

Center Hole Diameter 0.59 in (1.5 cm) Disk Diameter 12 cm/8 cm Disk Thickness 0.047 in (1.2 mm)

Track Pitch $0.74 \mu m$

Access Times Random

settling)

(typical reads, including

Full-Stroke

< 150 ms < 225 ms

Audio Output Level 0.7 Vrms Line-out

Cache Buffer

128 KB/s (minimum)

Data Transfer Rate (typical, including settling)

Sustained (16X) Sustained 4X CD-RW

150 KB/s 5,520 KB/s

Normal PIO Mode 4

16.6 MB/s

(single burst)

Start-up Time < 15 seconds Stop Time < 6 seconds



Technical Specifications

MultiBay DVD-ROM Drive MultiBay Drive Dimensions ($H \times W \times D$) 0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)

(optional) Weight 0.66 lb (0.3 kg)

> Center Hole Diameter 0.59 in (1.5 cm) Disk Diameter 12 cm/8 cm Disk Thickness 0.43 in (1.09 cm)

Track Pitch $0.74 \mu m$

Access Times Random (typical) < 180 ms DVD Media (typical reads, including < 300 ms DVD Media Full-Stroke (typical) settling) Random (typical) < 120 ms CD Media

< 200 ms CD Media Full-Stroke (typical)

Cache Buffer 512 KB/s (minimum)

3600 KB/s (150 KB/s at 1X CD rate) Data Transfer Rate Max 24X CD (typical, including settling) Max 8X DVD 10,800 KB/s (1352 KB/s at 1X DVD rate)

> Normal PIO Mode 4 16.6 MB/s (single burst)

Start-up Time < 12 seconds Stop Time < 3 seconds

MultiBay 24X CD-ROM MultiBay Drive Dimensions $(H \times W \times D)$ 0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm) Drive (optional)

Weight 0.50 lb (0.23 kg)

Applicable Disk CD-ROM (Mode 1, 2 and 3), CD-XA ready (Mode 2, Form 1 and 2), CD-I ready (Mode 2,

Form 1 and 2), CD-R (read only), CD Plus, Photo CD (Single and Multi-session), CD-

Extra, Video CD, CD-WO (fixed packets only), CD-Bridge

Center Hole Diameter 0.59 in (15 mm) Disk Diameter 12 cm, 8 cm Disk Thickness 0.047 in (0.12 cm)

Track Pitch $1.6 \, \mu m$

Access Times Random < 150 ms (typical reads, including Full-Stroke < 300 ms settling) 0.7 Vrms

Line-out

Audio Output Level

Cache Buffer 128 KB

Data Transfer Rate Sustained (16X) 150 KB/s (sustained 1X) (typical, including settling) Variable 1500 to 3600 KB/s (10X to 24X)

> Normal PIO Mode 4 16.66 MB/s (single burst)

Start-up Time < 8 seconds

Stop Time < 4 seconds



Technical Specifications

Internal MDC 56K high speed Modem

(Modem Specifications)

Modem Device Driver Name

Data Mode Capabilities High speed 56K modem (a-law, mu-law)

V.8bis V.80

V.44, V42.bis, MNP5 (Compression) V.42 (LAPM, MNP2-4) (Error Correction)

V.34 (file date: 10/96)

Optional symbol rates:

2800, 3429

Asymmetric Symbol rates

Synchronous primary channel data signaling rates:

33600, 31200

Automatic rate re-negotiation

V.32bis V.32 V.23 V.22bis V.22 V.21 Bell 212A Bell 103J

Fax Mode Capabilities TIA-5

Command Set

TIA-578-S (Class 1)

T.30, T.4 (Group 3)

V.17 V.29 V.27ter

V.21 Channel 2 V.250 (Partial)

TIA-602

Identification: GMI, GMM, GMR Port control: IPR, ICF, IFC, Iirr Modulation: MS, MR, MA

Error control: ES, ER, EB, ESR, ETBM Data compression: DS, DR

V.251

Power Consumption Transfer mode: < 200 mA, maximum

Standby mode: 5 mA, nominal

Integrated 10/100 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)

Auto-Negotiation (Automatic Speed and Duplex Selection)

HP Auto-MDIX

Full Duplex and Half Duplex operation at 10 and 100 Mbit/s IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)

Power Management ACPI 1.1 compliant -- multiple power modes

Situation-sensitive features reduce power consumption

Manageability PXE 2.0 Remote Boot

Statistics Gathering (RMON, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30))

Comprehensive diagnostic and configuration software suite

NIC Device Driver Name Broadcom 440x 10/100 Integrated Controller

Drivers Available Microsoft Windows XP, Windows 2000

DOS NDIS2 and ODI



Technical Specifications

HP W500 802,11a/b/a WLAN (availability may vary by region)

Wireless LAN Standards IEEE 802 Part 11a (802.11a)

IEEE 802. Part 11b (802.11b) IEEE 802. Part 11g (802.11g)

Interoperability Wi-Fi certified Frequency Band 2.4 and 5 GHz

Data Rates 802.11a; 6,9,12,18,24,36,48,54 Mbps

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

Security 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Hardware-accelerated support for the Advanced Encryption Standard (AES; 256-bit

encryption)

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP (Microsoft

implementation)

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure

products through the Cisco Compatible Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture

Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between 802.11a and 802.11b/g access points

Output Power 802.11b: 17 dBM (typical)

802.11a/g: 15 dBM (typical)

Power Consumption Transmit: 2.0 W (maximum)

> Receive: 1.5 W (maximum) Sleep mode: 20 mW (maximum)

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Power Saving Mode selectable through the configuration utility

Receiver Sensitivity*

54 Mbps: -70 dBm to 1 Mbps: -90 dbm

Antenna type

Altitude

High efficiency dual band antenna with polarization diversity, mounted in the display

enclosure

500 feet (152.44 m) - Outdoors Open Area Range 802.11a - Typical

150 feet (45.73 m) - Indoor, Office-environment

1200 feet (365.85 m) - Outdoor Open Area 802.11 b - Typical

300 feet (91.46 m) - Indoor, Office environment

1000 feet (304.88 m) - Outdoor Open Area 802.11 g - Typical

200 feet (60.98 m) - Indoor, Office environment

Form Factor MiniPCI Type IIIA Weight 0.036 lb (16.5 gm)

0.19 x 2.00 x 2.35 in (4.8 x 50.95 x 59.75 mm) Dimensions

Operating Voltage 3.3 V

Temperature 32° to 122° F (0° to 50° C) Operating

-14° to 158° F (-10 to 70° C) Non-operating

Humidity Operating 10 to 90% 5 to 95% Non-operating

0 to 15,000 ft (4,572 m) Operating

0 to 40,000 ft (12,192 m) Non-operating

Configuration Utility Choice of Configuration Utility:

Atheros Client Utility (required for Cisco Compatible Extensions support)

Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: May also be compatible with certain third party software supplicants.



Technical Specifications

LED Activity LED Off - WLAN and Bluetooth Radio OFF; Solid Green LED - WLAN or Bluetooth Radio

(please refer to your Tablet PC documentation to determine whether WLAN or Bluetooth is

activated)

Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Intel Pro/Wireless 2100 802,11b WLAN

Wireless LAN Standards IEEE 802. Part 11b (802.11b)

Wi-Fi certified Interoperability 2.4 GHz Frequency Band

Data Rates 802.11b; 1,2,5.5,11 Mbps Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK

Security 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP (Microsoft

implementation)

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure

products through the Cisco Compatible Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture

Ad-hoc (Peer to Peer) Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between 802.11b access points

16 dBM (typical) **Output Power**

Power Consumption Transmit: 2.0 W (maximum)

Receive: 1.5 W (maximum) Sleep mode: 200 mW, nominal

ACPI compliant power management Power Management

802.11 Compliant Power Saving Mode

Receiver Sensitivity* 11 Mbps: -82 dBm to 1 Mbps: -89 dBm

Antenna type High efficiency dual band antenna with polarization diversity, mounted in the display

enclosure

1200 feet (365.85 m) - Outdoor Open Area Range 802.11b - Typical

300 feet (91.46 m) - Indoor, Office environment

Form Factor MiniPCI Type IIIB

Weight 0.026 lb (11.75 gm) (maximum)

0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm) Dimensions

Operating Voltage 3.3 V

Temperature 32° to 158° F (0° to 70° C) Operating

 -40° to 176° F (-40° to 80° C) Non-operating

Humidity Operating 0 to 90% (non-condensing) 5 to 95% (non-condensing) Non-operating

Altitude 0 to 10,000 ft (3,048 m) Operating

> Non-operating 0 to 50,000 ft (15,240 m)

Technical Specifications

Configuration Utility Choice of Configuration Utility:

> Intel ProSet (required for Cisco Compatible Extensions support) Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: May also be compatible with certain third party software supplicants.

LED Activity LED Off - Radio OFF; Solid LED - Radio ON

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Intel Pro/Wireless 2200BG 802.11b/g WLAN Wireless LAN Standards IEEE 802.11b

IEEE 802, 11g

Interoperability Wi-Fi certified (details available at http://www.hp.com/go/WLAN)

Frequency Band 2.402 - 2.494 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

Security 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP ((Microsoft implementation); more details available at http://www.hp.com/go/WLAN).

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure

products through the Cisco Compatible Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture

Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between access points.

Output Power $16 \pm 2 \text{ dBM for CCK}$

11 + 6/-1 dBM for OFDM (power varies by data rate)

Maximum output power may vary by country according to local regulations

Power Consumption Transmit: 1.8 Watts (max)

> Receive: 1.0 Watts (max) Idle mode: 75mW, nominal

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Receiver Sensitivity*

54 Mbps: -72 dBm, 11 Mbps: -84 dBm, 1 Mbps: -94 dBm

Antenna type

High efficiency dual band antenna with polarization diversity, mounted in the display

enclosure

Range (typical) Outdoor 1200 feet at 1 Mbps

250 feet at 54 Mbps

Indoor 300 feet at 1 Mbps

50 feet at 54 Mbps

Form Factor MiniPCI Type IIIB Weight 0.026 lb (11.75 g) max

0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm) Dimensions

Operating Voltage 3.3v

32° to 158° F (0° to 70° C) Temperature Operating

> -40° to 176° F (-40° to 80° C) Non-operating 0 to 90% (non-condensing)

Humidity Operating

Non-operating 5 to 95% (non-condensing) 0 to 10,000 ft (3,048 m) Operating

Altitude Non-operating 0 to 50,000 ft (15,240 m)





Technical Specifications

Configuration Utility Choice of Configuration Utility:

- Intel PROset for Microsoft Windows 2000 or XP (required for Cisco Compatible Extensions support)
- Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: May also be compatible with certain third party software supplicants.

LED Activity

LED Off - Radio OFF; Solid LED - Radio ON

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation.



Technical Specifications

Intel Pro/Wireless 2915ABG 802.11a/b/g **WLAN**

Wireless LAN Standards IEEE 802.11a

> IEEE 802.11b IEEE 802. 11g

Interoperability Wi-Fi certified (details available at http://www.hp.com/go/WLAN)

Frequency Band 2.4 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

Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK, OFDM

Supports 64- and 128-bit WEP, WPA, hardware-accelerated AES, 802.1x authentication Security

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).

Sub-channels Multinational support with frequency bands and channels compliant to local regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture

Output Power

Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between access points.

+16 dBm +/- 2 dB' + 16 dBm +/- 2 dB (for CKK)

+15 dBm + 2 / -5 dB ((for OFDM; power varies by data rate)

Power Consumption Transmit: 1.8 Watts (max)

Receive: 1.4 Watts (max) Idle mode: 100 mW, nominal

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Receiver Sensitivity* 54 Mbps: -72 dBm, 11 Mbps: -89 dBm, 1 Mbps: -97 dBm

High efficiency dual band antenna with polarization diversity, mounted in the display Antenna type

enclosure

600 ft (82.88 m) at 1 Mbps - Outdoors Open Area Range (typical) 802.11a - Typical

150 ft (45.72 m) at 1 Mbps - Indoor, Office-environment

1200 ft (365.76 m)at 1 Mbps - Outdoors Open Area 802.11b - Typical

> 300 ft (91.44 m) at 1 Mbps - Indoor, Office-environment 250 ft (76.2 m)at 54 Mbps - Indoor, Office-environment

1200 ft (365.76 m) at 1 Mbps - Outdoors Open Area 802.11g - Typical

> 300 ft (91.44 m) at 1 Mbps - Indoor, Office-environment 50 ft (15.24 m)at 54 Mbps - Indoor, Office-environment

Form Factor MiniPCI Type IIIB

Weight 0.026 lb (11.75 gm) (max)

Dimensions 0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)

Operating Voltage 3.3v +/- 10%

Temperature Operating 32° to 176°F (0° to 80°C)

Non-operating -40° to 176°F (-40° to 80°C)

Humidity 10% to 90% (non-condensing) Operating 5% to 95% (non-condensing) Non-operating

Altitude Operating 0 to 10,000 ft (3,048 m)

0 to 50,000 ft (15,240 m) Non-operating

Configuration Utility Microsoft Windows XP Wireless Zero Configuration Utility

Intel PROset for Microsoft Windows 2000 or XP

LED Activity LED Off - Radio OFF; Solid LED - Radio ON

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation.



Technical Specifications

Bluetooth by HP Form Factor Integrated USB module

> Bluetooth 1.1 Compliant Dimensions 26 x 14 x 5.7 mm

Temperature -4° to 158° F (-20° to 70° C) Operating

> -40° to 176° F (-40° to 80° C) Non-operating

10 to 90% operating Humidity

5 to 95% non operating

Altitude 15,000 ft (4572 m) Operating

> Non-operating 40,000 ft (12,192 m)

Plug and Play USB 1.1 compliant

Microsoft Windows Plug and Play compliant

2402 to 2480 MHz Frequency Band

Number of Available 79 (1 MHz) available channels

Channels

Data Rates and

throughput Synchronous Connection Oriented links up to 3, 64 kbps, voice channels

Asynchronous Connection Less links 723.2 kbps/57.6 kbps asymmetric or 433.9 kbps

Antenna type Internally integrated within module

Range 33 ft (10 m) Software Stack Supported User may choose:

Microsoft User Interface (Profiles supported: HID, DUN, HCRP)

Widcomm User Interface (see profile support below)

Profile Support General Access Profile

Service Discovery Application Profile

Serial Port Profile

Generic Object Exchange Profile

File Transfer Profile Synchronization Profile Dial-Up Networking Profile

LAN Access Profile Object Push Profile

Hard Copy Cable Replacement Profile Personal Area Networking Profile Human Interface Device Profile

Technical Specifications

Usage Models Service Discovery (determine what Bluetooth devices are within range and support

authorization)

Synchronization:

PDAs to PCs
Portable to Desktop

File Transfer:

File and directory browsing and navigation on another Bluetooth device.

File copying

Object manipulation - including add, delete, create new folders etc.

Wireless link to Corporate LAN using several Bluetooth devices sharing the same

Access Point:

Corporate email, network neighborhood, access to LAN applications, file transfer, ftp,

Internet browsing, etc, using TCP/IP Wireless link to WAN thru cell phone Agnostic to WAN technology

Send/receive SMS messages Wireless link to Printer

Adhoc peer to peer networking (two computers) or Personal Area Networking (PAN) using

NDIS (< 7 computers)

Adhoc Bluetooth Pico-networking (point to multi-point) Object Push - Business card or appointment exchange

Human Interface Devices

Wirelessly interface to notebook with mouse, keyboard, etc

Printing

Wirelessly print to Bluetooth enabled printers

Transmit Power -6dBm to 4 dBm (Bluetooth Class II)

Receive SensitivityBetter than -80 dBM at 0.1 % raw bit error rate **Link Topology**Point to Point, Multipoint Pico Nets up to 7 slaves

Security Full support of Bluetooth Security Provisions

Network Architecture

Models

Ad-hoc (Peer to Peer)
Infrastructure (Access Points Required)

 Power Requirement
 Peak
 < 270 mW</th>

 Power Management
 Microsoft Windows ACPI, and USB Bus Support

Wireless EAB On/Off Software On/Off control

Self configurable to optimize power conservation in all operating modes, including

Standby, Hold, Park, and Sniff

Protocols Supported TCP/IP

IPX/SPX

UDP

LED Activity Solid Green LED - Wireless Bluetooth or WLAN On

LED Off - Wireless Bluetooth and WLAN Power Off

(please refer to your Tablet PC documentation to determine whether WLAN or Bluetooth is

activated)

Certifications All necessary regulatory approvals for countries we support including

FCC (47 CFR) Part 15C, Section 15.247 & 15.249

ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark



Technical Specifications

© Copyright 2003-2004 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. All other product names mentioned herein may be trademarks of their respective companies.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

