

Overview

What's New

- Mobile Intel® Pentium® III up to 1.2 GHz-M processor
- ATI Mobility Radeon with 16-MB DDR SDRAM
- USB 2.0
- Optional External MultiBay

At A Glance

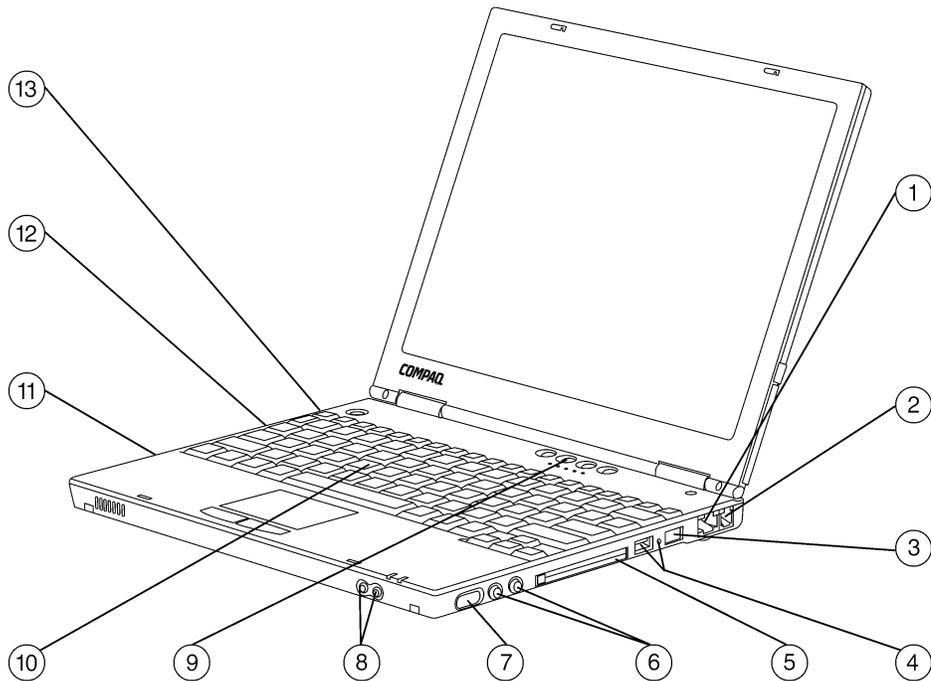
- Weighs only 3.5 lb/1.59 kg
- Less than 1 in/2.3 cm thin
- 12.1-inch XGA TFT display
- 256-MB SDRAM upgradeable to 1024 MB
- Up to 30-GB User removable SMART hard drives
- Integrated mini PCI 56K V.90/V.92 modem plus 10/100 NIC
- Complete set of system ports
- Microsoft® Windows® XP Professional Edition or Microsoft Windows 2000 preinstalled
- Protected by a Three-year, Worldwide Limited Warranty

NOTE: Certain restrictions and exclusions apply. For details, consult the Product Information Centre at 1-888-882-6672.

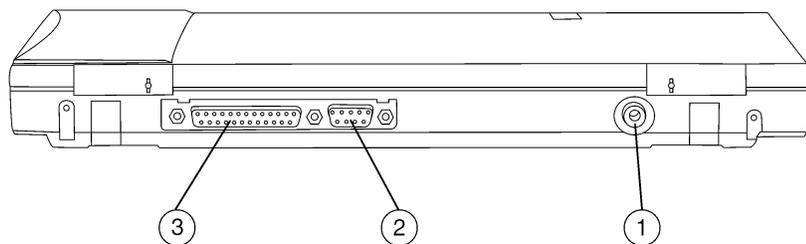
What's Special

- Ultra-light weight – 3.5 lb/1.59 kg
- Innovative MultiPort
- Full sized keyboard
- Support for up to four batteries*
- Self-powered External MultiBay, which provides a cost effective and travel friendly way to access MultiBay drives.
- Optional Mobile Expansion Unit providing Multimedia, NIC pass through, storage and enhanced security features
- Magnesium display enclosure
- Industry leading PC lifecycle solutions

NOTE: * = Requires optional MEU.



- | | |
|---|-----------------------------|
| 1. RJ-45 (NIC) | 8. External Volume Controls |
| 2. RJ-11 (Modem) | 9. Easy Access Buttons |
| 3. Infrared Port | 10 Full Size Keyboard |
| 4. Powered USB port for External MultiBay | 11. Cable Lock Slot |
| 5. PC Card Slot (1) | 12. USB |
| 6. Headphone/Microphone Jacks | 13. VGA Out |
| 7. Power | |



- | | |
|-----------|-------------|
| 1. TV Out | 3. Parallel |
| 2. Serial | |

Standard Features

Processor and Panel	<p>1.2 GHz-M Mobile Intel Pentium III processor with 512-KB L2 cache 1.0 GHz-M Mobile Intel Pentium III processor with 512-KB L2 cache 12.1-inch TFT XGA display with 1024x768 resolution up to 16.7M colours</p>	
NOTE: Mobile Intel Pentium III-M processors support enhanced Intel SpeedStep™ technology.		
Memory	<p>Standard 256-MB (133-MHz) SDRAM Maximum 1024-MB (133-MHz) SDRAM (with two slots)</p>	
NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only Compaq branded memory modules to ensure compatibility.		
Communications	<p>Type III Mini PCI 56K (V.90/V.92) modem plus 10/100 NIC Combo</p>	
NOTE: Designed only to allow faster downloads from V.90/V.92 compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions.		
NOTE: Communication availability is subject to country regulatory approval.		
Keyboard	<p>Full size desktop compatible keyboard, special feature hotkeys for instant access to power conservation, QuickLock/QuickBlank (ex: FN+F6), toggle between internal and external, or simultaneous displays, battery gauge, MultiPort on/off, speaker volume control, and brightness</p>	
Easy Access Internet Buttons	<p>The <i>Evo</i>™ Notebook N410c comes with four Easy Access Buttons designed to increase customer productivity by providing one-touch access to helpful Compaq information, favorite Internet destinations, files, or applications.</p>	
Pointing Device	<p>Touchpad</p>	
PC Card Slots	<p>One Type II PC Card Slot that supports both 32-bit CardBus and 16-bit PCMCIA Cards</p>	
Storage	<p>Diskette Drives</p>	<p>Optional Diskette Drive*</p>
	<p>Optical Drives</p>	<p>DVD/CD-RW Combo Drive* CD-RW Drive* DVD-ROM Drive* CD-ROM Drive*</p>
	<p>Hard Drive</p>	<p>40-GB SMART</p>
NOTE: * = Requires optional Mobile Expansion Unit (MEU) or External MultiBay.		
Multimedia	<p>Compaq <i>Premier•Sound</i>™ for enhanced stereo audio (with optional MEU) Integrated 16-bit Sound Blaster Pro-compatible stereo audio Integrated speaker and microphone External volume controls Headphone-out Microphone in Software MPEG1 support DVD movie playback software DVD-ROM Drive with DVD movie playback* DVD/CD-RW Combo Drive* CD-ROM Drive* 4X AGP graphics 16-MB DDR SDRAM</p>	
NOTE: * = Requires optional Mobile Expansion Unit (MEU) or External MultiBay.		

Standard Features

Interfaces	MultiPort	1
	PC Card Slot	One Type II
	Enhanced Parallel Port EPP/ECP	1
	Serial Port	1
	External Monitor	1
	TV-out	1
	Headphone/Line-out	1
	Microphone in	1
	AC Power	1
	RJ-11 (modem)	1 (Model dependent)
	RJ-45 (NIC)	1 (Model dependent)
	Infrared Port	1 (4 Mb/s support) (IrDA 4 MB compliant. IR performance will vary depending on performance of IR peripherals and application used.)
	USB Port	2
	LED Status Indicators	7
Graphics	ATI Mobility Radeon M6 with 16-MB DDR SDRAM	
Display (External)	Up to 32-bit per pixel colour 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 colour depth settings	
Display (Internal)	12.1-inch TFT XGA display with 1024 x 768 resolution up to 16.7M colours	
Operating System <i>One of the following</i>	Microsoft Windows XP Professional Edition Microsoft Windows 2000 NOTE: Driver support for Microsoft Windows 98 SE and Microsoft Windows NT® 4.0.	
Software	Compaq Management Agents Diagnostics for Microsoft Windows DVD Playback Software (with optional MEU) Altiris eXpress™ Client Compaq Health and Support Guide Compaq Info Centre Guide	
System Recovery	Each unit is shipped with a CD (kit) for quick recovery (erases hard disk and restores manufacturer installed image) and software recovery (installs only selected standard software).	
Intelligent Manageability	Compaq Intelligent Manageability, a key component of PC Lifecycle Solutions, is the broad set of manageability features found on Compaq <i>Deskpro</i> ™ EN desktops, <i>Armada</i> ™ notebooks, <i>Evo</i> Clients, Professional Workstations, <i>iPAQ</i> ™ Deskside and <i>ProLiant</i> ™ server products. These best-in-class features on PC clients comply with industry standards, such as DMI and Wired for Management, while pioneering new ground in client manageability. Compaq introduced the industry's first line of manageable clients in 1995 and has been driving the industry ever since. With Compaq's lifecycle management philosophy, enterprises have all of the pieces for end-to-end management and proven tools for hassle-free management of PCs. The combination of these tools will significantly lower the Total Cost of Ownership of managing the computing environment. Intelligent Manageability offers solutions in the areas of Initial Configuration and Deployment, Asset Tracking and Security, Software Updating and Management, and Fault Notification and Recovery. For more information, visit these Compaq websites: http://www.compaq.com/im ; http://www.compaq.com/easydeploy ; http://www.compaq.com/solutions/pcsolutions	

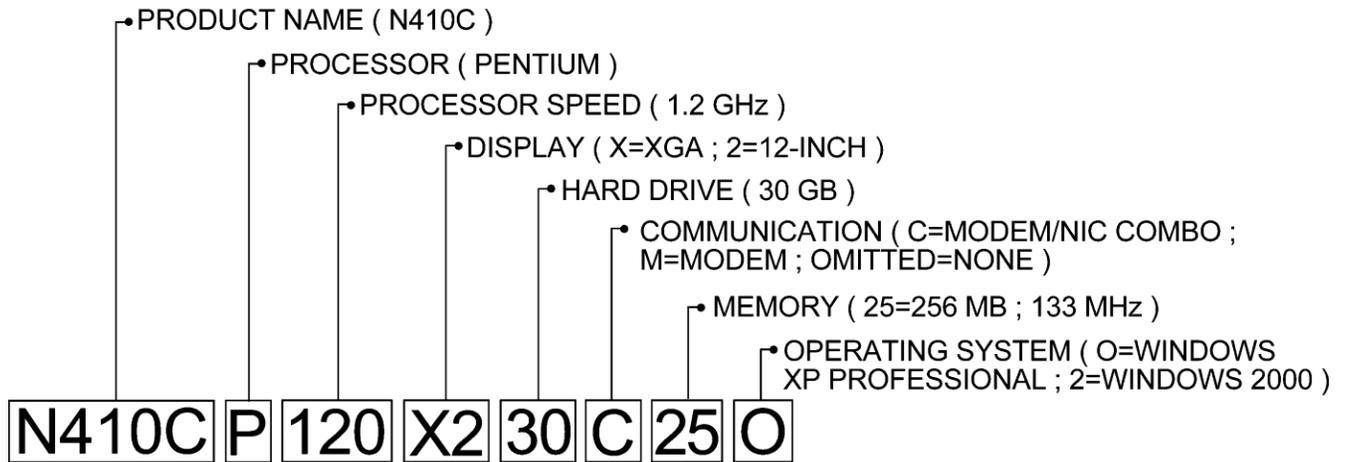
Standard Features

Security	Configuration Control Hardware Memory Change Alert Ownership Tag Setup Password Power-On Password DriveLock Enabled for PC SmartCard options Kensington Lock Slot
Power Supply	External AC (65 Watt) adapter (only 0.62 lb/0.28 kg, 6-foot/1.8 metre) power cord included. Total length including External AC adapter is 12 feet/3.66 metre
Battery	<p>The <i>Evo</i> Notebook N410c 4-cell internal (main) Lithium-Ion battery provides over two hours of battery life; over four hours achieved using optional external battery.</p> <p>NOTE: Actual results may vary with product model, configuration, and individual usage. Compaq results of 2:20 (hr:min) were achieved running the eTesting Labs Inc.'s Business Winstone 2001 BatteryMark™ Test version 1.0.1 on an N410c with an Intel Pentium III 1.2 GHz CPU, 12.1-inch XGA panel, 256-MB RAM, 30-GB HDD, 4-cell Lithium-Ion battery, and combination NIC/modem. System parameters were set according to Ziff Davis recommendations: panel brightness 50%, hard drive, standby and video idle time set to never, laptop power management scheme.</p> <p>NOTE: This test was performed without independent verification by eTesting Labs Inc. eTesting Labs Inc. makes no representations or warranties as to the result of the test. BatteryMark is a trademark of Ziff Davis Publishing Holdings Inc., and affiliate of eTesting Labs Inc., in the U.S. and other countries.</p>
Power Conservation	Supports enhanced Intel SpeedStep technology (allows a Battery Optimized Mode where CPU draws 50% of normal power yet affords 70 to 80% of maximum PIII processing speed) Hibernation Instant-on via Standby Pop-ups with three presets One custom level of power conservation ACPI compliant
MultiBay Devices (requires optional MEU)	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). MultiBay devices can be swapped with system power off under any supported operating system.
MultiPort	MultiPort is a flexible, innovative solution providing customers the ability to connect to their choice of wireless standards such as 802.11b or Bluetooth™. This can be achieved by simply changing out the high-performance wireless module, which is integrated into the top of the notebook. The award-winning MultiPort offers a cost effective means to migrate to future wireless standards as they become available.
Docking/System Expansion	The optional Mobile Expansion Unit (MEU) with NIC pass through extends the capabilities of the <i>Evo</i> Notebook N410c by adding dual MultiBay support, network connectivity, full port replication, and stereo speakers. The MultiBays in the MEU accept all common <i>Evo</i> series MultiBay drives and devices. The External MultiBay is a cost effective, travel friendly USB based alternative to the MEU which provides access to one MultiBay device. NOTE: The N410c is not compatible with Compaq docking solutions. Docking functionality is provided via the MEU.
Service and Support	Compaq Services includes a Three-year, Worldwide Limited Warranty, pick-up or carry-in, toll-free 7 x 24 hardware technical phone support. Optional services include upgrade to Three-year Standard Warranty, Onsite Warranty, or Application and Operating System Support. Compaq Services includes a One-year Limited Warranty, whole-unit replacement through second business day, and pick-up and delivery. (Optional services include a one-year warranty extension <i>CarePaq</i> ™ (FM-AMMAI-36 or 400514-002). Optional services include a three, four or five-year warranty extension <i>CarePaq</i> (179404-022, 200786-022, 200787-022). NOTE: Certain restrictions and exclusions apply. For details, consult the Product Information Centre at 1-888-882-6672. http://www.compaq.com/support/warranty_upgrades/product_specific_warranty.html

Standard Features

Naming Convention

The Etymology of a Model name:



Standard Features

MODELS

N410CP120X230C250

P/N 470037-550

French P/N 470037-557

Display	12.1-inch colour TFT XGA
Processor	1.2 GHz-M Mobile Intel Pentium III
Cache Memory	512-KB, L2 Cache
Memory	Standard 256-MB SDRAM Maximum 1024-MB SDRAM
Optical Drive	None
Hard Drive	30-GB SMART
Modem	Type III Mini PCI 56K (V.90/V.92) modem plus 10/100 NIC Combo
Graphics	ATI Mobility Radeon 16-MB SDRAM
Audio	Compaq <i>Premier•Sound</i>
Operating System	Microsoft Windows XP Pro
Pointing Device	Touchpad
Warranty	3 Year Parts, 3 Years Labour, 0 Years On-Site (3-3-0)

N410CP120X230C252

P/N 470037-662

French P/N 470037-663

Display	12.1-inch colour TFT XGA
Processor	1.2 GHz-M Mobile Intel Pentium III
Cache Memory	512-KB, L2 Cache
Memory	Standard 256-MB SDRAM Maximum 1024-MB SDRAM
Optical Drive	None
Hard Drive	30-GB SMART
Modem	Type III Mini PCI 56K (V.90/V.92) modem plus 10/100 NIC Combo
Graphics	ATI Mobility Radeon 16-MB SDRAM
Audio	Compaq <i>Premier•Sound</i>
Operating System	Microsoft Windows 2000
Pointing Device	Touchpad
Warranty	3 Year Parts, 3 Years Labour, 0 Years On-Site (3-3-0)

N410CP100X220C250

P/N 470039-997

French P/N 470040-006

Display	12.1-inch colour TFT XGA
Processor	1.0 GHz-M Mobile Intel Pentium III
Cache Memory	512-KB, L2 Cache
Memory	Standard 256-MB SDRAM Maximum 1024-MB SDRAM
Optical Drive	None
Hard Drive	20-GB SMART
Modem	Type III Mini PCI 56K (V.90/V.92) modem plus 10/100 NIC Combo
Graphics	ATI Mobility Radeon 16-MB SDRAM
Audio	Compaq <i>Premier•Sound</i>
Operating System	Microsoft Windows XP Pro
Pointing Device	Touchpad
Warranty	3 Year Parts, 3 Years Labour, 0 Years On-Site (3-3-0)

Standard Features

MODELS *(continued)*

N410CP100X220C252

P/N 470040-148

French P/N 470040-149

Display	12.1-inch colour TFT XGA
Processor	1.0 GHz-M Mobile Intel Pentium III
Cache Memory	512-KB, L2 Cache
Memory	Standard 256-MB SDRAM
	Maximum 1024-MB SDRAM
Optical Drive	None
Hard Drive	20-GB SMART
Modem	Type III Mini PCI 56K (V.90/V.92) modem plus 10/100 NIC Combo
Graphics	ATI Mobility Radeon 16-MB SDRAM
Audio	Compaq <i>Premier•Sound</i>
Operating System	Microsoft Windows 2000
Pointing Device	Touchpad
Warranty	3 Year Parts, 3 Years Labour, 0 Years On-Site (3-3-0)

NOTE: Mobile Intel Pentium III-M processors support enhanced Intel SpeedStep™ technology.

Options

Memory	512-MB (133 MHz) Memory Upgrade	238830-B25
	256-MB (133 MHz) Memory Upgrade	197898-B25
	128-MB (133 MHz) Memory Upgrade	197897-B25
	64-MB (133 MHz) Memory Upgrade	197986-B25
<p>NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only Compaq branded memory modules to ensure compatibility.</p>		
Monitors	TFT8030 Flat Panel Colour 18-inch (carbon/silver)	234362-001
	TFT7020 Flat Panel Colour 17-inch with integrated speakers (carbon/silver)	253217-001
	TFT5017 Flat Panel Colour 15-inch (carbon/silver)	263874-003
	TFT5017m Flat Panel Colour 15-inch multimedia flat panel (carbon/silver)	279414-001
	TFT5030 Flat Panel Colour 15-inch (carbon/silver)	228134-001
	S9500 19-inch CRT (carbon/silver)	261615-003
	V7550 17-inch CRT (carbon/silver)	261611-003
MultiBay Hard Drives	40-GB SMART Hard Drive	263472-B25
	30-GB SMART Hard Drive	212791-B25
MultiBay Storage Devices	8X DVD/CD-RW Combo Drive	260472-B25
	8X DVD-ROM Drive	138230-B25
	16X CD-RW Drive	269088-B25
	24X CD-ROM Drive	298452-B25
	1.44-MB Diskette Drive	226935-B25
Other Storage Devices	IBM® 1-GB Microdrive™ (PC card Device)	217390-B25
	USB Disk-on-Key – 8 MB	249552-B25
	USB Diskette drive	230330-B25
	Parallel port cable for diskette drive	226748-B21
	<p>NOTE: The <i>Evo</i> Notebook N410c requires optional Mobile Expansion Unit or external MultiBay to utilize MultiBay Storage Devices.</p>	
Mobile Expansion Unit (MEU)	External MultiBay (USB 2.0)	217388-001
	Mobile Expansion Unit (N410c) without MultiBay devices	286255-B25
<p>NOTE: * = Data transfer rates will vary from 150 KB/s to 3600 KB/s.</p>		
Wireless Connectivity	MultiPort 802.11b Wireless LAN W200 module	283836-001
	Bluetooth MultiPort module	228057-B21
	Compaq WL110 Wireless LAN PC Card	191808-B21
	Compaq WL510 Wireless Enterprise Access Point	216709-001
	Compaq WL410 Wireless SMB Access Point	191811-001
	Compaq WL310 Home Office Access Point	191813-001
	Compaq Range Extender Antenna	230268-B21
Power	4-cell primary Lithium-Ion battery (internal)	232593-B25
	4-cell secondary Lithium-Ion battery (external)	236309-B25
	4-cell secondary Lithium-Ion high capacity travel battery (external)	236310-B25

Options

Common Power Solutions	MultiBay Battery (8-cells)*	265650-B25
	External Battery Charger **	135555-001
	AC Adapter 65W	265602-001
	Auto Power Adapter/Charger 65W	265649-B25
	Aircraft Power Adapter	386504-B21
	AC Line Cord (3.1 m/10-ft)	217932-002
	NOTE: * = Use of this option with the <i>Evo</i> Notebook N400c/410c requires the optional Mobile Expansion Unit (MEU).	
NOTE: MultiBay Battery only functions in the optional MEU and will not function in the external MultiBay.		
NOTE: ** = The Universal Battery Charger will charge the N400c/410c external secondary handle batteries. It will <u>not</u> charge the N400c/410c internal primary battery.		
Input Devices	External Enhanced III Keyboard (carbon)	118003-008
	Compaq 2 Button Mouse (carbon)	103180-B21
	USB 2 Button Scroll Mouse (carbon)	195255-B25
	External 10-Key Numeric Keypad (carbon)	294317-B21
	USB EZ Access Keyboard	222726-008
	Wireless Keyboard and Mouse	251385-008
Security	Biometric PC Card	146805-B25
	Security Cable Lock	294316-B21
	Compaq Smart Card PC Card Reader	135646-B25
Useful Accessories	Compaq iPAQ Microportable Projector MP1200	261966-001
	Compaq iPAQ Microportable Projector MP3800	262839-001
	Compaq iPAQ Microportable Projector MP4800	257524-001
	Lamp Module L20 for MP1200	266631-B24
	Lamp Module L30 for MP3800	266633-B24
	Home Theatre Kit HT150 for MP3800	292187-B24
	Carrying Case for MP1200	295731-B24
	Lamp Replacement Kit for MP1600	118052-001
	Lamp Module for MP1800, MP1400	189789-001
	Lamp Module for MP2800, MP2810	215464-001
	Home Theater Kit HT110 for MP1410	246161-001
	Multimedia Adapter & Remote Control Kit MMA110 for MP1410	246162-001
	Multimedia Adapter & Remote Control Kit for MP1400, MP1800	174963-001
	Deluxe Carrying Case for MP Series projectors	253364-001
	Lamp Module for MP1410, MP1810	253365-001
	Lamp Module L90 for MP4800	257892-001
	Home Theater Kit HT180 for MP1200, MP4800	281729-001
	CeilingMount Kit CM10 for MP1200, MP4800	281730-001
	hp digital projector sb21	L1510A
	hp digital projector xb31	L1511A
	Ceiling Mount Kit for xb31	L1513A
	M1-A to component/USB video cable for sb21, xb31	L1523A
	M1-D to DVI/USB cable for sb21, xb31	L1529A
Lamp Module for sb21	L1515A	
Lamp Module for xb31	L1516A	

Options

Carrying Cases	Compaq Ultralight Case (nylon)	167336-B21
	Compaq Ultralight Case (leather)	242359-B25
	Compaq Plus Case	242360-B25
	Compaq Professional Case (nylon)	242361-B25
	Compaq Professional Case (leather)	242362-B25
	<i>Evo Notebook N410c, N400c, N610c, and Armada M300 and M700 specific</i>	
Compaq M Series Portfolio Case	167337-B21	

Memory

Compaq *Evo* Notebook N410c

STANDARD MEMORY

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 512-MB of SDRAM is available with the installation of optional SDRAM Memory Upgrades.

Up to	Slot 1	Slot 2
256 MB	256 MB	Empty
384 MB	256 MB	128 MB
512 MB	256 MB	256 MB
768 MB	256 MB	512 MB
1024 MB	512 MB	512 MB

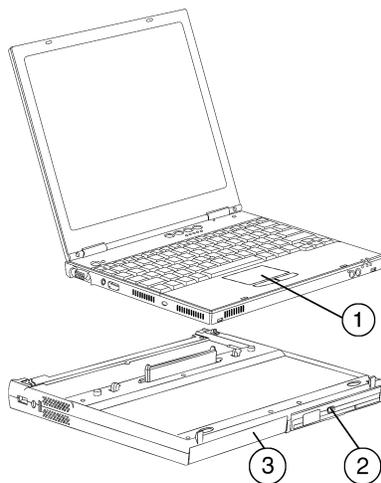
NOTE: This chart does not represent all possible memory configurations. Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only Compaq branded memory modules to ensure compatibility.

Following are memory options available from Compaq:

512-MB (133-MHz) Memory Upgrade	238830-B25
256-MB (133-MHz) Memory Upgrade	197898-B25
128-MB (133-MHz) Memory Upgrade	197897-B25

NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only Compaq branded memory modules to ensure compatibility.

Storage



1. Hard Drive
2. MultiBay
3. MultiBay

DRIVE SUPPORT

System Drive Support

Removable Media	Quantity Supported	Drive Bay Supported
1.44-MB Diskette Drive (optional)	Up to 1	External connects via parallel port
Hard Drives		
40-GB SMART Hard Drive	Up to 1	Hard Drive Bay

MEU DRIVE SUPPORT

Removable Media	Quantity Supported	Drive Bay Supported
8X DVD/CD-RW Combo Drive	Up to 2	MultiBay
8X DVD-ROM Drive	Up to 2	MultiBay
16X CD-RW Drive	Up to 2	MultiBay
24X CD-ROM Drive	Up to 2	MultiBay
1.44-MB Diskette Drive	Up to 1	MultiBay
Secondary Hard Drives		
40-GB SMART Hard Drive	Up to 2	MultiBay
30-GB SMART Hard Drive	Up to 2	MultiBay

Technical Specifications

System Unit	Dimensions (H x W x D)	12.1-inch TFT panel display	0.89 x 10.5 x 9.5 in/2.2 x 26.6 x 24.2 cm
	Weight	Minimum/Maximum	3.5 lb/1.58 kg
Stand-Alone Power Requirements	Nominal Operating Voltage (Li-Ion)		14.8 VDC
	Maximum 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 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 (unpressurized)	Operating		0 to 10,000 ft/3,048 m (14.7 to 10.1 psia)
	Non-operating		0 to 30,000 ft/9,144 m (14.7 to 4.4 psia)

12.1-Inch Colour TFT XGA Display Dimensions (H x W)	10.3 x 7.8 in/26.1 x 19.9 cm	
Diagonal Size	12.1 in/30.7 cm	
Mounting	Internal	
Number of Colours	16M	
Contrast Ratio	125:1	
Refresh Rate	60 Hz	
Brightness	130 nit typical AC only/70 on battery/115 nit minimum	
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	4W	

Technical Specifications

Hard Drives

40 GB

MultiBay Drive Adapter	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	0.15 lb/70 g
Drive Weight		0.21 lb/95 g
Capacity		40 GB
Height		0.374 in/9.5 mm
Width		2.75 in/70 mm
Interface		ATA-5
Transfer Rate	Synchronous (maximum)	100 MB/s (Drive Capability)
	Security	ATA Security
Seek Time (typical reads, including settling)	Single Track	3 ms
	Average	13 ms
Rotational Speed	4200 RPM	25 ms
Logical Blocks		78,140,160
Operating Temperature		41° to 131° F/5° to 55° C
Features	Security	ATA Security

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
	Operating Frequency Range	47 to 63 Hz AC
	Maximum Transient	4/50 kV

Internal Lithium-Ion Battery Pack

Weight		0.49 lb/0.22 kg
Cells		4-cell Lithium-Ion
Energy	Voltage	14.4 V
	Amp-hour capacity	1.96 Ah
	Watt-hour capacity	28Wh
Temperature	Operating	41° to 95° F/5° to 35° C
	Non-operating	-4° to 140° F/-20° to 60° C
Battery Re-Charge Time	System in OFF mode or Standby	2 hours
	System ON (depending of system power consumption)	2-5 hours

Technical Specifications

Secondary Lithium-Ion Battery Pack	Dimensions (H x W x D)	0.9 x 10.47 x 0.9 in/2.3 x 26.6 x 2.3 cm		
	Weight	0.48 lb/0.21 kg		
	Cells	4-cell Lithium-Ion		
	Energy	Voltage	14.4 V	
		Amp-hour capacity	1.96 Ah	
		Watt-hour capacity	28Wh	
	Temperature	Operating	41° to 95° F/5° to 35° C	
Non-operating		-4° to 140° F/-20° to 60° C		

Secondary High Capacity Lithium-Ion Battery Pack	Dimensions (H x W x D)	1.8 x 10.6 x 1.2 in/4.6 x 26.6 x 2.3 cm		
	Weight	0.93 lb/0.42 kg		
	Cells	4-cell Lithium-Ion		
	Energy	Voltage	14.4 V	
		Amp-hour capacity	2.6 Ah	
		Watt-hour capacity	37.4 Wh	
	Temperature	Operating	41° to 95° F/5° to 35° C	
Non-operating		-4° to 140° F/-20° to 60° C		

MultiBay Lithium-Ion Battery Pack (8-cell)	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	1.03 lb / 0.47 Kg		
	Energy	Voltage	14.8 V	
		Amp-hour capacity	3.2 Ah	
		Watt-hour capacity	47.4 Wh	
	Temperature	Operating	32° to 122° F/0° to 50° C	
		Non-operating	32° to 140° F/0° to 60° C	
	Battery Re-Charge Time	System in OFF mode or Standby	2 hours	
		System ON	2 to 5 hours	
	Lifecycle	80% capacity after 300 full charge/discharge cycles, or 600 half discharge followed by a full charge cycles.		

Technical Specifications

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/0.34 kg
	Centre Hole Diametre	0.59 in/1.5 cm	
	Disk Diametre	12 cm/8 cm	
	Disk Thickness	0.047 in/1.2 mm	
	Track Pitch	0.74 µm	
	Access Times (typical reads, including settling)	Random	< 150 ms
		Full-Stroke	< 225 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	
	Data Transfer Rate (typical, including settling)	CD-R (8X)	1200 KB/s (150 KB/s at 1X CD rate)
		CD-RW (8X)	1200 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		

24X 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
	Centre Hole Diametre	3.9 cm	
	Disk Diametre	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 (10X)	1500 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

16X CD-RW 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
	Centre Hole Diametre	1.5 cm	
	Disk Diametre	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	0.74 µm	
	Access Times (typical reads, including settling)	Random	< 150 ms
		Full-Stroke	< 225 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	
	Data Transfer Rate (typical, including settling)	CD-R (16X)	2400 KB/s
		CD-RW (8X)	1200 KB/s
		CD-ROM (24X)	3600 KB/s
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 15 seconds	
Stop Time	< 6 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
	Centre Hole Diametre	1.5 cm	
	Disc Diametre	12 cm/8 cm	
	Disc Thickness	1.2 mm	
	Track Pitch	0.74 µm	
	Access Times (typical reads, including settling)	Random (typical)	< 150 ms DVD Media
		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 (typical, including settling)	Max 24X CD	3600 KB/s (150 KB/s at 1X CD rate)
		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

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	
	Centre Hole Diametre	15 mm	
	Disk Diametre	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	1.6 µm	
	Access Times (typical reads, including settling)	Random	< 150 ms
		Full-Stroke	< 300 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB	
	Data Transfer Rate (typical, including settling)	Sustained (16X)	2400 KB/s
		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		

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

Technical Specifications

802.11b MultiPort Module	Form Factor	Compaq "MultiPort"		
	Weight	0.22 lb/100 g (maximum)		
	Operating Temperature	Operating	14° to 149° F/-10° to 65° C	
	Storage Temperature	Non-operating	-40° to 176° F/-40° to 80° 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	
	Plug and Play	USB 1.1 compliant		
		Microsoft Windows Plug and Play compliant		
	RF Network Standard	IEEE 802 Part 11b (802.11b)		
	Frequency Band	2,4000 to 2.4835 GHz		
	Number of Selectable Sub-channels	Worldwide Certification		
		United States (FCC)	11	
	Data Rates	1, 2, 5.5, 11 Mbps		
	Antenna type	Internally integrated within module (with special polarization diversity)		
	WEP Security	64-bit encryption keys compliant to IEEE 802.11		
		128-bit encryption key compliant to IEEE 802.11		
		Ability to enter keys manually or via pass-phrase		
	Network Architecture Models	Ad-hoc (Peer to Peer)		
		Infrastructure (Access Points Required)		
	Modulation Technique	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK		
	Receiver Sensitivity – Bit Error Rate (1E-5)	11 Mbps: -85 dBm		
		5.5 Mbps: -87 dBm		
		2 Mbps: -91 dBm		
		1 Mbps: -94 dBm		
	Maximum Receive Level	-4 dBm		
	Output Power (approximately)	18 dBm		
	Operating Voltage	5V power operation		
	Power Management	Keystroke Fn+F2 Power On/Off control		
	Power Consumption	Transfer mode: < 600 mA, maximum		
		Receive mode: > 400 mA, maximum		
Standby mode: > 1 mA, maximum				
Transmit Power	10 to 100mW It is preferable to have the user configurable output power to save battery life for laptop users or in high AP coverage areas			
Power Saving Option	802.11 Compliant Power Saving			
	Power Saving Mode selectable through the configuration utility			
	ACPI compliant power management			
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK			
OS Support	Microsoft Windows 98/98SE			
	Microsoft Windows 2000			
	Microsoft Windows Millennium			
Protocols Supported	TCP/IP			
	IPX/SPX			
	UDP			
LED Activity	Flashing LED – AP Search Mode			
	Solid LED – On			
	LED Off – Power Off			

Technical Specifications

Throughput, Data Rate and Operating Distance	Throughput	Data Rate	Operating Distance
	> 4.5 Mbps	11 Mbps	<ul style="list-style-type: none"> • 1000 feet – Open sight • 100 feet – Closed space (Steel Space)
	> 2 Mbps	5.5 Mbps	<ul style="list-style-type: none"> • 1100 feet – Open sight • 200 feet – Closed space (Steel Space)
	> 700 Kbps	1 Mbps	<ul style="list-style-type: none"> • 1200 feet – Open sight • 300 feet – Closed space (Steel Space)

Bluetooth MultiPort Module	Form Factor	Compaq "MultiPort"	
	Bluetooth	1.1 Compliant	
	Dimensions	2.2 x 6.6 x 0.55 in/5.6 x 16.7 x 1.4 cm	
	Weight	0.22 lb/100 g (maximum)	
	Temperature	Operating	50° to 104°F/10° to 40°C
		Non-operating	-4° to 140°F/-20° to 60°C
	Humidity	Operating	10% to 90%
		Non-operating	5% to 95%
	Altitude	Operating	0 to 10,000 ft/3,048 m
		Non-operating	0 to 30,000 ft/9,144 m
	Plug and Play	USB 1.1 compliant	
		Microsoft Windows Plug and Play compliant	
	Frequency Band	2,4000 to 2.4835 GHz	
	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 (with special polarization diversity)	
	Range	328 ft/100 m	
	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	

Technical Specifications

Bluetooth MultiPort Module (<i>continued</i>) 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 GSM/SMS, PCS, PHS, DECT, RAM, ARDIS, CDPD, etc. 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
	Transmit Power < 20 dBm (Bluetooth Class 1)
	Receive Sensitivity Better than –70 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 < 1500 mW Average < 500 mW Standby < 250 mW
Power Management Microsoft Windows ACPI, and USB Bus Support Keystrokes Fn+F2 Power On/Off control Self configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff	
OS Support Microsoft Windows 98/98SE Microsoft Windows 2000 Microsoft Windows Millennium	
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	

Technical Specifications

Type III Mini PCI 56K (V.90/V.92) Modem plus 10/100 NIC Combo	Form Factor	Mini-PCI Type III per Specification
	OS Support (with all released Service Packs)	Microsoft Windows 98 (Gold, SE), Windows Millennium Edition, Windows NT 4.0, Windows 2000, Windows XP (Home, Professional), DOS Application Support under Windows
	Power Management Support	APM Revision 1.2, ACPI, Compaq Power Management Extensions for Microsoft Windows NT
	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 (a-law, mu-law) V.90 (a-law, mu-law) V.8bis V.80 V.44 bis, MNP5 (compression) 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: 3600, 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/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, +LIRR Modulation: +MS, +MR, +MA Error control: +ES, +ER, +EB, +ESR, +ETBM Data compression: +DS, +DR V.251

Technical Specifications

Type III Mini PCI 56K (V.90/V.92) Modem plus 10/100 NIC Combo <i>(continued)</i>	NIC Device Driver Name	Intel PRO/100 P Mobile Combo Adapter
	Data Link Layers	IEEE 802.2 LLC
		SNAP
	Ethernet Features	10 Mbps Ethernet: IEEE 802.3 standard 10BASE-T
		100 Mbps Ethernet: IEEE 802.3u standard 100BASE-TX
		Full Duplex at 10 and 100 Mbps
		Auto-Negotiation
		Wake on LAN from all power managed states, including soft off (S5)
		Boot on LAN from OFF
	Software support	Lower Power State on Link Loss
		IBM LAN Server Version 1.2, 1.3, 2.0, 4.0
		Microsoft Windows 98 SE, NT 4.0, 2000, XP (Home and Professional)
	Protocol support	Novell® Netware® 3.1x, 4.x, 5.x
TCP/IP		
Novell IPX/SPX and Microsoft compatible		
Novel IPX ODI		
Microsoft NetBEUI		
	IBM DLC	

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