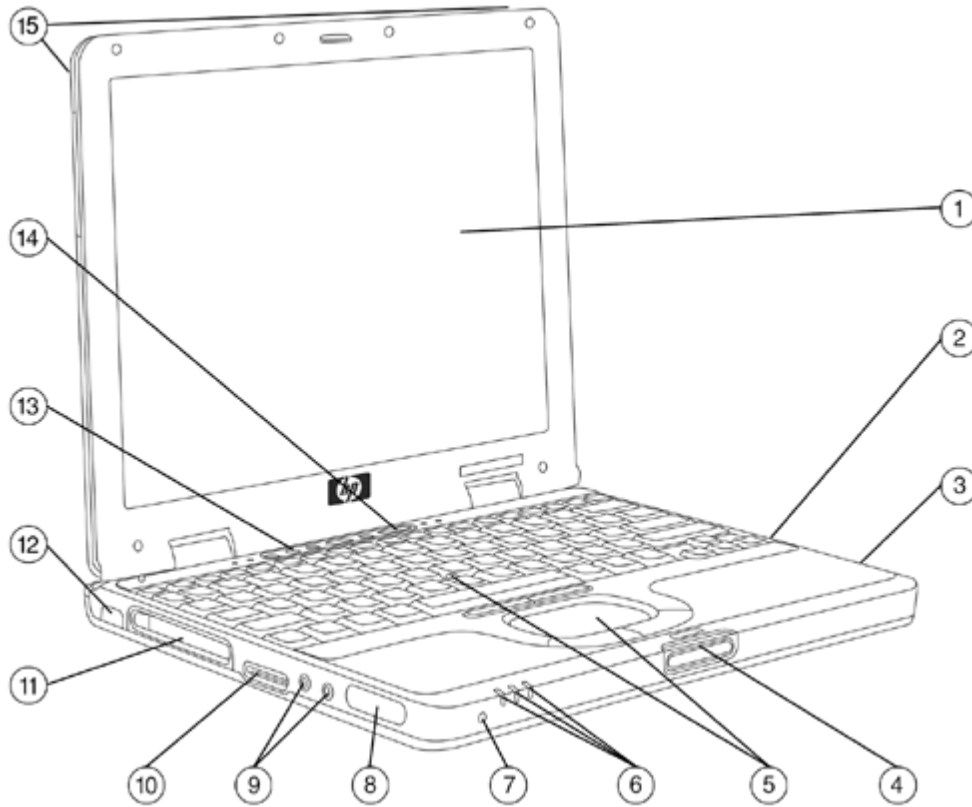
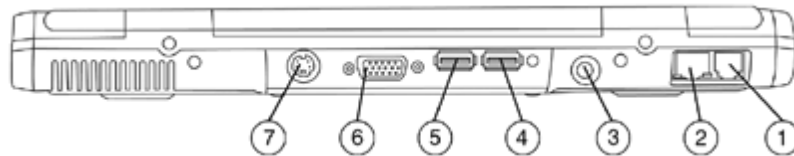


Overview



- | | |
|--|---------------------------------|
| 1. Display | 8. Speaker |
| 2. User Removable Hard Drive | 9. Headphone/Microphone Jacks |
| 3. Cable Lock Slot | 10. Secure Digital (SD) Slot |
| 4. Display Latch Release | 11. PC Card Slot |
| 5. Dual Pointing Devices (Pointstick/Touchpad) | 12. Infrared Port |
| 6. Wireless/Power/Charge LEDs | 13. Quick Launch Buttons |
| 7. Microphone | 14. Volume Down/Up/Mute Buttons |
| | 15. Integrated Dual Antenna |



- | | |
|--------------------------------------|----------------|
| 1. RJ-11 (Modem) | 5. USB |
| 2. RJ-45 (NIC) | 6. VGA Out |
| 3. DC In | 7. S-Video Out |
| 4. Powered USB for External Multibay | |

Overview

At A Glance

- Microsoft Windows XP Professional and limited localizations of Windows XP Home Edition preinstalled
- Intel® Pentium® M Processors and Intel® Celeron® M Processor
- 12.1-inch XGA TFT display
- 256-MB DDR SDRAM upgradeable to 1024 MB
- Up to 80-GB 5400rpm, user-removable hard drives
- Magnesium alloy display enclosure
- Protected by a three-year, Worldwide Limited Warranty - and in select countries a One-year Worldwide Limited Warranty. In both cases, certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

What's New

- Microsoft Windows XP Professional and limited localizations of Windows XP Home Edition preinstalled
- Intel Pentium M Processors
- ATI Radeon IGP 350M graphics with user selectable 32 or 64-MB DDR SDRAM
- Optional Integrated Smart Card Reader (replaces current PC card slot)
- HP ProtectTools Embedded Security - Support for TCG compliant TPM security module
- Optional integrated 802.11b (Intel), 802.11b/g (Intel) and 802.11a/b/g wireless LAN modules
- Optional integrated Bluetooth
- Integrated Secure Digital (SD) flash media slot
- Dual pointing devices
- Common Port Replicator and Advanced Port Replicator with Gigabit NIC pass-through
- Removed silver stripe around outer base and display

What's Special

- Ultra-light weight - 3.5 lb (1.59 kg)
- Full sized keyboard
- Support for up to two batteries
- Self powered external MultiBay, which provides a cost effective and travel friendly way to access MultiBay drives
- HP Mobile Printing driver makes on-the-go printing quick and easy

Standard Features

Processors

Intel Pentium M Processor 755 * – 2.0GHz, 2MB L2 cache, 400MHz Front Side Bus (FSB)
Intel Pentium M Processor 745 – 1.8GHz, 2MB L2 cache, 400MHz Front Side Bus (FSB)
Intel Pentium M Processor 735 – 1.7GHz, 2MB L2 cache, 400 MHz Front Side Bus (FSB)
Intel Pentium M Processor 725 – 1.6GHz, 2MB L2 cache, 400 MHz Front Side Bus (FSB)
Intel Pentium M Processor 715 – 1.5GHz, 2MB L2 cache, 400 MHz Front Side Bus (FSB)
Chipset: ATI Radeon IGP 350M with 400 MHz processor side bus

NOTE: Intel Pentium-M Processors support enhanced Intel SpeedStep technology. Processor speed denotes maximum performance mode; processors will run at approximately 600-MHz in battery optimization mode.

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

Operating System

One of the following

Microsoft Windows XP Professional
Microsoft Windows XP Home (limited localizations)

NOTE: Driver support available for Microsoft Windows 98 SE, Microsoft Windows 2000 and Microsoft Windows NT® 4.0.

Display	Internal	12.1-inch TFT XGA display with 1024 x 768 resolution up to 16.7 M colors
	External	Up to 32-bit per pixel color depth Supports 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 1024, or 1600 x 1200 resolutions up to 100-Hz refresh rate, dependent upon monitor capability, and resolution and color depth settings

Memory	Standard	256-MB 266-MHz SDRAM DDR SDRAM (256-MB SODIMM in slot 1)
	Maximum	1024-MB 266-MHz SDRAM DDR SDRAM (512-MB SODIMMs in slots 1 and 2)

NOTE: 256MB of DDR standard with 32MB of system memory shared as video memory.
NOTE: Shared video memory (UMA) uses part of the total system memory for video performance. For example, if there is 256MB of system memory, 32MB will be shared with the video graphics sub-system. The system will have 224MB of available system memory for other computing activities.
NOTE: Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility.

Communications

10/100/1000 NIC is integrated on the system board
High speed 56K Modem with digital line guard is integrated on the system board
NOTE: Designed only to allow faster downloads from compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions.
NOTE: Modem availability is subject to country regulatory approval.

Standard Features

Keyboard The 101/102-key desktop compatible keyboard features full size keys, isolated inverted-T cursor control keys, 6 editing keys, both left and right control and alt keys, and 11 function keys. The US layout has 84 keys and the International layout 85 keys. Other features include 19 mm x 19 mm standard key pitch (center-to-center spacing), 2.5 mm key stroke, 2 Windows keys, comfort-dished keycaps, bright key legends for improved visibility in low light conditions, an integrated numeric keypad, and hotkeys providing instant access to power conservation, display brightness, and other controls.

Quick Launch Buttons The HP Compaq Business Notebook nc4010 has three Quick Launch buttons designed to provide one-touch access to commonly used features including QuickLock, Wireless on/off, and presentation mode.

Pointing Device Dual pointing devices (both Pointstick and Touchpad)

Optional Smart Card Reader Optional integrated Smart Card reader (replaces current PC Card slot)

Flash Media Slots One integrated Secure Digital (SD) slot

Storage

Diskette Drives	Optional Diskette Drive*
Hard Drives	80-GB 5400 rpm SMART 60-GB 5400 rpm SMART 40-GB 5400 rpm SMART
Optical Drives	24X/24X/24X/8X DVD/CD-RW combo Drive* 24X CD-ROM Drive* 8X DVD-ROM Drive* 2X DVD+RW Drive*
Flash Media Storage	One integrated Secure Digital (SD) slot

NOTE: * Requires optional external MultiBay or Advanced Port Replicator.
NOTE: The HP nc4010 hard drives are customer removable and will withstand multiple insertion/removal cycles.

Multimedia

- Premier Sound™ audio
- Integrated 16-bit Sound Blaster Pro-compatible audio
- Integrated mono speaker and microphone
- External volume controls
- Stereo Headphone-out
- Microphone in
- Software MPEG1 support
- DVD movie playback software
- DVD+RW*
- 8X DVD-ROM Drive with DVD movie playback*
- 24X DVD/CD-RW Combo Drive*
- 24X CD-ROM Drive*
- 4X AGP graphics

NOTE: * Requires optional external MultiBay or Advanced Port Replicator.

Standard Features

Interfaces	PC Card Slot	1 Type II
	External Monitor	1
	Microphone in	1
	DC Power	1
	RJ-11 (modem)	1
	RJ-45 (NIC)	1
	Infrared Port	1 (IrDA 4-MB compliant. IR performance will vary depending on performance of IR peripherals and application used.)
	S-video out connector	1
	USB version 2.0 Port	2
	Docking Connector	1
	Travel Battery Connector	1
	LED Status Indicators	7

Graphics	<p>ATI Radeon IGP 350M graphics controller with user selectable 32- or 64-MB DDR SDRAM 4X AGP</p> <p>Hardware support for DirectX 7.0</p> <p>NOTE: Shared video memory (UMA) uses part of the total system memory for video performance. For example, if there is 256MB of system memory, 32MB will be shared with the video graphics sub-system. The system will have 224MB of available system memory for other computing activities.</p>
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Audio	HP Premier Sound 16-bit sound, Line out/headphone and microphone jacks
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Software	<p>Preloaded Software</p> <p>Adobe Acrobat Reader 5.10</p> <p>Altiris eXpress™ Client Win32</p> <p>HP Management Agents</p> <p>HP Quick Launch Button Software</p> <p>HP Mobile Printing Driver</p> <p>Intel SpeedStep Technology Applet (Windows 2000 only, built into Windows XP)</p> <p>HP Help and Support (XP Only)</p> <p>Synaptics Touchpad Driver</p> <p>interVideo WinDVD DVD Player* (for optional DVD and DVD/CDRW drives) Roxio Easy CD Creator* (for DVD/CDRW drives)</p> <p>interVideo WinDVD Creator* (for optional DVD+RW drive)</p> <p>NOTE: *For optional DVD/CD-RW drives which are supported in the optional External MultiBay or Advanced Port Replicator.</p>
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System Recovery	<p>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 notebook 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 notebook.</p> <p>(NOTE: This option erases the hard disk and restores the base operating system. Drivers and applications are installed using the other CDs provided with the kit.)</p>
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Standard Features

Intelligent Manageability In December 2003, Insight Manager was replaced by HP Systems Insight Manager Software (SIM). HP SIM will use WMI to retrieve client system information. A HP SIM connector will be available for the HP Client Manager Software beginning in 2Q/2004. For more information on HP SIM, please refer to the HP website at <http://www.hp.com/go/hpsim/>.

Security The HP nc4010 supports a range of standard, as well as optional, security features including the optional Embedded Security chip and Optional integrated Smart Card reader.

Standard Security Features	Configuration Control Hardware Memory Change Alert Ownership Tag Setup Password Power-On Password DriveLock Enabled for PC SmartCard options Kensington Lock Slot
Optional Security Features	Embedded Security Chip Designed to the Trusted Computing Group (TCG) standard Microsoft Crypto API and PKCS#11 software interface support RSA Secured Partner program certification
	Integrated Smart Card reader Compatible with ISO 7816 compliant Smart Cards EMV level 1 certification PC/SC interface support

For more information on HP security solutions refer to <http://www.hp.com/go/security>.

Power Supply External 65 watt AC adapter, 6-foot (1.8-meter) power cord included.
Total length including External AC adapter is 12 ft (3.66 m).

Battery The HP Compaq Business Notebook nc4010 6-cell internal main Lithium-Ion battery (one year warranty) provides up to 3 ½ hours of battery life; up to 7 ½ hours can be achieved using the optional travel battery.

Battery Re-Charge Time	System in OFF mode or Standby	2 hours
	System ON (depending on system power consumption)	2-5 hours

Quick Specs disclaimer:

NOTE: Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a HP Compaq nc4010 with an Intel Pentium M 1.4GHz CPU, Windows XP Professional, 12.1-inch XGA LCD, 512-MB RAM, 40-GB HDD, 11.1V Lithium-Ion battery, and NIC/modem, achieved an overall MobileMark 2002 score of 3h 12m (6h 21m with dual battery). BAPCO, MobileMark, and SYSmark are trademarks of Business Applications Performance Corporation. System parameters followed test recommendations: panel brightness set to half, but no less than 60 nits, power management scheme - Laptop/Portable, hard drive timer set to 3 minutes, standby and video timers set to never. Wireless turned off.

Standard Features

Quick Specs disclaimer:

NOTE: Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a nc4010 with an Intel Pentium M 1.4 GHz CPU, Windows XP Professional, 12.1-inch XGA LCD, 512-MB RAM, 60-GB HDD, Lithium-Ion battery, and NIC/modem, achieved an overall Business Winstone 2002 BatteryMark score of 3h 52m 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%, wireless off, power management scheme - Laptop/Portable, hard drive, standby and video timers set to never.

Power Conservation

Supports enhanced Intel SpeedStep Technology (allows a Battery Optimized Mode, Maximum Performance Mode, or Automatic mode)
Hibernation
Instant-on via Standby
ACPI compliant

MultiBay Devices

MultiBay devices may be swapped with the system powered on (hot) under Microsoft Windows XP Professional or Windows 2000 (except MultiBay Zip drive or MultiBay secondary hard drive).
NOTE: MultiBay devices can only be utilized with the optional External MultiBay or Advanced Port Replicator.

Wireless Devices

The HP nc4010 notebook supports a broad 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 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	Integrated support for 802.11a, b and g Up to 54mbps throughput performance Advanced Encryption Standard (AES) support
HP W400 802.11b/g	Integrated support for 802.11b and g Up to 54mbps throughput performance Advanced Encryption Standard (AES) support
Intel PRO 2100/Wireless 802.11b wireless LAN	Integrated support for 802.11b Up to 11mbps throughput performance
Intel PRO 2200/Wireless 802.11 b/g wireless LAN	Intel® Centrino™ mobile technology Integrated support for 802.11b and g Up to 11mbps throughput performance
Integrated Bluetooth	Designed to the Bluetooth v1.1 specification

Standard Features

Docking

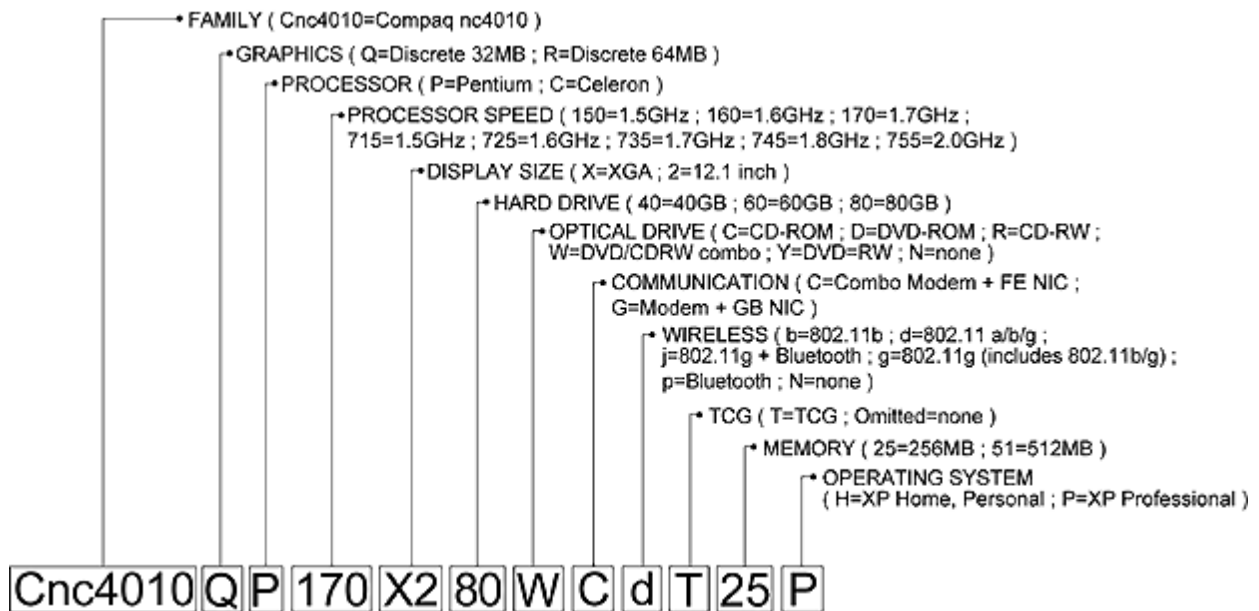
Port Replicator and Advanced Port Replicator. HP's common port replicator and advanced port replicator provide simple and convenient port management. Features include Gigabit NIC pass through, DVI, USB, and 1394 port. These docking solutions are compatible across multiple Business Notebook platforms enabling a lower total cost of ownership.

Service and Support

HP Services includes a Three-year and in select countries a One-year, Worldwide Limited Warranty, pick-up or carry-in and toll-free 7 x 24 hardware technical phone support (one-year warranty on battery), on-site service or a One-year warranty are also available.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details. <http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp>.

The Etymology of a Model name:



Models

Standard Features

Global Wireless
CNC4010UP735X240NGJT51Pe
PF672AA#ABA

Processor	Intel® PM 735 (1.7-GHz Intel Pentium-M processor) with 400-MHz Front Side Bus
Operating System	Microsoft Windows XP Professional
Display	12.1-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal)
Cache Memory	2048-KB L2 cache
Memory	Standard 512-MB 266-MHz DDR SDRAM (512-MB SODIMM in slot 1) Maximum 1-GB 266-MHz DDR SDRAM (512-MB SODIMM in slots 1 and 2)
Hard Drive	40-GB 5400 rpm SMART Hard Drive
Video Memory	32 MB standard w/256MB or more main memory, configurable up to 64MB
Optical Drive	With optional External MultiBay or Advanced Port Replicator
Graphics	ATI Radeon IGP 350M graphics controller with user selectable 32- or 64-MB DDR SDRAM Hardware support for DirectX 7.0 4X AGP
Audio	HP Premier Sound 16-bit sound, Line out/headphone and microphone jacks
Communications	High speed 56K Modem, Integrated 10/100/1000 NIC, Intel 802.11 b/g, Bluetooth
Security	TCG compliant TPM security module
Pointing Device	Dual pointing devices (both Pointstick and Touchpad)
Battery	6-cell Lithium-Ion battery Dual battery capability with optional travel battery External 65W adapter
Warranty	3/3/0

Global
CNC4010UP725X240NGN51Pe
PF673AA#ABA

Processor	Intel® PM 725 (1.6-GHz Intel Pentium-M processor) with 400-MHz Front Side Bus
Operating System	Microsoft Windows XP Professional
Display	12.1-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal)
Cache Memory	2048-KB L2 cache
Memory	Standard 512-MB 266-MHz DDR SDRAM (512-MB SODIMM in slot 1) Maximum 1-GB 266-MHz DDR SDRAM (512-MB SODIMM in slots 1 and 2)
Hard Drive	40-GB 5400 rpm SMART Hard Drive
Video Memory	32 MB standard w/256MB or more main memory, configurable up to 64MB
Optical Drive	With optional External MultiBay or Advanced Port Replicator
Graphics	ATI Radeon IGP 350M graphics controller with user selectable 32- or 64-MB DDR SDRAM Hardware support for DirectX 7.0 4X AGP

Standard Features

Audio	HP Premier Sound 16-bit sound, Line out/headphone and microphone jacks
Communications	High speed 56K Modem, Integrated 10/100/1000 NIC
Pointing Device	Dual pointing devices (both Pointstick and Touchpad)
Battery	6-cell Lithium-Ion battery Dual battery capability with optional travel battery External 65W adapter
Warranty	3/3/0

Options

		HP PN
Memory	512-MB 333-MHz DDR Memory Upgrade	DC390B
	256-MB 333-MHz DDR Memory Upgrade	DC389B
MultiBay Hard Drives	80-GB 5400 rpm SMART Hard Drive	DC920A
	60-GB 5400 rpm SMART Hard Drive	DC894A
MultiBay Storage Devices	DVD+RW Drive	DG189A
	24X Combo DVD/CD-RW	DC364A
	8X DVD Drive	DC352A
	Diskette Drive	DC362A
Other Storage Devices	HP USB Digital drive with 128MB SD Memory	DL702A
Expansion Bases	Basic Port Replicator	DC367B#ABA
	Advanced Port Replicator	DC366B#ABA
	External MultiBay	DC373B#ABA
	Monitor Stand	DC377A
Power	Battery Kit with Travel Adapter	DD880A
Communication	W500 WLAN 802.11a/b/g kit	DR469A#ABA
Common Power Solutions	External Single Battery Charger	DF933A#ABA
	AC Adapter 65W	DC359A#ABA
	90W Aircraft Power Cables	DC899A
	AC Line Cord (10 ft/3.1 m)	DC851B#ABA
Input Devices	HP 2 Button Mouse (carbon)	DC369A
	HP Travel Mouse	F2100A
Security	Kensington Security Lock	PC766A
	HP Smart Card PC Card Reader	DC350B

Options

Carrying Cases

HP Entry Value Carrying Case	DL617A
HP Top Load Nylon Case	DC915A
HP Roller Case	PE842A
HP Top Load Leather	DC917A
HP Executive Nylon Case	DC916A
HP Sport Backpack	DG102A

Memory

HP Compaq nc4010 Ultraportable Business Notebook

Standard Memory Plus Optional Memory

Support for up to 1024 MB of DDR SDRAM memory is available with the installation of optional DDR SDRAM Memory Kits.

0-MB of memory on system board

2 Slots total

1-256-MB DIMM installed in Slot 1

1-Additional open Memory Slot

Memory	Slot 1	Slot 2
	256 MB	Empty

Standard Memory with Optional Memory Upgrades

Support for up to 1024-MB of SDRAM is available with the installation of optional SDRAM Memory Upgrades.

Up to	Slot 1	Slot 2
512 MB	512 MB	Empty
512 MB	256 MB	256 MB
768 MB	256 MB	512 MB
1024 MB	512 MB	512 MB

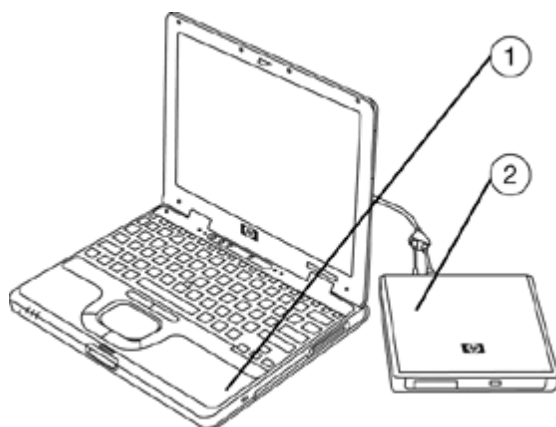
NOTE: This chart does not represent all possible memory configurations. Due to the non industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility.

Following are memory options available from HP:

	Compaq PN	HP PN
512-MB 266-MHz DDR Memory Upgrade	269087-B25	DC390A
256-MB 266-MHz DDR Memory Upgrade	269086-B25	DC389A

NOTE: 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.

Storage



1. Hard Drive
2. Optional External MultiBay

Drive Support

System Drive Support

Hard Drives

80-GB 5400 rpm SMART Hard Drive	Up to 1	Hard Drive Bay
60-GB 5400 rpm SMART Hard Drive	Up to 1	Hard Drive Bay
40-GB 5400 rpm SMART Hard Drive	Up to 1	Hard Drive Bay

External MultiBay Drive Support

Removable Media	Quantity Supported	Drive Bay Supported
CD-ROM Drive	Up to 1	External MultiBay
DVD-ROM Drive	Up to 1	External MultiBay
DVD/CD-RW Combo Drive	Up to 1	External MultiBay
DVD+RW MultiBay	Up to 1	External MultiBay
1.44-MB Diskette Drive	Up to 1	External MultiBay

Secondary Hard Drives

80-GB 5400 rpm SMART Hard Drive	Up to 1	External MultiBay
60-GB 5400 rpm SMART Hard Drive	Up to 1	External MultiBay
40-GB 5400 rpm SMART Hard Drive	Up to 1	External MultiBay

Technical Specifications

System Unit	Dimensions (HxWxD)	12.1-inch TFT panel display	1.1 x 11 x 9.2 in (2.79 x 27.94 x 23.37 cm)
	Weight	3.5 lb (1.58 kg)	
	NOTE: * Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components.		
Stand-Alone Power Requirements	Nominal Operating Voltage (Li-Ion)		14.8 VDC
	Max Operating Power		40W
	Peak Operating Power		50W
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 wetbulb temperature
Shock	Operating		50g, 2ms, half-sine
	Non-operating		175g, 2ms, half-sine
Vibration	Operating		0.5 G zero-to-peak, 10 to 500 Hz, 0.25 Oct/min sweep rate
	Non-operating		1.0 G, zero-to-peak, 10 to 500 Hz, 0.5 Oct/min sweep rate
Random Vibration	Operating		0.75 grms
	Non-operating		1.50 grms
Altitude	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)
Maximum Altitude (unpressurized)	Operating		0 to 10,000 ft (0 to 3,048 m)
	Non-operating		0 to 30,000 ft (0 to 9,144 m)
Industry Standard Certifications	Blue Angel		No
	Energy Star Compliant		Yes
	UL		Yes
	CSA		Yes
	VDE/TUV		Yes
	Nordic Safety		Yes
	Mexican Safety		Yes
Poland Compliance		Yes	

External AC Adapter	Weight	0.65 lb (0.29 kg) (adapter)	
		0.29 lb (0.13 kg) (power cord)	
Power Supply (Input)	Operating Voltage		90 to 264 VAC RMS
	Operating Current		1.6 A RMS
	Operating Frequency Range		47 to 63 Hz AC

Technical Specifications

Primary Lithium-Ion Battery Pack	Dimensions (H x W x L)	0.9 x 2.48 x 8.15 in (2.3 x 6.3 x 20.7 cm)		
	Weight	0.62 lb (.28 kg)		
	Cells/Type	6-cell Lithium-Ion		
	Energy	Voltage	11.1 V	
		Amp-hour capacity	3.96 Ah	
		Watt-hour capacity	40Wh	
	Temperature	Operating	41° to 113° F (5° to 45° C)	
		Non-operating	-4° to 140° F (-20° to 60° C)	
	Battery Re-Charge Time	System in OFF mode or Standby	2-3 hours	
		System ON (depending on system power consumption)	2-5 hours	

Lithium-Ion Travel Battery Pack	Dimensions (H x W x L)	0.9 x 2.48 x 8.15 in (2.3 x 6.3 x 20.7 cm)		
	Weight (includes caddy)	0.86 lb (0.39 kg)		
	Cells/Type	6-cell Lithium-Ion		
	Energy	Voltage	11.1 V	
		Amp-hour capacity	3.96 Ah	
		Watt-hour capacity	40Wh	
	Temperature	Operating	41° to 113° F (5° to 45° C)	
		Non-operating	-4° to 140° F (-20° to 60° C)	
	Battery Re-Charge Time	System in OFF mode or Standby	2-3 hours	
		System ON (depending on system power consumption)	2-5 hours	

12.1-Inch Color TFT XGA Display	Dimensions (H x W x L)	10.3 x 7.8 in (26.1 x 19.9 cm)		
	Diagonal Size	12.1 in (30.7 cm)		
	Mounting	Internal		
	Number of Colors	16 M		
	Contrast Ratio	125:1		
	Refresh Rate	60 Hz		
	Brightness	130 nit typical		
	Pixel Resolution	Pitch	0.264 x 0.264 mm	
		Format	1024 x 768	
		Configuration	RGB Stripe	
	Backlight	CCFT		
	Character Display	80 x 25		
	Total Power Consumption	4 W		
Viewing Angle	±35° degrees Horizontal, +15°/-35° Vertical (typical)			

Technical Specifications

Hard Drives

80-GB 5400 rpm	MultiBay Drive Adapter	Dimensions (H x W x D)	1.27 x 13.25 x 12.61 cm (0.5 x 5.21 x 4.97 in)
		Weight	0.15 lb (68 g)
	Drive Weight	0.22 lb (98 g)	
	Capacity	80 GB	
	Height	0.37 in (9.5 mm)	
	Width	2.75 in (70 mm)	
	Interface	ATA-6	
	Transfer Rate	Synchronous (maximum)	100 MB/s (Drive Capability)
	Seek Time	Single Track	3 ms
	(typical reads, including settling)	Average	13 ms
		Maximum	24 ms
	Rotational Speed	5400 rpm	
	Logical Blocks	156,301,488	
	Operating Temperature	41° to 131° F (5° to 55° C)	
Features	Security	ATA Security	

60-GB 5400 rpm	MultiBay Drive Adapter	Dimensions (H x W x D)	1.27 x 13.25 x 12.61 cm (0.5 x 5.21 x 4.97 in)
		Weight	0.15 lb (68 g)
	Drive Weight	0.22 lb (98 g)	
	Capacity	60 GB	
	Height	0.37 in (9.5 mm)	
	Width	2.75 in (70 mm)	
	Interface	ATA-5	
	Transfer Rate	Synchronous (maximum)	100 MB/s (Drive Capability)
	Seek Time	Single Track	3 ms
	(typical reads, including settling)	Average	13 ms
		Maximum	24 ms
	Rotational Speed	5400 rpm	
	Logical Blocks	117,210,240	
	Operating Temperature	41° to 131° F (5° to 55° C)	
Features	Security	ATA Security	

Technical Specifications

40-GB 5400 rpm MultiBay Drive Adapter	Dimensions (H x W x D)	1.27 x 13.25 x 12.61 cm (0.5 x 5.21 x 4.97 in)	
	Weight	0.15 lb (68 g)	
	Drive Weight	0.22 lb (99 g)	
	Capacity	40 GB	
	Height	0.37 in (9.5 mm)	
	Width	2.75 in (70 mm)	
	Interface	ATA-5	
	Transfer Rate	Synchronous (maximum) 100 MB/s (Drive Capability)	
	Seek Time (typical reads, including settling)	Single Track	3 ms
		Average	13 ms
		Maximum	24 ms
	Rotational Speed	5400 rpm	
	Logical Blocks	78,140,160	
	Operating Temperature	41° to 131° F (5° to 55° C)	
	Features	Security ATA Security	

24X/24X/24X/8X DVD/CD-RW Combo Drive	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)
		Weight	0.74 lb (0.33 kg)
	Center Hole Diameter	39 mm	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	0.74 μm	
	Access Times (typical reads, including settling)	Random CD	< 150 ms
		Full-Stroke CD	< 225 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	
	Data Transfer Rate (typical, including settling)	CD-R (24X)	3600 KB/s (150 KB/s at 1X CD rate)
		CD-RW (24X)	3600 KB/s (150 KB/s at 1X CD rate)
		CD-ROM (24X)	3600 KB/s (150 KB/s at 1X CD rate)
		DVD (8X)	10,800 KB/s (1352 KB/s at 1X DVD rate)
		Normal PIO Mode 4 (single burst)	16.6 MB/s
Start-up Time	< 15 seconds		
Stop Time	< 6 seconds		

Technical Specifications

24X CD-ROM Drive	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)
		Weight	0.50 lb (0.22 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	15 mm	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	1.6 μ m	
	Access Times	Random	< 150 ms
	(typical reads, including settling)	Full-Stroke	< 300 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB	
	Data Transfer Rate	Sustained (16X)	2400 KB/s
	(typical, including settling)	Variable	1500 to 3600 KB/s (10X to 24X)
		Normal PIO Mode 4 (single burst)	16.66 MB/s
	Start-up Time	< 8 seconds	
	Stop Time	< 4 seconds	

8X DVD-ROM Drive	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)
		Weight	0.66 lb (0.3 kg)
	Center Hole Diameter	1.5 cm	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	0.74 μ m	
	Access Times	Random (typical)	< 150 ms DVD Media
	(typical reads, including settling)	Full-Stroke (typical)	< 225 ms DVD Media
		Random (typical)	< 110 ms CD Media
		Full-Stroke (typical)	< 200 ms CD Media
	Cache Buffer	512 KB/s (minimum)	
	Data Transfer Rate	Max 24X CD	3600 KB/s (150 KB/s at 1X CD rate)
	(typical, including settling)	Max 8X DVD	10,800 KB/s (1352 KB/s at 1X DVD rate)
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 10 seconds	Single Session CD-ROM
	Stop Time	< 3 seconds	

Technical Specifications

DVD+RW Drive	Dimensions	0.5 x 5.46 x 5.23 in (1.35 x 13.88 x 13.28 cm)		
	Weight	0.551 lb (250 g)		
	Access Times	Random	<175 ms	CD
			<230 ms	DVD
		Full Stroke	<285 ms	CD
			<335 ms	DVD
	Max data transfer rate	24X – CD-ROM	3,600 KB/s	
		8X – DVD	10,800 KB/s	
		16X – CD-R	2,400 KB/s	
		8X – CD-RW	1,200 KB/s	
		4X – DVD+R	5,400 KB/s	
		2X – DVD+RW	2,700 KB/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			
Supported Media (write)	CD-R, CD-RW, DVD+R, DVD+RW			
Media Capacity (read)	4.7 GB			
Media Capacity (write)	4.7 GB			
Transport	Tray Loading			

MultiBay Diskette Drive	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)	
		Weight	0.51 lb (230 g)	
	Diskette Size	3.5 in		
	Height	12.7 mm		
	Bytes per Sector	512		
	Sectors per track	High density	18 (1.44 MB)/15 (1.2 MB)	
		Low density	9	
	Tracks per side	High density	80 (1.44 MB)/80 (1.2 MB)	
		Low density	80	
	Read/Write heads	2		
	Access Times	Track-to track (high/low)	3 ms/6 ms	
		Average (high/low)	94 ms/174 ms	
		Settling time	15 ms	
Latency average		100 ms		

Audio

Technical Specifications

Hardware	Implementation	AC97 CODEC
	Audio Signal Link to CPU	Audio CODEC (AC) link
	Full Duplex	Yes
	Stereo Inputs	Line In – 20K Impedance (with Port Replicator only)
	Mono Inputs	Microphone – 20K Impedance
	Stereo Outputs	Headphone jack, S/PDIF from Port Replicator only
Audio Output Quality	Frequency Response	20 Hz – 20 kHz
	Signal to Noise Ratio	>94dB
	Total Harmonic Distortion	0.01%
	Noise Floor	-120dB
	Play/Record Sampling Rate(s)	7 kHz – 48 kHz
	AD/DA Resolution	16 bit
Mono Speaker	Amplifier Power	2-Watts RMS
	Speaker Impedance	4-Ohms
Integrated 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 1.1a compliant – multiple power modes Situation-sensitive features reduce power consumption NIC Battery Saving Mode (enabled by default)
	Performance Features	TCP/IP/UDP Checksum Offload (configurable) Microsoft Large Send Offload (configurable) TCP Segmentation Offload CPU Task Offload Adaptive Interrupts
	Manageability	Wake-on-LAN from all Power-Managed States (configurable; Magic Packet and Microsoft Wake-Up Frame) PXE 2.0 Remote Boot Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite Cable Analyzer
	NIC Device Driver Name	Broadcom NetXtreme Gigabit Ethernet
	Drivers Available	Windows XP Windows 2000 Linux kernel versions 2.2 and 2.4

Technical Specifications

Agere Systems AC'97 Modem	Form Factor	MDC 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	High speed 56K Modem (a-law, mu-law) V.8bis V.80 V.44, V.42bis, 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: 3600, 31200 Automatic rate re-negotiation V.32bis V.32 V.23 V.22bis V.22 V.21 Bell 212A Bell 103J (300 bps)
Fax Mode Capabilities	TIA-578-S (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	

Technical Specifications

Configuration Utility

Choice of Configuration Utility:

- Atheros Client Utility 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

HP W500 802.11a/b/g WLAN

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 (details available at <http://www.hp.com/go/notebooks/wlan>)

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); more details available at 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 Models

Ad-hoc (Peer to Peer)
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 (max)
Receive: 1.5 W (max)
Sleep mode: 20 mW (max)

Power Management

ACPI compliant power management
802.11 Compliant Power Saving Mode
Power Saving Mode selectable through the configuration utility

Receiver Sensitivity₁

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

Antenna type

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

Technical Specifications

Range	802.11 a - Typical	500 feet – Outdoors Open Area 150 feet – Indoor, Office-environment
	802.11 b - Typical	1200 feet – Outdoor Open Area 300 feet – Indoor, Office environment
	802.11 g - Typical	1000 feet – Outdoor Open Area 200 feet – Indoor, Office environment
Form Factor	MiniPCI Type IIIA	
Weight	0.036 lb (16.5 gm)	
Dimensions	0.19 x 2.00 x 2.35 in (4.8 x 50.95 x 59.75 mm)	
Operating Voltage	3.3v	
Temperature	Operating	32° to 122° F (0° to 50° C)
	Non-operating	-14° to 158° F (-10° to 70° C)
Humidity	Operating	10% to 90%
	Non-operating	5% to 95%
Altitude	Operating	0 to 15,000 ft (4,572 m)
	Non-operating	0 to 40,000 ft (12,192 m)
Configuration Utility	Choice of Configuration Utility: <ul style="list-style-type: none"> • Atheros Client Utility 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

Intel PRO/Wireless 2100 802.11b WLAN	Wireless LAN Standards	IEEE 802. Part 11b (802.11b)	
	Interoperability	Wi-Fi certified	
	Frequency Band	2.4 GHz	
	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)	
	Sub-channels	Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program). 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 802.11b access points.	
	Output Power	16 dBm (typical)	
Power Consumption	Transmit: 2.0 Watts (max)		
	Receive: 1.75 Watts (max)		
	Sleep mode: 200mW, nominal		

Technical Specifications

Power Management	ACPI compliant power management 802.11 Compliant Power Saving Mode
Receiver Sensitivity ¹	11 Mbps: -82 dBm to 1 Mbps: -89 dBm
Antenna type	High efficiency dual band antenna with polarization diversity, mounted in the display enclosure
Range	802.11 b - Typical 1200 feet – Outdoor Open Area 300 feet – 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
Temperature	Operating 32° to 158° F (0° to 70° C) Non-operating -14° to 176° F (-40° to 80° C)
Humidity	Operating 0% 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)
Configuration Utility	Choice of Configuration Utility: <ul style="list-style-type: none">• Intel ProSet for Microsoft Windows 2000 or XP (required for Cisco Compatible Extensions support)• Microsoft Windows XP Wireless Zero Configuration Utility
LED Activity	LED Off – Radio OFF; Solid LED – Radio ON

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

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/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
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/notebooks/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 Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
Roaming	IEEE 802.11 compliant roaming between access points.

Technical Specifications

Output Power	16 ± 2 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	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)
Dimensions	0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)
Operating Voltage	3.3v
Temperature	Operating 32° to 158° F (0° to 70° C) Non-operating -40° to 176° F (-40° to 80° C)
Humidity	Operating 0 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)
Configuration Utility	Choice of Configuration Utility: <ul style="list-style-type: none">• 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

Agency Approvals Details at <http://www.hp.com/go/notebooks/wlan>

*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).

Bluetooth by HP

Form Factor	Integrated USB module
Bluetooth	1.1 Compliant
Dimensions	1.02 x 0.55 x 0.22 in (26 x 14 x 5.7 mm)
Temperature	Operating -4° to 158° F (-20° to 70° C) Non-operating -40° to 176° F (-40° to 80° C)
Humidity	Operating 10% to 90% Non operating 5% to 95%
Altitude	Operating 15,000 ft (4572 m) Non-operating 40,000 ft (12192 m)

Technical Specifications

Plug and Play	USB 1.1 compliant Microsoft Windows Plug and Play compliant
Frequency Band	2402 to 2480 MHz
Number of Available Channels	79 (1 MHz) available channels
Data Rates and throughput	1 Mbps 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 symmetric
Antenna type	Internally integrated within module
Range	33 ft (10 m)
OS Support	Microsoft Windows XP Professional and Home Microsoft Windows 2000
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
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

Technical Specifications

	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 Sensitivity	Better 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
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 Blue LED – On LED Off – Power Off
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

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