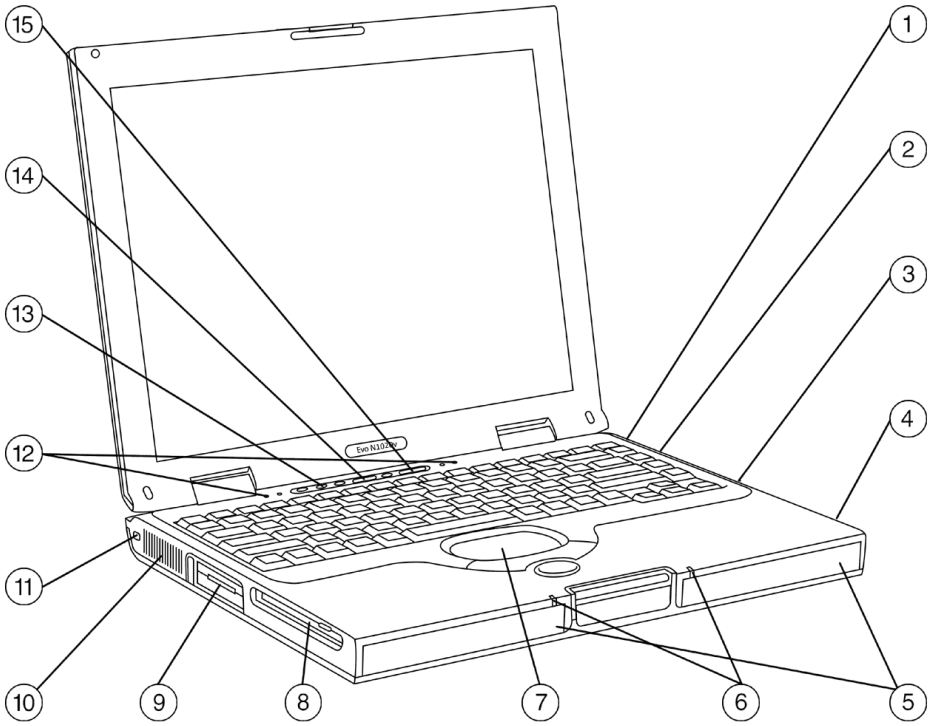
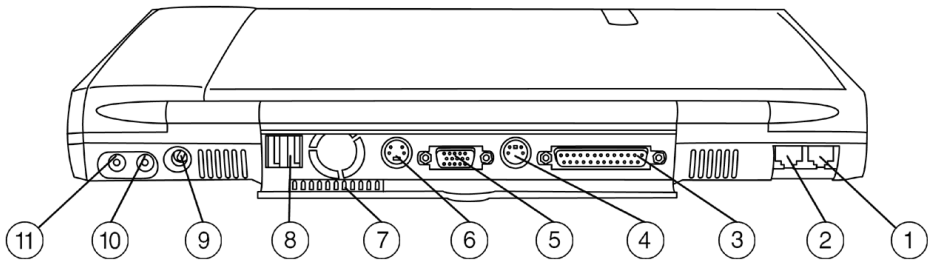
Overview



1. 1394
2. Infrard
3. Optical Drive
4. Battery
5. Stereo Speakers
6. System LEDs
7. Dual Pointing Devices
8. Diskette Drive
9. PC Card Slot (1)
10. Kensignton Lock
11. Air Vent
12. Keyboard LEDs
13. Easy Access Buttons
14. Power Button
15. Volume Control



1. RJ-11
2. RJ-45
3. Parallel
4. PS/2
5. VGA
6. S-video
7. Air Vent
8. USB
9. DC In
10. Audio in
11. Headphone

Overview

At A Glance

- Intel® Pentium® 4 processors – up to 2.4 GHz; Intel Celeron™ processors – up to 1.7 GHz
- Microsoft® Windows® XP Pro, Microsoft Windows XP Home and Microsoft Windows 2000
- 15-inch XGA, SXGA+ and 14.1-inch XGA display
- Configurations as light as 6.6 lb (3 kg) weight (14-inch panel)
- 1.55 in (3.95 cm) thin
- 256 MB DDR SDRAM (266 MHz), Upgradeable to 1024 MB
- Up to 60-GB SMART hard drives
- Mini PCI modem and integrated NIC
- Full-size keyboard
- Includes a one-year, Worldwide Warranty – Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details.

What's New

- Intel Pentium 4 processors – up to 2.4 GHz; Intel Celeron processors – up to 1.7 GHz
- 400-MHz bus
- 4X AGP Graphics
- MultiPort wireless communication options
- Choice of Touchpad or Dual Pointing Device

What's Special

- Intel Pentium 4 processors
- All-in-one convenient design
- Latest USB interface
- Wireless features thru award-winning MultiPort
- Common Docking Options

Standard Features

Processor and Panel
One of the following:

15-inch color TFT SXGA+ with 1400 x 1050 resolution (up to 16.7M colors internal)

15-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal)

14.1-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal)

2.4 GHz Intel Pentium 4 processor with 512 KB L2 cache
2.2 GHz Intel Pentium 4 processor with 512 KB L2 cache
2.0 GHz Intel Pentium 4 processor with 512 KB L2 cache
1.8 GHz Intel Pentium 4 processor with 512 KB L2 cache
1.9 GHz Mobile Intel Pentium 4 processor with 512 KB L2 cache
1.8 GHz Mobile Intel Pentium 4 processor with 512 KB L2 cache
1.7 GHz Intel Celeron with 256 KB L2 cache
1.6 GHz Intel Celeron with 256 KB L2 cache
1.5 GHz Intel Celeron with 256 KB L2 cache

Operating System

Microsoft Windows XP Pro (requires 256 MB of memory minimum),Microsoft Windows 2000, or Microsoft Windows XP Home (limited language availability) preinstalled

Memory

Standard/Maximum

128 MB (266 MHz) DDR SDRAM (128 MB SODIMM in slot 1)
256 MB (266 MHz) DDR SDRAM (256 MB SODIMM in slot 1)
576 1024 MB (266 MHz) DDR SDRAM (512 MB SODIMMs in slots 1 and 2)

NOTE: Due to the non-industry standard nature of some third-party memory modules, we recommend Compaq branded memory to ensure compatibility.
NOTE: Intel Pentium 4 processors, speed denotes maximum performance mode on AC power; processor speed on battery ower is approximately 64% of maximum performance mode.
NOTE: 128MB of DDR standard with 16MB of shared video memory
NOTE: 256MB of DDR standard with 32MB of shared video memory
NOTE: Up to 64MB of shared video memory user configurable
NOTE: Shared video memory (UMA) uses part of the total system memory for video performance. For example, if there is 128mb of system memory and 16mb of shared memory for video graphics, the system has 112mb left of available system memory for other computing activities.

Communications

10/100 NIC is integrated on the system board

Type III Mini PCI 56K (V.92) modem

NOTE: Designed only to allow faster downloads from V.92 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

Keyboard

88-key compatible keyboard with isolated, inverted-T cursor control keys, special feature hotkeys for instant access to power conservation, toggle between internal and external, or simultaneous displays, and control brightness and contrast.

Easy Access Internet Buttons

The Evo Notebook N1020V comes with three Easy Access Buttons (EAB) designed to increase customer productivity by providing one-touch access to helpful Compaq information, favorite Internet destinations, or default e-mail application. The EAB portion of the keyboard deck also includes dedicated hardware volume control and a quick-launch button for CD/DVD play.

Pointing Device

Choice of touchpad with 4-way scroll or dual pointing devices (both pointstick and touchpad)

PC Card Slots

One Type II PC Card Slot which supports both 32-bit CardBus and 16-bit PC Cards

Standard Features

Storage	Fixed Diskette Drive	1.44-MB Diskette Drive
	Primary Hard Drive	60 GB or 40 GB or 30 GB or 20 GB
	Fixed Optical Drive	DVD/CD-RW Combo Drive DVD-ROM Drive CD-ROM Drive

Multimedia

JBL Pro Speakers with bass reflex and 16bit stereo sound
Dedicated Hardware volume controls
Headphone-out port
Microphone in port
Software MPEG1 support, MPEG2 and DVD
8X DVD/CD-RW Combination Drive (on select models)
8X DVD-ROM Drive with movie playback software (on select models)
24X CD-ROM Drive (on select models)
S-video Port
IEEE 1394 Port
4X AGP graphics
16MB or 32MB of DDR (Double Date Rate) Shared video memory

Interfaces	PC Card Slot	One Type II
	Enhanced Parallel EPP/ECP	1
	PS/2	1
	S-Video	1
	VGA	1
	1394	1
	Port Replicator	1
	Headphone/Line-out	1
	DC Power	1
	RJ-11 (modem)	1
	RJ-45 (NIC)	1
	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	6

Graphics

ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator with 32-MB DDR shared video memory VRAM for increased color depth and graphics performance

Display (External)

Up to 32-bit per pixel color depth

Supports 640 x 480, 800 x 600, 1024 x 768, 1280 x 1024, 1400 x 1050, 1600 x 1200, or 2048 x 1536 resolutions up to 160-Hz refresh rate, dependent upon monitor capability, resolution and color depth settings

Standard Features

Display (Internal)	14.1-inch color TFT XGA with 1024 x 768 resolution (up to 16.7 M colors internal) 15-inch color TFT XGA with 1024 x 768 resolution (up to 16.7 M colors internal) 15-inch color TFT SXGA+ with 1400 x 1050 resolution (up to 16.7 M colors internal)
Software	Diagnostics for Microsoft Windows DVD Playback Software Roxio Easy CD Creator (on CD-RW and DVD/CD-RW models) Safety and Comfort Guide Acrobat Reader Reference Guide Compaq Easy Access Button Software
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)
Security	Configuration Control Hardware Memory Change Alert Ownership Tag Set-up Password Power-On Password DriveLock Enabled for PC SmartCard options Kensington Lock
Power Supply	External 90-watt AC adapter, power cord included.
Battery	Standard 8-cell Lithium-Ion battery. The Evo Notebook N1020v provides over two hours of battery life using the standard 8-cell Lithium-Ion battery. NOTE: Actual results may vary with product model, configuration, and individual usage. Compaq results of 2:20 (hr:min) were achieved running the Business Winstone 2001 Battery Markä 1.0 on a N1020Vv with a Intel Pentium 4 2.0-GHz CPU, 15-inch XGA panel, 256-MB RAM, 30-GB HDD, 8X DVD, 8-cell Lithium-Ion battery, and NIC/modem. System parameters were set according to eTesting Labs' recommendations: panel brightness 50%, hard drive timer three minutes. 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.
Power Conservation	Hibernation Instant-on via Standby Pop-ups with three presets One custom level of power conservation ACPI compliant
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.

Standard Features

Docking

Port replicator and Advanced Port Replicator. The sleek, new port replicator and advanced port replicator designs provide simple and convenient port management. Features include NIC pass through, USB, and a 1394 digital port. Compatible across multiple platforms for lower total cost of ownership.

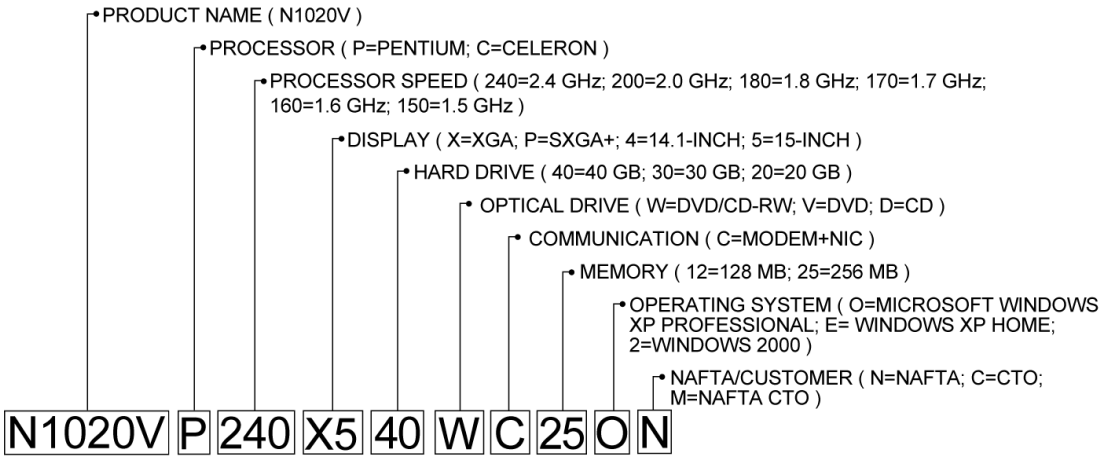
Service and Support

Compaq Services includes a one-year, Worldwide Limited Warranty, pick-up or carry-in; upgraded warranty and toll-free 7 x 24 hardware technical phone support available.

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

Naming Convention

The Etymology of a Model name:



N1020vC160X420DC25E		
	Processor	1.60 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	20 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vP200X430VC25O	Processor	2.0 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year
N1020vP240X540WC25O	Processor	2.4 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	15-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year
N1020vC160X430DC12E	Processor	1.60 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vP200X430VC25O	Processor	2.0 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHZ DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year
N1020vP240X540WC25O	Processor	2.4 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHZ DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year
N1020vC160X430VC12E	Processor	1.60 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	8X DVD-ROM Drive
	Optical Drive	30 GB
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vC170X440VC25E	Processor	1.70 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

N1020vC170X440WC25E	Display	14.1-inch color TFT XGA
	Processor	1.70 GHz Celeron
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Operating System	Microsoft Windows XP Home
	Warranty	One Year

N1020vP180X430VC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vP180X440WC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

N1020vP180X540WC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

N1020vC150X420DC12O	Processor	1.50 GHz Celeron
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	20 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vC150X420DC122	Processor	1.50 GHz Celeron
	Operating System	Microsoft Windows 2000
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	20 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

N1020vP200X530DC122	Processor	2.0 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows 2000
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

N1020vP240P540WC25O	Processor	2.4 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	24X DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	One Year

Standard Features

N1020vC160X430DC12E	Processor	1.60 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	24X CD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vP200X430VC25O	Processor	2.0 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	256 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHZ DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vP240X540WC25O	Processor	2.4 GHz Intel Pentium 4 processor
	Operating System	Microsoft Windows XP Pro
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHZ DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year

Standard Features

N1020vC160X430VC12E	Processor	1.60 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	30 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vC170X440VC25E	Processor	1.70 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vC170X440WC25E	Processor	1.70 GHz Celeron
	Operating System	Microsoft Windows XP Home
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year

Standard Features

N1020vP180X420VC12O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	128 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	20 GB
	Optical Drive	8X DVD-ROM Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vP180X430VC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
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	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year
N1020vP180X440WC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	14.1-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
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	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year

Standard Features

N1020vP180X540WC25O	Processor	1.8 GHz Mobile Intel Pentium 4-M processor
	Operating System	Microsoft Windows XP Pro
	Display	15.0-inch color TFT XGA
	Cache Memory	512 KB, L2 Cache
	Standard Memory	256 MB (1 DIMM) 266 MHz DDR
	Maximum Memory	1024 MB (266 MHz) DDR
	Hard Drive	40 GB
	Optical Drive	DVD/CD-RW Combo Drive
	Communications	Type III Mini PCI 56K (V.92) modem, (LOM) integrated 10/100 NIC
	Graphics	ATI Radeon IGP 340M Integrated UMA architecture ATI 4X AGP 3D accelerator
	Audio	JBL Pro Speakers with bass reflex and 16-bit stereo sound
	Warranty	Two Year

	Long Model Name	N1020vC160X420 DC25E	N1020vP200X430 VC25O	N1020vP240X540 WC25O
	CPU	Celeron 1.60 GHz	P4-D 2.0 GHz	P4-D 2.4 GHz
	Display	14.1-inch XGA	14.1-inch XGA	15.0-inch XGA
	Memory	256 MB (1 DIMM)	256 MB (1 DIMM)	256 MB (1 DIMM)
	Hard Drive	20 GB	30 GB	40 GB
	Discrete Video Memory			
	Optical	24X CD	8X DVD	DVD/CDRW Combo drive
	Secondary Optical			
	Diskette Drive	1.44 MB diskette	1.44 MB diskette	1.44 MB diskette
	Communications	Modem (Hendrix)/NIC	Modem (Hendrix)/NIC	Modem (Hendrix)/NIC
	Input Device	Touchpad	Touchpad	Touchpad
	Operating System	Windows XP Home	Windows XP Pro	Windows XP Pro
	Battery	8-cell 4.4Ah	8-cell 4.4Ah	8-cell 4.4Ah
	Additional SW Applications			
	Warranty	1 Year	1 Year	1 Year
NORTH AMERICA				
	U.S.	470045-646	470045-647	470045-648
	Canada (English)			
	Fr Canada		470045-650	470045-649
	Fr Canada	470045-651		

	Long Model Name	N1020vC160X430 DC12E	N1020vP200X430 VC25O	N1020vP240X540 WC25O
	CPU	Celeron 1.60 GHz	P4-D 2.0 GHz	P4-D 2.4 GHz
	Display	14.1-inch XGA	14.1-inch XGA	15.0-inch XGA
	Memory	128 MB (1 DIMM)	256 MB (1 DIMM)	256 MB (1 DIMM)
	Hard Drive	20 GB	30 GB	40 GB
	Discrete Video Memory			
	Optical	24X CD-ROM	8X DVD	DVD/CDRW Combo drive
	Secondary Optical			
	Diskette Drive	1.44 MB diskette	1.44 MB diskette	1.44 MB diskette
	Communications	Modem (Bowie)/NIC	Modem (Bowie)/NIC	Modem (Bowie)/NIC
	Input Device	Touchpad	Touchpad	Touchpad
	Operating System	Windows XP Home	Windows XP Pro	Windows XP Pro
	Battery	8-cell 4.4Ah	8-cell 4.4Ah	8-cell 4.4Ah
	Additional SW Applications			
	Warranty	1 Year	1 Year	1 Year
EUROPE / MIDDLE EAST/ AFRICA				
	Arabia		470045-652	470045-653
	Belgium		470045-655	470045-654
	Czech Republic		470045-656	470045-657
	Denmark		470045-659	470045-658
	Europe Intl	470045-661	470045-660	470045-662
	France		470045-664	470045-663
	Germany			
	Greece/Poland		470045-665	470045-666
	Hungary		470045-668	470045-667
	Israel (Hebrew)		470045-669	470045-670
	Italy		470045-672	470045-671
	Netherlands		470045-673	470045-674
	Norway		470045-676	470045-675
	Portugal		470045-677	470045-678
	Russian		470045-680	470045-679
	Slovakia			
	Slovenia		470045-681	470045-682
	South Africa			
	Spain		470045-684	470045-683
	Sweden/Finland		470045-685	470045-686
	Switzerland (GR/FR)			
	Switzerland (GR/FR/IT/EN)		470045-688	470045-687
	Turkey		470045-689	470045-690
	UK		470045-692	470045-691

Standard Features

	Long Model Name	N1020vC160X 420DC122	N1020vP200X 530DC25O	N1020vP200X 420DC122	N1020vP240P540 WC25O
	CPU	Celeron 1.6 GHz	P4-D 2.0 GHz	P4-D 2.0 GHz	P4-D 2.4 GHz
	LCD	14.1-inch XGA	15.0-inch XGA	14.1-inch XGA	15.0-inch SXGA+
	Total Memory	128 MB (1 DIMM)	256 MB (1 DIMM)	128 MB (1 DIMM)	256 MB (1 DIMM)
	HDD	20 GB	30 GB	20 GB	40 GB
	Discrete Video Memory				
	Optical	24X CD-ROM	24X CD-ROM	24X CD-ROM	24X DVD/CDRW Combo drive
	Secondary Optical				
	Diskette Drive	1.44 MB diskette	1.44 MB diskette	1.44 MB diskette	1.44 MB diskette
	Communications	Modem (Indy)/NIC	Modem (Indy)/NIC	Modem (Indy)/NIC	Modem (Indy)/NIC
	Input Device	Touchpad	Touchpad	Touchpad	Touchpad
	Operating System	Windows 2000	XP Pro	Windows 2000	XP Pro
	Battery	8-cell 4.0Ah	8-cell 4.0Ah	8-cell 4.0Ah	8-cell 4.0Ah
	Additional SW Applications				
	WARRANTY	1 Year	1 Year	1 Year	1 Year
	Japan	470045-695	470045-696	470045-697	470045-698
	Japan - English	470045-702	470045-701	470045-700	470045-699

Options

Memory	512-MB (266 MHz) Memory Upgrade		269087-B25
	256-MB (266 MHz) Memory Upgrade		269086-B25
	128-MB (266 MHz) Memory Upgrade		269085-B25
Monitors	TFT8030 Flat Panel Color 18-inch (carbon/silver)		234362-xxx
	TFT7020 Flat Panel Color 17-inch with integrated speakers (carbon/silver)		253217-xxx
	TFT5015 Flat Panel Color 15-inch (carbon/silver)		234044-xxx
	TFT5030 Flat Panel Color 15-inch (carbon/silver)		228134-xxx
	V720 17-inch CRT (carbon/silver)		232944-xxx
	S720 17-inch CRT (carbon/silver)		239287-xxx
	V570 15-inch CRT (carbon/silver)		228113-xxx
Other Storage Devices	IBM 1-GB Microdrive (PC card Device)		217390-B25
Connectivity	Compaq Type II Mini PCI 56K (V.90) Modem		225640-B31
	Compaq Type II Mini PCI 56K (V.90) Modem plus 10/100 NIC Combo		225642-B31
	100BaseTX Ethernet Upgrade		225435-001
	1394 PC Card		177593-B25
	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.		
Wireless Connectivity	802.11b MultiPort Wireless LAN module		233412-001
	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
	CDPD WWAN PC Card (U.S. Only)		238111-001
Expansion Bases	Port Replicator		269095-xx1
	Advanced Port Replicator		269094-xx1
	External MultiBay		217388-001/002
	Monitor Stand		274407-B25
Power	Evo Notebook N1020v	8 Cell primary battery (4 Ah)	278418-B25
		8 Cell primary battery (4.4 Ah)	291369-B25
Common Power Solutions	External Battery Charger		265603-xxx
	External Battery Charger (Multiple Battery)		265604-xx1
	AC Adapter (90 W)		283884-xxx
	Aircraft Power Adapter (90 W)		291370-B25
	AC Line Cord 10 ft (3.1 m)		217932-xx2

Options

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-xxx
	Wireless Keyboard and Mouse	251385-xx8
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-xxx
	Compaq iPAQ Microportable Projector MP3800	262839-xxx
	Compaq iPAQ Microportable Projector MP4800	257524-xxx
	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

Memory

Compaq Evo N1020V

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.

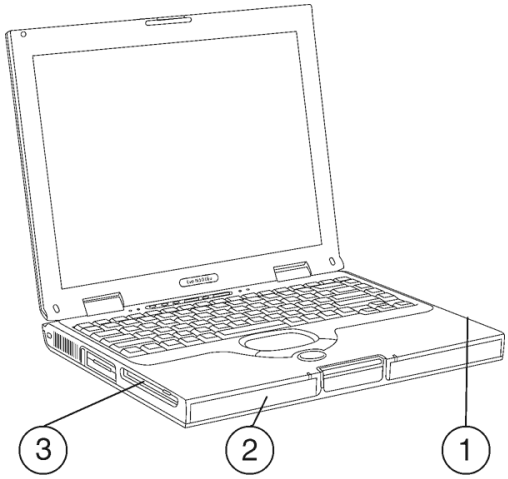
Memory	Slot 1	Slot 2
256 MB	256 MB	-
384 MB	256 MB	128 MB
512 MB	512 MB	-
768 MB	512 MB	256 MB
1024 MB	512 MB	512 MB

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 (266 MHz) Memory Upgrade 269087-B25
- 256-MB (266 MHz) Memory Upgrade 269086-B25
- 128-MB (266 MHz) Memory Upgrade 269085-B25

Storage



1. Dedicated optical drive
2. Primary hard drive
3. Dedicated diskette drive

Drive Support

System Drive Support	Quantity Supported	Drive Supported
1.44-MB Diskette Drive	1	Dedicated diskette drive
DVD/CD-RW Combo Drive	1	Dedicated optical drive
DVD-ROM Drive	1	Dedicated optical drive
Max CD-ROM Drive	1	Dedicated optical drive
Hard Drives		
60-GB SMART Hard Drive	1	Dedicated hard drive bay
40-GB SMART Hard Drive	1	Dedicated hard drive bay
30-GB SMART Hard Drive	1	Dedicated hard drive bay
20-GB SMART Hard Drive	1	Dedicated hard drive bay

System Unit	**Dimensions** (HxWxD)	15-inch and 14.1-inch TFT panel displays	1.55 x 12.89 x 10.53 in (3.95 x 32.75 x 26.75 cm)
	Weight With P4 Processor	14 inch LCD, DVD or CD-ROM, 1 SODIMM	6.82 lb (3.1 kg)
	Weight With Celeron Processor	15 inch LCD, DVD or CD-ROM, 1 SODIMM	7.09 lb (3.2 kg)
		15 inch LCD, DVD or CD-ROM, 1 SODIMM	6.87 lb (3.12 kg)
	NOTE: * = Weight varies by configuration.		
	Stand-Alone Power Requirements	Nominal Operating Voltage (Li-Ion)	14.4 V (8-cell)
		Average Operating Power	29.7 W Desktop
		Peak Operating Power	80 W on AC 55 W on DC
		Power in suspend mode	< 1000 mW
		Power in hibernation mode	< 100 mW
	Power Supply	Rated Input Voltage	100 to 240 VAC
		Rated Input Current	< 1.5 A
		Rated Frequency	50 to 60 Hz
	Temperature	Operating	50° to 95° F (10° to 35° C)
		Non-operating	14° to 140° F (–10° 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	10 G, 11 ms, half-sine
		Non-operating	60 G, 11 ms, 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
	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)

14.1-Inch Color TFT XGA Display	**Dimensions** (H x W)	11.22 x 8.46 in (28.5 x 21.5 cm)	
	Diagonal Size	14.1 in (35.81 cm)	
	Mounting	Internal Panel Supports, Side Mounted	
	Number of Colors	Up to 16.8 M	
	Contrast Ratio	150:1	
	Brightness	120nt typ	
	Pixel Resolution	Pitch	0.264 x 0.264 mm
		Format	1024 x 768
		Configuration	RGB stripe
	Backlight	Edge Lit	
	Character Display	80 x 25	
	Total Power Consumption	4.2 W	

15-Inch Color TFT SXGA+ Display	**Dimensions** (H x W)	11.8 x 9 in (30.4 x 22.8 cm)	
	Diagonal Size	15 in (38 cm)	
	Mounting	Internal Panel Supports, Side Mounted	
	Number of Colors	Up to 16.8 M	
	Contrast Ratio	150:1	
	Brightness	150nt typ	
	Pixel Resolution	Pitch	0.218264 x 0.218264 mm
		Format	1400 x 1050
		Configuration	RGB stripe
	Backlight	Edge Lit	
	Character Display	80 x 25	
	Total Power Consumption	5.75 W	

15-Inch Color TFT XGA Display	**Dimensions** (H x W)	11.8 x 9 in (30.4 x 22.8 cm)	
	Diagonal Size	15 in (38 cm)	
	Mounting	Internal Panel Supports, Side Mounted	
	Number of Colors	Up to 16.8 M	
	Contrast Ratio	150:1	
	Brightness	150nt typ	
	Pixel Resolution	Pitch	0.297 x 0.297 mm
		Format	1024 x 768
		Configuration	RGB stripe
	Backlight	Edge Lit	
	Character Display	80 x 25	
	Total Power Consumption	5.0 W	

Hard Drives

60-GB	**Capacity**	60 GB	
	Drive Weight	0.34 lb (155 g)	
	Height	0.374 in (9.5 mm)	
	Width	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	2.5 ms
		Average	13 ms
		Maximum	23 ms
	Rotational Speed	5400 rpm	
	Logical Blocks	117,210,240	
	Operating Temperature	41° to 131° F (5° to 55° C)	
	Features	Security	ATA Security

40-GB	**Drive Weight**	0.21 lb (99 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	3.0 ms
		Average	13 ms
		Maximum	25 ms
	Rotational Speed	4200 rpm	
	Logical Blocks	78,140,160	
	Operating Temperature	41° to 131° F (5° to 55° C)	
30-GB	**Drive Weight**	0.22 lb (99 g)	
	Capacity	30 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	2.5 ms
		Average	12 ms
		Maximum	23 ms
	Rotational Speed	4200 rpm	
	Logical Blocks	58,605,120	
	Operating Temperature	41° to 131° F (5° to 55° C)	
20-GB	**Drive Weight**	0.21 lb (95 g)	
	Capacity	20 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	2.5 ms
		Average	12 ms
		Maximum	23 ms
	Rotational Speed	4200 rpm	
	Logical Blocks	~ 39,070,080	
	Operating Temperature	41° to 131° F (5° to 55° C)	

Diskette Drive	**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
External AC Adapter	**Weight**	0.85 lb (0.385 kg)	
	Power Supply (Input)	Operating Watts	90
		Operating Voltage	110 to 240 VAC RMS
		Operating Current	1.5 A RMS
		Operating Frequency Range	50 to 60 Hz AC
Lithium-Ion Battery Pack (8-cell)	**Dimensions** (L x W x D)	4.95 x 3.46 x 0.80 in (12.5 x 8.8 x 2.0 cm)	
	Weight	0.96 lb (0.43 kg)	
	Energy	Voltage	14.8 V
		Amp-hour capacity	Minimum 3.7 Ah Typical 3.9 Ah
		Watt-hour capacity	Minimum 53.2 Ah Typical 56.1 Ah
	Temperature	Operating	32° to 108° F (0° to 42° C)
		Non-operating	32° to 140° F (0° to 60° C)

DVD/CD-RW Drive	Center Hole Diameter	15 mm	
	Disk Diameter	12 cm, 8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	1.6 µm	
	Access Times (typical reads, including settling)	Random CD	< 120 ms
		Full-Stroke CD	< 175 ms
	Disk Diameter	Random DVD	< 140 ms
	Disk Thickness	Full-Stroke DVD	< 225 ms
	Audio Output Level	0.7 – 0.9 Vrms	
	Cache Buffer	2 Mbytes (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	Single	< 7 seconds (typical)
		Multi-Session	< 30 seconds (typical)
	Stop Time	< 3 seconds (typical)	

DVD-ROM Drive	Center Hole Diameter	0.59 in (1.5 cm)	
	Disk Diameter	12 cm/8 cm	
	Disk 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)
	Start-up Time	< 12 seconds Typical	
	Stop Time	< 3 seconds Typical	

24X CD-ROM Drive	**Applicable Disk**	CD-ROM (Mode 1, 2 and 3), CD-XA ready (Mode 2, Form 1 and 2), CD-I ready (Mode 2, Form 1 and 2), CD-R (read only), CD Plus, Photo CD (Single and Multi-session), CD-Extra, Video CD, CD-WO (fixed packets only), CD-Bridge	
	Center Hole Diameter	0.59 in (15 mm)	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	0.047 in (1.2 mm)	
	Track Pitch	1.6 µm	
	Access Times (typical reads, including settling)	Random	< 110 ms
		Full-Stroke	< 220 ms
	Audio Output Level	Line-out	0.7-0.9 Vrms
	Cache Buffer	128 KB	
	Data Transfer Rate (typical, including settling)	CD-ROM	3600 KB/s Maximum
	Start-up Time	< 10 seconds	
	Stop Time	< 5 seconds	

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 2000 Microsoft Windows XP Home Microsoft Windows XP Pro	
Protocols Supported	TCP/IP IPX/SPX UDP	
LED Activity	Flashing LED – AP Search Mode Solid LED – On LED Off – Power Off	

Throughput, Data Rate and Operating Distance

Throughput	Data Rate	Operating Distance
> 4.5 Mbps	11 Mbps	• 1000 ft – Open sight • 100 ft – Closed space (Steel Space)
> 2 Mbps	5.5 Mbps	• 1100 ft – Open sight • 200 feet – Closed space (Steel Space)
> 700 Kbps	1 Mbps	• 1200 ft – Open sight • 300 ft – 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	
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)	
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 2000 Microsoft Windows XP Home Microsoft Windows XP Pro	
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	

Type III Mini PCI 56K (V.92) **Modem**	**Form Factor**	Mini-PCI Type III per Specification
	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) K56flex (a-law, mu-law) V.8bis V.80 V44.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-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

Integrated 10/100 NIC	NIC Device Driver Name	RealTek (RTL 8139CL+)
	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 100Mbps Auto-Negotiation Wake on LAN from standby 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. Microsoft 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

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