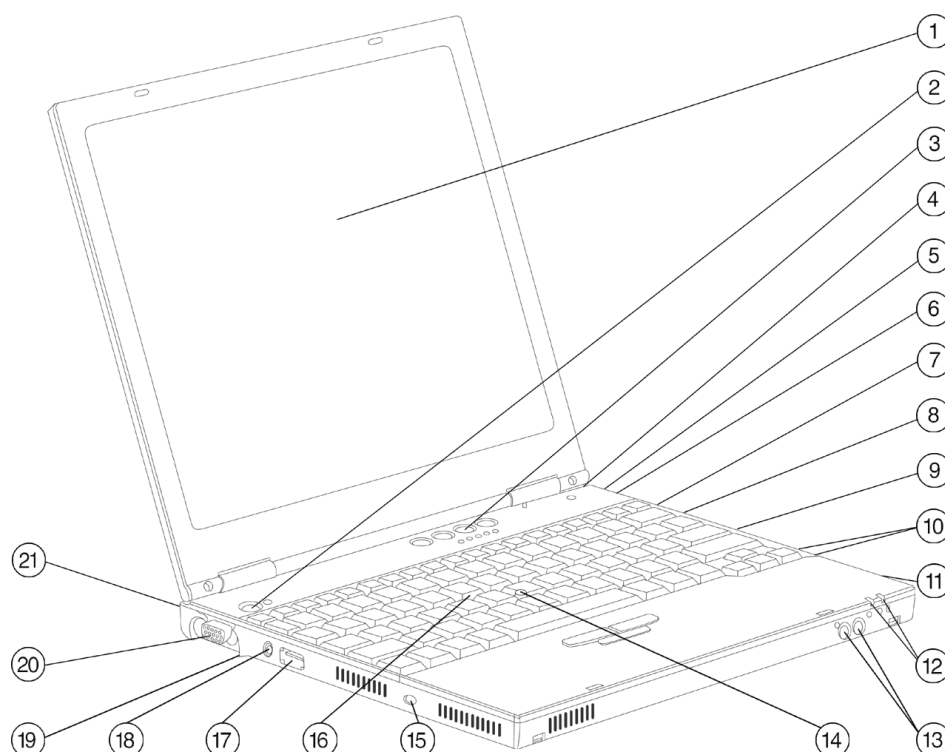# QuickSpecs

Overview

1. Colour Display
2. Suspend/Resume Button
3. Easy Access Internet Buttons
4. Rear System Ports (Parallel, Serial, TV Out)
5. RJ-11
6. RJ-45
7. IR
8. USB (1 of 2)
9. PC Card Slot
10. Audio In/Out Jacks
11. On/Off Button
12. Power/Battery LEDs
13. External Volume Control/Mute
14. Point Stick Pointing Device
15. Security Cable Slot
16. Full-size Keyboard
17. USB (2 of 2)
18. AC Power Connector
19. Internal Lithium-Ion Battery
20. VGA Out Port
21. Secondary Battery Connector
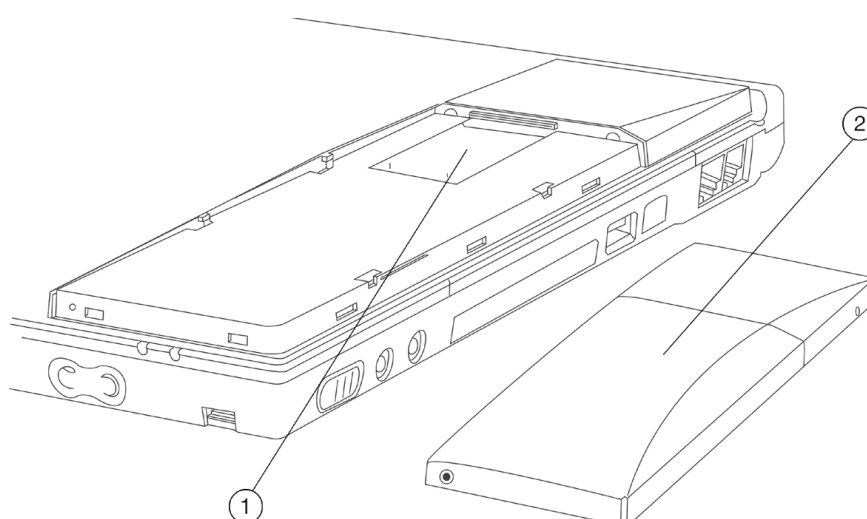
1. Multiport Connector
2. Multiport Module

QuickSpecs

Overview

What's New

- Mobile Intel® Pentium® III 850 MHz processor with SpeedStep™ technology

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
- 128-MB SDRAM upgradeable to 512 MB
- 20-GB User removable SMART hard drive
- Integrated mini PCI 56K V.90 modem plus 10/100 NIC
- Complete set of system ports
- Microsoft® Windows® XP Professional Edition/Microsoft Windows 2000 (dual install)
- Protected by a Three-year, Worldwide Limited Warranty — 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*
- Optional Mobile Expansion Unit providing Multimedia, storage and enhanced security features
- Magnesium display enclosure
- Compatible with current Compaq enterprise docking solutions
- Industry leading PC lifecycle solutions
  NOTE: * = Requires optional MEU.

QuickSpecs

Standard Features

Processor and Panel	850 MHz Mobile Intel Pentium III processor with SpeedStep technology with 256-KB L2 cache	
	12.1-inch TFT XGA display with 1024x768 resolution up to 16.7M colours	

Memory	Standard	128-MB SDRAM
	Maximum	512-MB SDRAM (with two slots)

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.
NOTE: 256-MB and 512-MB 133-MHz memory are not compatible with the Evo Notebook N400c.

Communications	Type III Mini PCI 56K (V.90) modem plus 10/100 NIC Combo

NOTE: Designed only to allow faster downloads from V.90 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	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

Easy Access Internet Buttons	The Evo Notebook N400c 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.

Pointing Device	Pointstick

PC Card Slots	One Type II PC Card Slot that supports both 32-bit CardBus (Full support in Microsoft Windows 9.x and Windows 2000) and 16-bit PCMCIA Cards

Storage	Diskette Drives	Optional Floppy Drive*
		Optional SuperDisk 2X LS –120 Drive*
	Optical Drives	DVD/CD-RW Combo Drive*
		CD-RW Drive*
		DVD-ROM Drive*
		CD-ROM Drive*
	Hard Drive	20-GB SMART

NOTE: * = Requires optional Mobile Expansion Unit (MEU).

QuickSpecs

Standard Features

Multimedia	Compaq Premier·Sound 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*	
	2X AGP Graphics	
	8-MB SDRAM	
	NOTE: * = Requires optional Mobile Expansion Unit (MEU).	

Interfaces	MultiPort	1
	PC Card	One Type II
	Enhanced Parallel 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 M1 with 8-MB SDRAM

Display (External)	Up to 32-bit per pixel colour depth
	Supports 640 x 480, 800 x 600, 1024 x 768, 1152 x 864, 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 One of the following	Dual installation of Microsoft Windows XP Professional Edition and Microsoft Windows 2000 Microsoft Windows 2000 preinstalled/Microsoft Windows NT 4.0 on Quick Restore CD Microsoft Windows 98 SE preinstalled

Standard Features

Software	Compaq Insight Management Agents Diagnostics for Microsoft Windows DVD Playback Software (with optional MEU) Altiris eXpress™ Client Compaq Power Management Compaq Security Management Safety and Comfort Guide Acrobat Reader Reference 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 Deskpro EN desktops, Armada notebooks, Evo Clients, Professional Workstations, iPAQ Deskside and ProLiant 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 NOTE: These Web sites are available in English only.
Security	Configuration Control Hardware Memory Change Alert Ownership Tag Setup Password Power-On Password DriveLock Enabled for PC SmartCard options
Power Supply	External AC Adapter (only 0.39 lb/0.18 kg, 6-foot/1.8 metre) power cord included. Total length including External AC adapter is 12 feet/3.66 metre
Battery	The Evo Notebook N400c 4-cell internal main Lithium-Ion battery provides over two hours of battery life; over four hours achieved using optional external battery. NOTE: Actual results may vary with product model, configuration, and individual usage. Compaq results of 2:31 (hr:min) were achieved running the eTesting Labs Inc.'s BatteryMark™ Test version 4.0.1 on an N400c with an Intel Pentium III 700 MHz CPU, 12.1-inch XGA panel, 128-MB RAM, 20-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 three minutes, and Intel SpeedStep battery optimized mode. NOTE: Actual results may vary with product model, configuration, and individual usage. Compaq results of 2:16 (hr:min) were achieved running the eTesting Labs Inc.'s BatteryMark Test version 4.0.1 on an N400c with an Intel Pentium III 850 MHz CPU, 12.1-inch XGA panel, 128-MB RAM, 20-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 3 minutes, Intel SpeedStep battery optimized mode and battery conservation mode set to high. NOTE: These tests were 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.

Standard Features

Power Conservation

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
(with optional MEU)

MultiBay devices may be swapped with the system powered on (hot) or in suspend mode (warm) under Microsoft Windows 98 SE 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.
NOTE: Microsoft Windows NT 4.0 does not support hot swapping of the CD-RW drive.

MultiPort

Integrated MultiPort expands functionality via user removable MultiPort Modules. MultiPort modules can provide integrated wireless communications and enhanced security features. MultiPort modules can be hot swapped with the system powered on (hot) or in suspend mode (warm) under any supported operating system. The MultiPort interface is based on the USB 1.1 Standard Specification
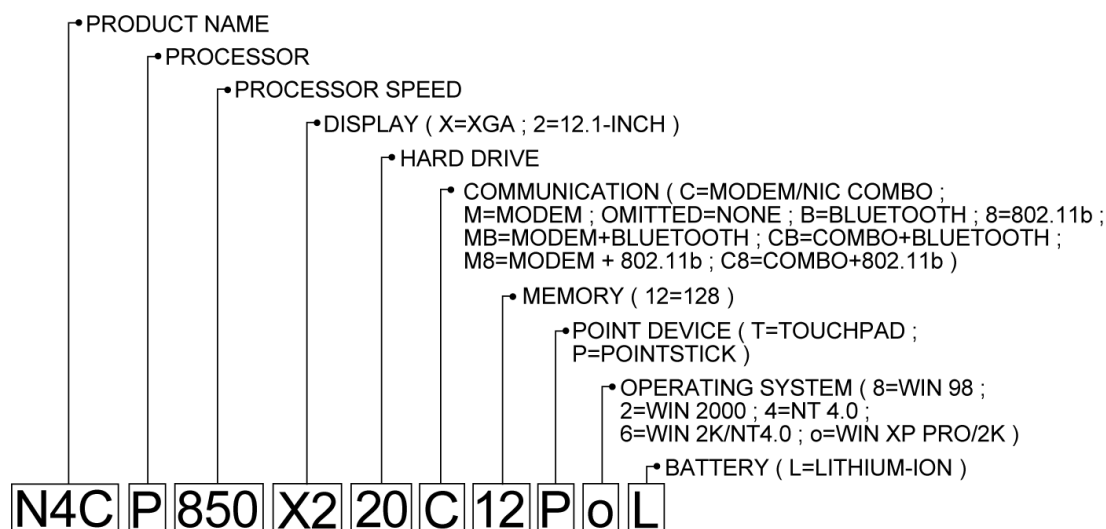NOTE: Microsoft Windows NT does not support USB technology.

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.

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
NOTE: This Web site is available in English only.

Naming Convention

The Etymology of a Model name:

PRODUCT NAME
PROCESSOR
PROCESSOR SPEED
DISPLAY (X=XGA ; 2=12.1-INCH)
HARD DRIVE
COMMUNICATION (C=MODEM/NIC COMBO ;
M=MODEM ; OMITTED=NONE ; B=BLUETOOTH ; 8=802.11b ;
MB=MODEM+BLUETOOTH ; CB=COMBO+BLUETOOTH ;
M8=MODEM + 802.11b ; C8=COMBO+802.11b)
MEMORY (12=128)
POINT DEVICE (T=TOUCHPAD ;
P=POINTSTICK)
OPERATING SYSTEM (8=WIN 98 ;
2=WIN 2000 ; 4=NT 4.0 ;
6=WIN 2K/NT4.0 ; o=WIN XP PRO/2K)
BATTERY (L=LITHIUM-ION)

| N4C | P | 850 | X2 | 20 | C | 12 | P | o | L |

Standard Features

N4CP850X220C25PoL	Display	12.1-inch colour TFT XGA
P/N 470026-529/-633	Processor	Mobile Intel Pentium III 850 MHz
	Cache Memory	256-KB, L2 Cache
	Memory	Standard 256-MB SDRAM
		Maximum 512-MB SDRAM
	Optical Drive	None
	Hard Drive	20-GB SMART
	Modem	Type III Mini PCI 56K (V.90) modem plus 10/100 NIC Combo
	Graphics	ATI Mobility M 8-MB SDRAM
	Audio	Compaq Premier·Sound
	Operating System	Microsoft Windows XP/Windows 2000
	MultiPort	Optional wireless modules available

N4CP850X220C12P6L	Display	12.1-inch colour TFT XGA
P/N 470022-683/-684	Processor	Mobile Intel Pentium III 850 MHz
	Cache Memory	256-KB, L2 Cache
	Memory	Standard 128-MB SDRAM
		Maximum 512-MB SDRAM
	Optical Drive	None
	Hard Drive	20-GB SMART
	Modem	Type III Mini PCI 56K (V.90) modem plus 10/100 NIC Combo
	Graphics	ATI Mobility M 8-MB SDRAM
	Audio	Compaq Premier·Sound
	Operating System	Microsoft Windows 2000/Windows NT 4.0
	MultiPort	Optional wireless modules available

N4CP850X220C12P8L	Display	12.1-inch colour TFT XGA
P/N 470022-682/-649	Processor	Mobile Intel Pentium III 850 MHz
	Cache Memory	256-KB, L2 Cache
	Memory	Standard 128-MB SDRAM
		Maximum 512-MB SDRAM
	Optical Drive	None
	Hard Drive	20-GB SMART
	Modem	Type III Mini PCI 56K (V.90) modem plus 10/100 NIC Combo
	Graphics	ATI Mobility M 8-MB SDRAM
	Audio	Compaq Premier·Sound
	Operating System	Microsoft Windows 98SE
	MultiPort	Optional wireless modules available

Options

Memory	128-MB (133 MHz) Memory Upgrade	197897-B25
	64-MB (133 MHz) Memory Upgrade	197896-B25
	256-MB (100 MHz) Memory Upgrade	161554-B21

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.

Monitors	TFT8020 Flat Panel Colour 18-inch (carbon)	159244-xxx
	TFT5010 Flat Panel Colour 15-inch (carbon)	154486-xxx
	P1210 CRT 22-inch (carbon/silver)	230538-001
	P910 CRT 19-inch (carbon/silver)	230535-001
	S710 CRT 17-inch (carbon)	154499-002
	S510 CRT 15-inch (carbon)	168636-002

MultiBay Hard Drives	30-GB SMART Hard Drive	212791-B25
	20-GB SMART Hard Drive	212790-B25

MultiBay Storage Devices	DVD/CD-RW Combo Drive	260472-B25
	CD-RW Drive	136186-B25
	DVD-ROM Drive	138230-B25
	CD-ROM Drive	298452-B25
	SuperDisk 2X LS –120 Drive	197895-B25
	Floppy Drive	226935-B25
	Iomega Zip 250 Drive	217387-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

Mobile Expansion Unit (MEU)	MEU with CD-RW drive and Floppy drive	234281-B25
	MEU with 8X DVD-ROM drive and Floppy drive	234280-B25
	MEU with 24X Max CD-ROM drive* and Floppy drive	234279-B25

NOTE: * = Data transfer rates will vary from 150 KB/s to 3600 KB/s.

Options

Connectivity	Compaq Type III Mini PCI 56K (V.90) Modem	225640-B31
	Compaq Type III Mini PCI 56K (V.90) Modem plus 10/100 NIC Combo	225642-B31
	Compaq Type III Mini PCI 56K (V.90) Modem plus 10/100 IPSEC NIC Combo	225638-B31
	Compaq M420 56K Global Modem	317900-001
	10/100 TX PC Card UTP Controller	335506-B21
	100Base TX Ethernet Upgrade	225435-001
	1394 PC Card	177593-B25

NOTE: For additional compatible PC Cards, view the Compaq PC Card Solutions List on the Compaq Web site at: http://www.compaq.com/support/techpubs/pcmcia/
NOTE: This Web site is available in English only.
NOTE: Designed only to allow faster downloads from V.90 compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions. Modem only supports Microsoft Windows 9.x and Windows NT 4.0.

Wireless Connectivity	802.11b MultiPort Wireless LAN module	233412-xx1
	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

Expansion Bases	Expansion Base	383500-xx1
	Expansion Base with Intel NIC	120266-xx1
	Expansion Base Tower Stand	123129-B25
	Convenience Base	382500-xx1
	Convenience Base with Intel NIC	120971-xx1
	Convenience Base Monitor Cover	122931-xx1
	Port Replicator EM	382300-xx1

NOTE: The Evo Notebook N400c requires the optional Mobile Expansion Unit (MEU) for docking with any of the expansion bases listed above.

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

Common Power Solutions	MultiBay Battery (6-cells)*	387937-B25
	External Battery Charger **	135555-xxx
	AC Adapter 65W	265602-001
	Auto Power Adapter/Charger	401043-B25
	Aircraft Power Adapter	386504-B21
	AC Line Cord (3.1 m/10-ft)	217932-xx2

NOTE: * = Use of this option with the Evo Notebook N400c requires the optional Mobile Expansion Unit (MEU).
NOTE: ** = The Universal Battery Charger will charge the N400c external handle batteries. It will not charge the N400c internal primary battery.

Options

Input Devices	Wireless Keyboard and Mouse	251385-008
	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

Security	Biometric PC Card	146805-B25
	Security Cable Lock	294316-B21
	Compaq Smart Card PC Card Reader	135646-B25
	PC Guardian Lock	261680-B21

Useful Accessories	MP1400 Microportable Projector	174626-xx1
	MP1800 Microportable Projector	180226-xx1
	MP2800 Microportable Projector	180228-xx1
	Multimedia Adapter & Remote Kit (comes with the MP1800)	174963-001
	MP1600 Video Adapter	116298-001
	MP1600 Lamp replacement kit	118052-001
	MP1800/1400 Lamp replacement kit	189789-001
	MP2800 Lamp replacement kit	215464-001

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
	Evo Notebook N400c, Armada M300 and Armada M700 specific	
	Compaq M Series Portfolio Case	167337-B21

Memory

Compaq Evo Notebook N400c

Standard Memory
0-MB of memory on system board,
2 Slots total
1-128-MB DIMM installed in Slot 1
1-Additional open Memory Slot

Memory	Slot 1	Slot 2
	128 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
128 MB	128 MB	Empty
192 MB	128 MB	64 MB
256 MB	128 MB	128 MB
320 MB	256 MB	64 MB
384 MB	256 MB	128 MB
512 MB	256 MB	256 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:

256-MB (100-MHz) Memory Upgrade	161554-B21
128-MB (133-MHz) Memory Upgrade	197987-B25
64-MB (133-MHz) Memory Upgrade	197986-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.

NOTE: 256-MB and 512-MB 133-MHz memory are not compatible with the Evo Notebook N400c.

QuickSpecs

Storage
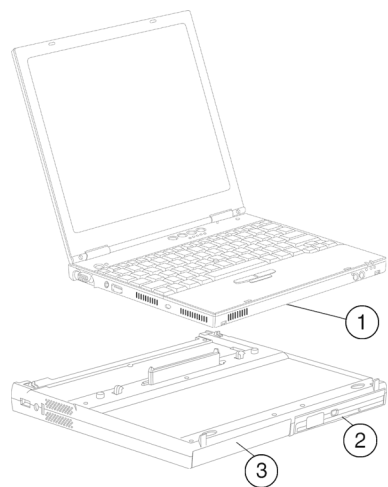
1. Hard Drive
2. MultiBay
3. MultiBay

Drive Support

System Drive Support

Removable Media	Quantity Supported	Drive Supported
1.44-MB Diskette Drive	Up to 1	External connects via parallel port

Hard Drives

20-GB 4200 rpm SMART Hard Drive	Up to 1	Hard Drive Bay

MEU Drive Support

Removable Media	Quantity Supported	Drive Bay Supported
1.44-MB Diskette Drive	Up to 1	MultiBay
CD-RW Drive	Up to 2	MultiBay
DVD-ROM Drive	Up to 2	MultiBay
CD-ROM Drive	Up to 2	MultiBay
DVD/CD-RW Combo Drive	Up to 2	MultiBay
Zip 250 Drive	Up to 2	MultiBay
Super Disk 2X LS-120 Drive	Up to 2	MultiBay

Secondary Hard Drives

10-GB SMART Hard Drive	Up to 2	MultiBay
20-GB SMART Hard Drive	Up to 2	MultiBay
30-GB SMART Hard Drive	Up to 2	MultiBay

Technical Specifications

System Unit	Dimensions (HxWxD)	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 battery115 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

20-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 (0.07 kg)
	Drive Weight	0.21 lb (95 g)	
	Capacity	20 GB	
	Height	0.374 in (9.5 mm)	
	Width	2.5 in (70 mm)	
	Interface	ATA	
	Transfer Rate Synchronous (maximum)	100 MB/s (Drive Capability)	
	Seek Time (typical reads, including settling)	Single Track	3 ms
		Average	12 ms (read)
		Full-Stroke	23 ms
		Rotational Speed	4200 rpm
	Logical Blocks	~ 39,070,080	

External AC Adapter	Weight	0.39 lb (0.18 kg)	
	Power Supply (Input)	Operating Voltage	90 to 260 VAC RMS
		Operating Current	1.3 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

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	0.49 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)

Technical Specifications

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 (6-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	0.81 lb (0.37 kg)	
	Energy	Voltage	10.8 V
		Amp-hour capacity	2.8 Ah
		Watt-hour capacity	30.2 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

MultiBay 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	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 (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	< 6seconds	

Technical Specifications

MultiBay 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	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 (minimum)	
	Data Transfer Rate (typical, including settling)	Sustained (16X)	150 KB/s
		Sustained 4X CD-RW	5,520 KB/s
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 15 seconds	
	Stop Time	< 6 seconds	

MultiBay 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	0.59 in (1.5 cm)	
	Disk Diametre	12 cm/8 cm	
	Disk Thickness	0.43 in (1.09 cm)	
	Track Pitch	0.74 μm	
	Access Times (typical reads, including settling)	Random (typical)	< 180 ms DVD Media
		Full-Stroke (typical)	< 300 ms DVD Media
		Random (typical)	< 120 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	< 12 seconds	
	Stop Time	< 3 seconds	

QuickSpecs

Technical Specifications

MultiBay 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	0.59 in (15 mm)	
	Disk Diametre	12 cm, 8 cm	
	Disk Thickness	0.047 in (0.12 cm)	
	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)	150 KB/s (sustained 1X)
		Variable	1500 to 3600 KB/s (10X to 24X)v
		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	
	Activity Indicator	On system	
	Height	0.5 in (1.27 cm)	
	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

MultiBay SuperDisk 2X LS-120 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	0.61 lb (0.28 kg)
	Maximum Transfer Rate	From Disk	896 KB/s
		Sustained	375 to 900 KB/s
	120 MB Physical Format	Number of Heads	2
		Bytes per Sector	512
		Sectors per Track	51 to 92
		Zones/Side	55
		Data Tracks per Side	1736
		Servo Tracks	900
		Sector Interleave	1:1
	Access Times (including setting)	Track–to–track	20 ms
		Average	70 ms
		Latency Average	41.67
	Operating Conditions	Temperature	41° to 131° F(5° to 55° C)
		Humidity	10% to 80% RH
	Operating System Support	Microsoft Windows 95, Windows NT 4.0	
	Option Kit Contents	LS-120 Drive, 17 mm MultiBay Adapter, Software, Documentation	

NOTE: Drivers for the LS-120 Drive are standard in Microsoft Windows 95/OSR2, Windows NT 3.51/SP5, and Windows NT 4.0. Use the LS-120 Option Support Diskette (included in option kit) with earlier releases of Windows 95 and NT 3.51.

MultiBay Iomega Zip 250 Drive	Dimensions (H x W x D)	5.26 x 5.24 x 5.71 in (13.35 x 13.3 x 14.5 cm)	
	Weight	9.8 oz or Xg (277.8 g)	
	Transfer Rates	250 Media: 1200 – 2400 KB/s	
		100 Media: 138 – 1400 KB/s	
	Access Times (including setting)	Track–to–track: 5 ms	
		Average: 40 ms	
		Latency Average: 10 ms	
		Maximum: 70 ms	
	Operating Conditions	Temperature	41° to 124.7° F (5° to 51.5° C)
		Humidity	10% to 80% RH
	Operating System Support	Microsoft Windows 95, 98, Windows NT 4.0, Windows 2000, Windows Me	
	Option Kit Contents	Zip 250 Drive, Documentation	

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 2.4465 to 2.4835 GHz (France) 2.4000 to 2.4697 GHz (Japan)
	Number of Selectable Sub-channels	**Worldwide Certification**
		United States (FCC) 11
		France (FR) 4
		Japan (JP) 14
		Other countries 13
	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

Technical Specifications

	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	
	LED Activity	Flashing LED – AP Search Mode	
		Solid LED – On	
		LED Off – Power Off	

	Throughput	**Data Rate**	**Operating Distance**
Throughput, Data Rate and Operating Distance	> 4.5 Mbps	11 Mbps	• 1000 feet – Open sight • 100 feet – Closed space (Steel Space)
	> 2 Mbps	5.5 Mbps	• 1100 feet – Open sight • 200 feet – Closed space (Steel Space)
	> 700 Kbps	1 Mbps	• 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

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) 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 NT4.0, Windows 2000, Windows Millennium Edition, 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
	Modem Device Driver Name	Lucent Win Modem

Data Mode Capabilities
V.90 (a-law, mu-law)
K56flex (a-law, mu-law)
V.8bis
V.80
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-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, + Iirr
Modulation: +MS, +MR, +MA
Error control: +ES, +ER, +EB, +ESR, +ETBM
Data compression: +DS, +DR
V.251

NIC Device Driver Name   Intel PRO/100 P Mobile Combo Adapter

Data Link Layers
IEEE 802.2 LLC
SNAP

Technical Specifications

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 100Mbps	
	Auto-Negotiation	
	Wake on LAN from all power managed states,	
	including soft off (S5)	
	Boot on LAN from OFF	
	Lower Power State on Link Loss	
Software support	IBM LAN Server Version 1.2, 1.3, 2.0, 4.0	
	Microsoft NT 3.51, NT 4.0. Windows 2000	
	Novell Netware 3.1x, 4.x, 5.x	
Protocol support	TCP/IP	
	Novell IPX/SPX and Microsoft compatible	
	Novel IPX ODI	
	Microsoft NetBEUI	
	IBM DLC	