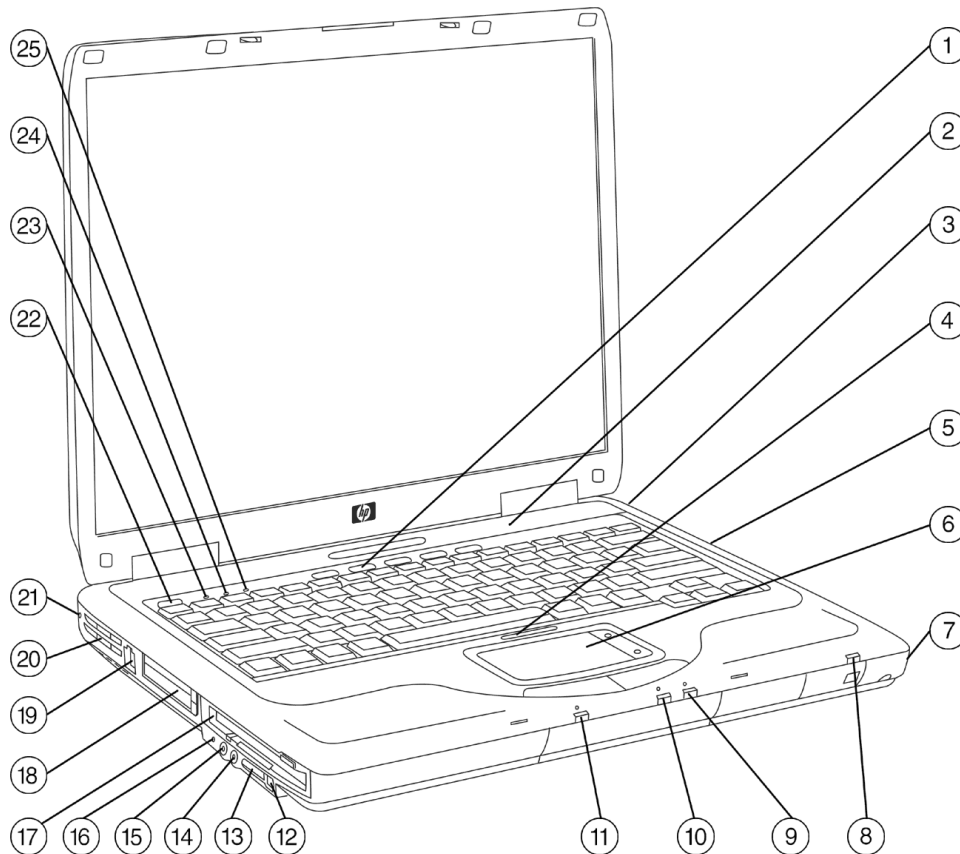
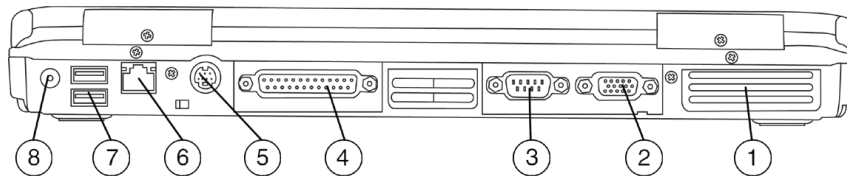


### Overview



- |                             |                       |
|-----------------------------|-----------------------|
| 1. Easy Access Buttons (5)  | 14. Volume Controls   |
| 2. Stereo Speakers          | 15. Headphone         |
| 3. PS/2 Port                | 16. Audio In          |
| 4. Touch Pad On/Off Button  | 17. 1394 Port         |
| 5. Fixed Optical Drive      | 18. Diskette Drive    |
| 6. Touch Pad                | 19. PC Card Slots (2) |
| 7. Primary Battery          | 20. RJ-11 (Modem)     |
| 8. Wireless LED             | 21. Air Vent          |
| 9. Wireless On/Off Button   | 22. Kensington Lock   |
| 10. Battery Charging LED    | 23. Power Button      |
| 11. Hard Drive Activity LED | 24. Caps Lock LED     |
| 12. System Power LED        | 25. Num Lock LED      |
| 13. Mute Lock LED           | 26. Keypad LED        |



- |                  |                  |
|------------------|------------------|
| 1. Air Vent      | 5. S-Video       |
| 2. VGA Video     | 6. RJ-45 (NIC)   |
| 3. Serial        | 7. USB Ports (2) |
| 4. Parallel Port | 8. DC In         |

### Overview

#### At A Glance

- Mobile Intel® Pentium® 4 processors – up to 2.5 GHz
  - Mobile Intel Celeron™ processors – up to 2.4 GHz
- Microsoft Windows XP Professional, Microsoft Windows XP Home, or Microsoft Windows 2000 driver support via web.
- 15-inch TFT XGA and SXGA+, 14.1-inch TFT XGA display
- Configurations as light as 6.75 lb (3.06 kg) and as thin as 1.51 in (3.85 cm) (14-inch panel)
- 128MB, 256MB or 512MB DDR SDRAM (266 MHz), Upgradeable to 1GB
- Up to 60 GB (4200 rpm) hard drive
- Integrated NIC, modem and available 802.11b and 802.11g Wireless LAN
- Full-size keyboard with (5) Quick Launch Buttons
- Includes a one-year, Worldwide Limited Warranty – Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

#### What's New

- Mobile Intel Pentium 4 processors – up to 2.5 GHz
  - Mobile Intel Celeron processors – up to 2.4 GHz
- Microsoft Windows XP Professional, Microsoft Windows XP Home, or Microsoft Windows 2000 driver support via web.
- 400-MHz FSB
- Two Type II PC Card Slots
- Available Integrated 802.11b WLAN
- Available Integrated 802.11g WLAN
- Touchpad with dedicated On/Off button and dedicated scroll

#### What's Special

- Mobile Intel Pentium 4 –M processors
- Microsoft Windows XP Professional, Microsoft Windows XP Home, or Microsoft Windows 2000 driver support via web.
- All-in-one convenient design
- Designed for mobility
- USB 2.0 and IEEE 1394



### Standard Features

**Processors and Chipset** 2.5 GHz Mobile Intel Pentium 4-M processor 400-MHz Front Side Bus and 512-KB L2 cache  
*One of the following:*  
 2.4 GHz Mobile Intel Pentium 4-M processor 400-MHz Front Side Bus and 512-KB L2 cache  
 2.2 GHz Mobile Intel Pentium 4-M processor 400-MHz Front Side Bus and 512-KB L2 cache  
 2.0 GHz Mobile Intel Pentium 4-M processor 400-MHz Front Side Bus and 512-KB L2 cache  
 2.4 GHz Mobile Intel Celeron processor 400-MHz Front Side Bus and 256-KB L2 cache  
 2.2 GHz Mobile Intel Celeron processor 400-MHz Front Side Bus and 256-KB L2 cache  
 2.0 GHz Mobile Intel Celeron processor 400-MHz Front Side Bus and 256-KB L2 cache  
 1.8 GHz Mobile Intel Celeron processor 400-MHz Front Side Bus and 256-KB L2 cache  
 1.7 GHz Mobile Intel Celeron processor 400-MHz Front Side Bus and 256-KB L2 cache  
 Chipset: ATI Radeon IGP 340M (RS200MP)/ALI M1535+

**Operating System** Microsoft Windows XP Professional, (requires 256MB of memory minimum) or  
 Microsoft Windows XP Home (limited language availability) preinstalled  
 Microsoft Windows 2000 Driver support via web

**Displays**

Internal	15-inch color TFT UXGA (wide viewing angle) with 1600 x 1200 resolution (up to 16.7M colors internal) 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)
External	Up to 32-bit per pixel color depth Supports 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 1024, or 1600 x 1200 resolutions up to 100-Hz refresh rate, dependent upon monitor capability, and resolution and color depth settings

**Memory**

Standard	128 MB (266 MHz) DDR SDRAM (128 MB SODIMM in slot 1) or 256 MB (266 MHz) DDR SDRAM (256 MB SODIMM in slot 1) or 512 MB (266 MHz) DDR SDRAM (512 MB SODIMM in slot 1)
Maximum	1 GB (266 MHz) DDR SDRAM (512MB (266 MHz) in slot 1 and 2)

**NOTE:** 128MB of DDR (16MB standard shared video memory).  
**NOTE:** 256MB of DDR (64MB standard shared video memory).  
**NOTE:** Up to 64MB shared video memory user configurable.

**Communications** 10/100 NIC is integrated on the system board  
 High speed 56K modem  
 802.11b on select models  
 802.11g on select models  
 Wireless on/off Button

**Keyboard** Full-size desktop-compatible keyboard; special feature hotkeys for instant access to toggling between internal and external displays, or simultaneous displays and brightness Oversized keys and separate cursor control keys (87 keys) – 101-key compatible

**Easy Access Buttons** Five-One Touch Quick Launch Buttons.



### Standard Features

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**Pointing Device** Touch pad with on/off button and dedicated scroll up/down surface

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**PC Card Slots** Two Type II PC Card slots with support for 16-bit PCMCIA and 32-bit Cardbus

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**Storage**

Fixed Diskette Drive	1.44 MB Diskette Drive (optional)
Primary Hard Drive	60-GB 4200 rpm Hard Drive 40-GB 4200 rpm Hard Drive 30-GB 4200 rpm Hard Drive 20-GB 4200 rpm Hard Drive
Fixed Optical Drive	DVD/CD-RW combo Drive< CD-RW Drive DVD Drive CD Drive

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**Audio** Integrated Speakers, Volume control and Mute buttons, AC/97, SoundBlaster Pro compatible, 16-bit stereo sound

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**Multimedia**

- Dual Speakers and 16-bit stereo sound
- Dedicated Hardware and Hotkey volume controls
- Headphone-out port
- Microphone in port
- Software MPEG1 support, MPEG2 and DVD
- DVD/CD-RW Combination Drive (on select models)
- DVD-ROM Drive with movie playback software (on select models)
- CD-ROM Drive (on select models)
- S-video Port
- IEEE 1394 Port
- USB 2.0 Ports
- 4X AGP graphics
- 16MB or 64MB of DDR (Double Date Rate) shared video memory

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### Standard Features

<b>Interfaces</b>	PC Card	1 Type II
	Enhanced Parallel EPP/ECP	1
	PS/2	1
	S-Video	1
	VGA	1
	1394	1
	Port Replicator – select models	1
	Headphone/Line-out	1
	Microphone-in	1
	Serial Port	1
	DC Power	1
	RJ-11 (modem)	1
	RJ-45 (NIC)	1
	Infrared Port – select models	1 (4 Mb/s support) (IrDA 4 MB compliant. IR performance will vary depending on performance of IR peripherals and application used.)
	USB 2.0	2
	LED status indicators	8

- System power
- Battery charging
- Hard drive activity
- Caps lock
- Num lock
- Keypad
- Wireless
- Mute Lock

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**Graphics** UMA architecture – ATI Mobility™ Radeon™, AGP 4x and 3D Architecture, MPEG2 and DVD playback, standard 16MB shared w/128MB main memory, 64MB shared w/256MB or more main memory, configurable up to 64MB.

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**Software** Intervideo WinDVD Playback Software  
Roxio Easy CD Creator (on CDRW, DVD/CDRW)  
Safety and Comfort Guide  
Acrobat Reader  
Reference Guide  
One touch button software  
Symantec Norton Anti-virus  
HP Help and Support  
Microsoft Office on select models  
**NOTE:** Symantec Norton Antivirus 2003 (Complimentary 60 days Live Update)

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**System Recovery** Each unit is shipped with a recovery CD kit containing a system restore and Operating System CD. These CDs allow users to either recover or repair their notebook's operating system without losing personal data. The Operating System CD also provides the option of reinstalling the operating system software provided with the notebook. (Erases hard disk and restores the manufacturer installed image.)

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**Security** Power-on Password  
Kensington MicroSave security slot; accepts 3rd party security lock devices.

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### Standard Features

**Power Supply** External 90-Watt AC adapter, power cord included.

**Battery** The HP Compaq Business Notebook nx9000 provides up to 2 ½ hours of battery life using the standard 8-cell Lithium-Ion battery, 4.4Ahr and Smart Battery Technology (provides accurate, instantaneous battery status).

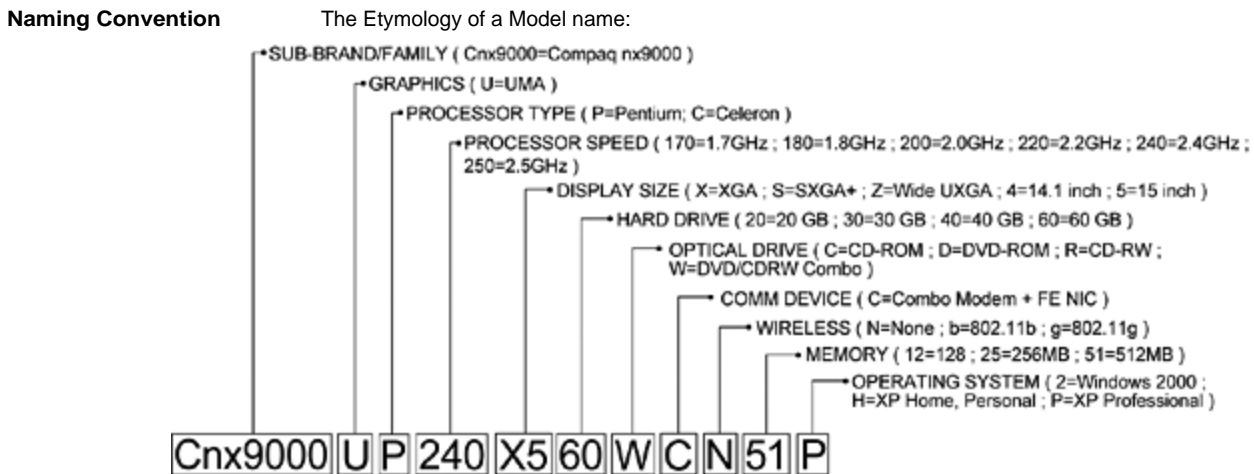
**NOTE:** Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a nx9000 with a Pentium 4 M 2.4 GHz CPU, Windows XP Pro, 15.0-inch XGA LCD, 512-MB RAM, 60-GB HDD, DVD, Lithium-Ion battery, and NIC/modem, achieved an overall Business Winstone 2002 BatteryMark score of 2h 59m Business Winstone® 2002 BatteryMark™ Version 1.0 units. Winstone® is a registered trademark and BatteryMark™ is a trademark of Ziff Davis Publishing Holdings Inc. in the U.S. and other countries. Copyright 2002 Ziff Davis Media Inc. All Rights Reserved. System parameters followed test recommendations: panel brightness 50%, power management scheme - Laptop/Portable, hard drive, standby and video timers set to never.

**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  
One custom level of power conservation  
Energy Star Compliant

**Service and Support** HP 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 HP Customer Support Center for details.



### Options

<b>Storage</b>	USB 16MB Disk on Key	DF517A
	IBM 1GB Microdrive	217390-B25
	USB Diskette Drive	F5101A
	USB Diskette Drive	230330-B25
	USB Diskette Drive	DC361A
<b>Memory</b>	128MB (266 MHz) DDR RAM Memory Upgrade	269085-B25 or DC388A
	256MB (266 MHz) DDR RAM Memory Upgrade	269086-B25 or DC389A
	512MB (266 MHz) DDR RAM Memory Upgrade	269087-B25 or DC390A
	128MB (266 MHz) DDR RAM Memory Upgrade	F4694A
	256MB (266 MHz) DDR RAM Memory Upgrade	F4695A
	512MB (266 MHz) DDR RAM Memory Upgrade	F4696A
<b>Expansion</b>	Simple Port Replicator (USB 2.0)	F4811B
<b>Power</b>	Primary Battery Pack	F4809A
	AC Adapter 90W	F4813A
	Auto/Truck Adapter 90W	DC303A
<b>Carrying Cases</b>	Compaq Nylon	249246-001
	Compaq Leather	249245-001
	HP Nylon	F1606A
	HP Leather	F1607A
	HP Top Load Nylon Carrying Case	DC915A
	HP Top Load Leather Carrying Case	DC917A
<b>Security</b>	PC Card Biometrics ID Device	146805-B25
	PC Card Smart Card Reader	135646-B25
	Security Cable Lock	294316-B21
<b>External Drives</b>	Zip 250 External Drive (USB)	174255-001



### Options

<b>Input/Output Devices</b>	2 button Mouse (carbon) (PS/2)	103180-B21
	USB 2 Button Scroll Mouse (Carbon)	195255-B25
	External 10-Key Numeric Keypad (PS/2)	294317-B21
	Keyboard (carbon) (PS/2)	118003-xxx
	USB Keyboard	222726-xxx
	USB/PS2 Keyboard	118003-xx9
	USB/PS2 Mouse	103180-B22
	USB Diskette Drive	F5101A
	USB Travel Mouse	F2100A
	USB Travel Mouse (optical scroll mouse)	F4815A

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<b>Monitors</b>	HP s9500 19" (18.0" vis) CRT Monitor	P9010A#ABA
	HP v7550 17" (16.0" vis) Flat-face CRT Monitor	P9013A#ABA



### Memory

#### HP Compaq nx9000 Business Notebook

#### Standard Memory Plus Optional Memory

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

Memory	Slot 1	Slot 2
128 MB	128 MB	-
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 or DC390A
- 256-MB (266 MHz) Memory Upgrade 269086-B25 or DC389A
- 128-MB (266 MHz) Memory Upgrade 269085-B25 or DC388A



### Storage

#### Drive Support

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System Drive Support	Quantity Supported	Drive Supported
1.44-MB Diskette Drive	1/0	Dedicated diskette drive
DVD/CD-RW Combo Drive	1	Dedicated optical drive
CD-RW Drive	1	Dedicated optical drive
DVD-ROM Drive	1	Dedicated optical drive
Max CD-ROM Drive	1	Dedicated optical drive

#### Hard Drives

60-GB Hard Drive	1	Dedicated hard drive bay
40-GB Hard Drive	1	Dedicated hard drive bay
30-GB Hard Drive	1	Dedicated hard drive bay
20-GB Hard Drive	1	Dedicated hard drive bay



### Technical Specifications

<b>System Unit</b>	<b>Dimensions (HxWxD)</b>	14.1-inch TFT panel displays	1.51 x 12.96 x 10.72 in (3.84 x 32.75 x 27.23 cm)
		15-inch TFT panel displays	1.62 x 12.96 x 10.72 in (4.12 x 32.75 x 27.23 cm)
	<b>Weight</b>	14.1-inch TFT panel displays	6.75 lb (3.06 kg)
		15-inch TFT panel displays	7.25 lb (3.29 kg)
<b>NOTE: * = Weight varies by configuration.</b>			
<b>Stand-Alone Power Requirements</b>		Nominal Operating Voltage (Li-Ion)	14.4 V (8-cell)
		Average Operating Power	29.7 W Desktop
		Peak Operating Power	82 W on AC 55 W on DC
		Power in suspend mode	< 1000 mW
		Power in hibernation mode	< 100 mW
	<b>Power Supply</b>		Rated Input Voltage
		Rated Input Current	4.74 A
		Rated Frequency	50 to 60 Hz
<b>Temperature</b>		Operating	50° to 95° F (10° to 35° C)
		Non-operating	14° to 140° F (-10° to 60° C)
<b>Relative Humidity</b>		Operating	10% to 90% relative humidity, non-condensing
		Non-operating	5% to 90% relative humidity, 101.6° F (38.7° C) Maximum wetbulb temperature
<b>Shock</b>		Operating	10 G, 11 ms, half-sine
		Non-operating	60 G, 11 ms, half-sine
<b>Vibration</b>		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
<b>Maximum Altitude (unpressurized)</b>		Operating	0 to 10,000 ft (0 to 3,048 m)
		Non-operating	0 to 30,000 ft (0 to 9,144 m)

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

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### Technical Specifications

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

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

<b>15-Inch Color TFT UXGA Display with wide viewing angle</b>	<b>Dimensions (H x W)</b>	11.8 x 9.0 in (30.4 x 22.8 cm)		
	<b>Diagonal Size</b>	15.0 in (38.0 cm)		
	<b>Mounting</b>	Internal Panel Supports, Side Mounted		
	<b>Number of Colors</b>	Up to 16.8M		
	<b>Contrast Ratio</b>	250:1		
	<b>Brightness</b>	140nt typ		
	<b>Pixel Resolution</b>	Pitch	0.191 x 0.191 mm	
		Format	1600 x 1200	
		Configuration	RGB stripe	
	<b>Backlight</b>	Edge Lit		
	<b>Character Display</b>	80 x 25		
<b>Total Power Consumption</b>	6.5W			
<b>Viewing Angle</b>	+/-85° degrees Horizontal, +15° /-35° Vertical (typical)			



### Technical Specifications

#### Hard Drives

<b>60-GB</b> (4200 rpm)	<b>Drive Weight</b>	0.34 lb (155 g)	
	<b>Capacity</b>	60 GB	
	<b>Height</b>	0.374 in (9.5 mm)	
	<b>Width</b>	70 mm	
	<b>Interface</b>	ATA-5	
	<b>Transfer Rate</b>	Synchronous (maximum)	100 MB/s (Drive Capability)
		Security	ATA Security
	<b>Seek Time</b> (typical reads, including settling)	Single Track	3 ms
		Average	13 ms
		Maximum	25 ms
	<b>Rotational Speed</b>	4200 rpm	
	<b>Logical Blocks</b>	117,210,240	
<b>Operating Temperature</b>	41° to 131° F (5° to 55° C)		
<b>Features</b>	Security	ATA Security	

<b>40-GB</b> (4200 rpm)	<b>Drive Weight</b>	0.21 lb (95 g)	
	<b>Capacity</b>	40 GB	
	<b>Height</b>	0.374 in (9.5 mm)	
	<b>Width</b>	2.75 in (70 mm)	
	<b>Interface</b>	ATA-5	
	<b>Transfer Rate</b>	Synchronous (maximum)	100 MB/s (Drive Capability)
		Security	ATA Security
	<b>Seek Time</b> (typical reads, including settling)	Single Track	3.0 ms
		Average	13 ms
		Maximum	25 ms
	<b>Rotational Speed</b>	4200 rpm	
	<b>Logical Blocks</b>	78,140,160	
<b>Operating Temperature</b>	41° to 131° F (5° to 55° C)		

<b>30-GB</b> (4200 rpm)	<b>Drive Weight</b>	0.22 lb (99 g)	
	<b>Capacity</b>	30 GB	
	<b>Height</b>	0.374 in (9.5 mm)	
	<b>Width</b>	2.75 in (70 mm)	
	<b>Interface</b>	ATA-5	
	<b>Transfer Rate</b>	Synchronous (maximum)	100 MB/s (Drive Capability)
		Security	ATA Security
	<b>Seek Time</b> (typical reads, including settling)	Single Track	2.5 ms
		Average	12 ms
		Maximum	23 ms
	<b>Rotational Speed</b>	4200 rpm	
	<b>Logical Blocks</b>	58,605,120	
<b>Operating Temperature</b>	41° to 131° F (5° to 55° C)		



### Technical Specifications

<b>20-GB</b> (4200 rpm)	<b>Drive Weight</b>	0.21 lb (95 g)	
	<b>Capacity</b>	20 GB	
	<b>Height</b>	0.374 in (9.5 mm)	
	<b>Width</b>	2.75 in (70 mm)	
	<b>Interface</b>	ATA-5	
	<b>Transfer Rate</b>	Synchronous (maximum)	100 MB/s (Drive Capability)
		Security	ATA Security
	<b>Seek Time</b> (typical reads, including settling)	Single Track	2.5 ms
		Average	12 ms
		Maximum	23 ms
	<b>Rotational Speed</b>	4200 rpm	
<b>Logical Blocks</b>	~ 39,070,080		
<b>Operating Temperature</b>	41° to 131° F (5° to 55° C)		

<b>Diskette Drive</b>	<b>Diskette Size</b>	3.5 in	
	<b>Height</b>	0.5 in (12.7 mm)	
	<b>Bytes per Sector</b>	512	
	<b>Sectors per track</b>	High density	18 (1.44 MB)/15 (1.2 MB)
		Low density	9
	<b>Tracks per side</b>	High density	80 (1.44 MB)/80 (1.2 MB)
		Low density	80
	<b>Read/Write heads</b>	2	
	<b>Access Times</b>	Track-to track (high/low)	3 ms/6 ms
		Average (high/low)	94 ms/174 ms
	Settling time	15 ms	
	Latency average	100 ms	

<b>External AC Adapter without Power Faction Correction</b>	<b>Weight</b>	0.67 lb (0.304 kg)	
	<b>Power Supply (Input)</b>	Operating Voltage	100 to 240 VAC RMS
		Operating Current	1.7 A RMS
		Operating Frequency Range	47 to 63 Hz AC

<b>External AC Adapter with Power Faction Correction (EMEA/PRC)</b>	<b>Weight</b>	0.76 lb (0.345 kg)	
	<b>Power Supply (Input)</b>	Operating Voltage	100 to 240 VAC RMS
		Operating Current	1.0 A RMS
		Operating Frequency Range	47 to 63 Hz AC

<b>Lithium-Ion Battery Pack (8-cell)</b>	<b>Dimensions (L x W x D)</b>	5.25 x 3.63 x 0.75 in (13.4 x 9.2 x 1.9 cm)	
	<b>Weight</b>	0.96 lb (0.43 kg)	
	<b>Energy</b>	Voltage	14.8 V
		Amp-hour capacity	Typical 4.4 Ah
		Watt-hour capacity	Typical 64 Wh
	<b>Temperature</b>	Operating	32° to 140° F (0° to 60° C)
		Non-operating	-4° to 140° F (-20° to 60° C)



### Technical Specifications

<b>DVD/CD-RW Drive</b>	<b>Center Hole Diameter</b>	15 mm		
	<b>Disk Diameter</b>	12 cm, 8 cm		
	<b>Disk Thickness</b>	1.2 mm		
	<b>Track Pitch</b>	1.6 $\mu$ m		
	<b>Access Times</b> (typical reads, including settling)	Random CD		< 110 ms
		Full-Stroke CD		< 210 ms
		Random DVD		< 130 ms
		Full-Stroke DVD		< 225 ms
	<b>Audio Output Level</b>	0.7 – 0.9 Vrms		
	<b>Cache Buffer</b>	2 Mbytes (minimum)		
	<b>Data Transfer Rate</b> (typical, including settling)	CD-R (24X)		3600 KB/s (150 KB/s at 1X CD rate)
		CD-RW (10X)		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
<b>Start-up Time</b>	Single		< 9 seconds (typical)	
	Multi-Session		< 30 seconds (typical)	
<b>Stop Time</b>	< 6 seconds (typical)			

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<b>DVD-ROM Drive</b>	<b>Center Hole Diameter</b>	0.59 in (1.5 cm)		
	<b>Disk Diameter</b>	12 cm/8 cm		
	<b>Disk Thickness</b>	1.2 mm		
	<b>Track Pitch</b>	0.74 $\mu$ m (DVD)/1.6 $\mu$ m (CD)		
	<b>Access Times</b> (typical reads, including settling)	Random (typical)		< 125 ms DVD Media
		Full-Stroke (typical)		< 225 ms DVD Media
		Random (typical)		< 100 ms CD Media
		Full-Stroke (typical)		< 175 ms CD Media
	<b>Cache Buffer</b>	512 KB/s (minimum)		
	<b>Data Transfer Rate</b> (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)
<b>Start-up Time</b>	< 12 seconds Typical			
<b>Stop Time</b>	< 3 seconds Typical			

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### Technical Specifications

<b>24X CD-ROM Drive</b>	<b>Applicable Disk</b>	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	
	<b>Center Hole Diameter</b>	0.59 in (15 mm)	
	<b>Disk Diameter</b>	12 cm, 8 cm	
	<b>Disk Thickness</b>	0.047 in (1.2 mm)	
	<b>Track Pitch</b>	1.6 $\mu$ m	
	<b>Access Times</b> (typical reads, including settling)	Random	< 110 ms
		Full-Stroke	< 220 ms
	<b>Audio Output Level</b>	Line-out	0.7-0.9 Vrms
	<b>Cache Buffer</b>	128 KB	
	<b>Data Transfer Rate</b> (typical, including settling)	CD-ROM	3600 KB/s Maximum
	<b>Start-up Time</b>	< 10 seconds	
	<b>Stop Time</b>	< 5 seconds	

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### Technical Specifications

<b>Integrated Conexant 56K ACLink Modem</b>	<b>Form Factor</b>	Integrated on motherboard
	<b>Power Management Support</b>	APM Revision 1.2, ACPI
	<b>Approvals/Certifications</b>	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
	<b>Data Mode Capabilities</b>	High speed 56K modem (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) <b>Optional symbol rates:</b> 2800, 3429 Asymmetric Symbol rates <b>Synchronous primary channel data signaling rates:</b> 3600, 31200 Automatic rate re-negotiation V.32bis V.32 V.23 V.22bis V.22 V.21 Bell 212A Bell 103J
	<b>Fax Mode Capabilities</b>	TIA-578-S (Class 1) T.30, T.4 (Group 3) V.17 V.29 V.27ter V.21 Channel 2
	<b>Command Set</b>	V.250 (Partial) TIA-602 Identification: +GMI, +GMM, +GMR Port control: +IPR, +ICF, +IFC, +ILRR Modulation: +MS, +MR, +MA Error control: +ES, +ER, +EB, +ESR, +ETBM Data compression: +DS, +DR V.251



### Technical Specifications

<b>Integrated 10/100 NIC</b>	<b>NIC Device Driver Name</b>	National Semiconductor Corp. DP83815/816 10/100 MacPhyter PCI Adapter
	<b>Data Link Layers</b>	IEEE 802.2 LLC SNAP
	<b>Ethernet Features</b>	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 (S3) Lower Power State on Link Loss
	<b>Software support</b>	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
	<b>Protocol support</b>	TCP/IP Novell IPX/SPX and Microsoft compatible Novel IPX ODI Microsoft NetBEUI IBM DLC

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