

# OVERVIEW

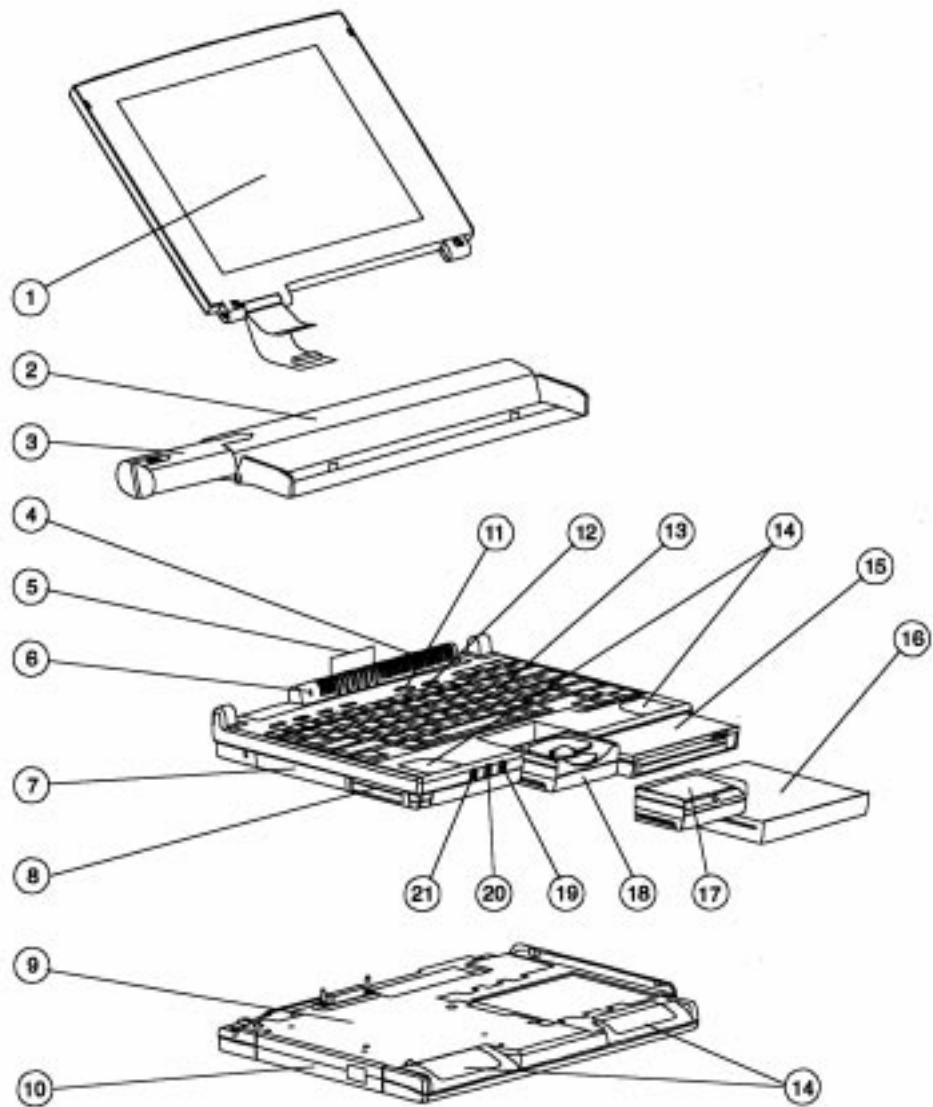
Compaq Armada 4100

## BENEFITS AT A GLANCE

- Flexible design allows configuration as a slimline notebook, a full-featured notebook or a robust multimedia notebook
- 133-MHz Intel Pentium® and 150- or 166-MHz Intel Pentium processors with MMX™ technology and 256 KB level two cache
- Choice of 12.1-inch CSTN or CTFT displays (SVGA)
- 32-bit PCI local bus graphics
- 8 or 16 MB standard memory expandable up to 72 or 80 MB
- Supports up to three Li-Ion batteries for up to nine hours of battery life<sup>1</sup>
- 1.4- to 2.0-GB SMART Hard Drives
- Intelligent Manageability for lower total cost of ownership
- Upgradable memory and hard drive
- Full-sized 101-key compatible keyboard
- Optional Mobile CD Unit provides enhanced multimedia functionality
- Optional Pass-Through and Ethernet Convenience Bases
- Modular pointing device: touchpad standard, interchangeable with optional optical trackball
- Sound Blaster Pro-compatible with 16-bit stereo, integrated speakers and microphone
- Full motion video and software MPEG support
- Compaq-unique power conservation features including Hibernation
- Protected by Compaq Services including a three-year, Worldwide Limited Warranty<sup>2</sup>

<sup>1</sup> When tested in standard configuration using the Ziff-Davis BatteryMark test version 1.0, the battery life of the Armada 4100 will range from 2 hours and 0 minutes to 3 hours and 0 minutes depending on individual usage.

<sup>2</sup> Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details.



**Armada 4131T Shown  
(with Mobile CD Unit)**

1. Display
2. Handle with Removable Battery (also provides 10° keyboard tilt and port cover)
3. Li-Ion Battery Handle
4. Heat Pipe Radiator
5. Power/Standby, Battery Charge, Cap Lock, Scroll Lock and Num Lock status LEDs
6. Microphone
7. SMART Hard Drive
8. PC Card Slots
9. Mobile CD Unit
10. 20X MAX CD-ROM Drive
11. Standby Switch
12. Power Switch
13. Full-Sized Keyboard with Four User-programmable Keys
14. Stereo Speakers
15. Diskette Drive
16. Li-Ion Dual Bay Battery (optional)
17. Touchpad
18. Optical Trackball (optional)
19. Audio-in Jack
20. Headphone Jack
21. Microphone Jack

### MODELS

**Armada 4131T**  
289300-401

**Armada 4150**  
287350-008

**Armada 4160T**  
287200-003

**Armada 4160T  
Slimline**  
287500-009

### STANDARD FEATURES

#### Flexible Design

Flexible design allows users to configure units according to specific needs, taking with them what they need, and leaving the rest behind:

**Standard Configuration:** Provides a full-featured notebook that weighs 6.2 lbs and is less than 1.5 inches thick, with the convenience of a battery in the handle and the flexibility of swapping the Diskette Drive with the optional Li-Ion Dual Bay Battery.<sup>1</sup>

**Slimline Configuration:** From the standard configuration, just remove the Battery Handle, swap the Diskette Drive for the optional Li-Ion Dual Bay Battery, and you have a powerful notebook less than 1.5 inches thick and weighing 5.2 lbs. The optional External Diskette Drive Cable/Caddy is available, providing a no compromise solution. (Armada 4160T Slimline ships in this configuration and includes a Li-Ion Dual Bay Battery and external diskette drive.)

**Multimedia Configuration:** To the Standard Configuration, simply attach the Mobile CD Unit and you have CD-ROM capabilities, enhanced stereo sound, a MIDI/Joystick port and the ability to add a third battery—all in a notebook that weighs approximately 8.2 lbs and is only 2.3 inches thick.

#### Processor

Armada 4131T: 133-MHz Intel Pentium®  
Armada 4150: 150-MHz Intel Pentium with MMX technology  
Armada 4160T and 4160T Slimline: 166-MHz Intel Pentium with MMX technology  
All Models: 256 KB level two write back cache

#### Architecture

64-bit CPU, cache and memory bus; 32-bit PCI local bus graphics

#### Display/Graphics

Armada 4150: 12.1-inch color STN with 800 x 600 resolution and 8-bit color (256 colors internal)  
Armada 4131T, 4160T and 4160T Slimline: 12.1-inch color TFT with 800 x 600 resolution and 16-bit color (64K colors internal)  
All models: 32-bit PCI local bus graphics with 1-MB EDO DRAM for video memory

#### Memory

Armada 4131T: 8 MB of RAM, expandable to 72 MB  
All other models: 16 MB of RAM, expandable to 80 MB

#### Hard Drives

Armada 4131T: 1.4-GB SMART Hard Drive  
Armada 4150: 1.6-GB SMART Hard Drive  
Armada 4160T and 4160T Slimline: 2.0-GB SMART Hard Drive  
Optional Hard Drive: 2.0-GB SMART Hard Drive

#### Diskette Drive

Armada 4160T Slimline: External Diskette Drive Bay and Removable Bay Diskette Drive  
All other models: Removable Bay Diskette Drives

#### Storage

Up to 2.0 GB

#### Multimedia

Compaq PremierSound for enhanced stereo audio including integrated 16-bit Sound Blaster Pro-compatible stereo audio, integrated stereo speakers and microphone, software volume control, stereo line in, headphone out, microphone in jacks, software MPEG, NTSC/PAL video output; optional Mobile CD Unit provides 20X MAX<sup>2</sup> CD-ROM Drive, enhanced stereo speakers, MIDI/joystick port, bay for an additional battery and Wave Table Synthesis

#### PC Card Slots

Two Type II/One Type III PC Card Slot(s); support for full-duplex speakerphone, telephone answering machine and switched voice/data with optional Compaq SpeedPac 336 Telephony Modem

#### Infrared Communication Port

IrDA-1.1 (4150 and 4160T), IrDA-1.0 (4131T) compatible infrared communication port for wireless communication with infrared devices

#### Power/Battery Life<sup>3</sup>

External AC Adapter weighing approximately 10 ounces allows simultaneous system operation and battery charge

Li-Ion Battery Handle or Li-Ion Dual Bay Battery provides up to 2.5 hours of battery life; up to 9 hours of battery life can be achieved when using three Li-Ion batteries including standard battery handle and an optional Modular Battery in both the Dual Bay and Mobile CD Unit battery bay

#### Integrated Pointing Device

Standard Touchpad is fully interchangeable for optional Optical Trackball

**STANDARD FEATURES** (cont'd)

**Keyboard**

101-key compatible keyboard with isolated, inverted-T cursor control keys, right control key, four user-programmable keys; special feature hot keys for instant access to power conservation, QuickLock/QuickBlank, toggle between internal external, or simultaneous displays, speaker volume control, brightness and contrast

**Power Conservation**

Hibernation, Instant-On via Standby; pop-ups with three presets and one custom level of power conservation

**Dimensions (HxWxD)**

Standard Configuration:  
1.49 x 11.6 x 10.3 in/3.78 x 29.46 x 26.16 cm  
Slimline Configuration:  
1.49 x 11.4 x 8.8 in/3.78 x 28.96 x 22.35 cm  
Multimedia Configuration:  
2.3 x 11.6 x 10.3 in/5.84 x 29.46 x 26.16 cm

**Weight**

Armada 4131T:  
Standard Configuration: 6.1 lbs/2.77 kg  
Slimline Configuration: 5.2 lbs/2.36 kg  
Multimedia Configuration: 8.2 lbs/3.72 kg  
Armada 4150:  
Standard Configuration: 6.2 lbs/2.81 kg  
Slimline Configuration: 5.2 lbs/2.36 kg  
Multimedia Configuration: 8.2 lbs/3.72 kg  
Armada 4160T and 4160T Slimline:  
Standard Configuration: 6.2 lbs/2.81 kg  
Slimline Configuration: 5.2 lbs/2.36 kg  
Multimedia Configuration: 8.2 lbs/3.72 kg

**Software**

Windows 95, Netscape, Microsoft Internet Explorer, ESS Audio Rack, Lode Runner, Laplink, Just Connect, Compaq Insight Manager Personal Edition

**Interfaces**

Infrared, enhanced parallel, serial, external monitor, keyboard/pointing device, AC adapter/automobile adapter, PCMCIA, NTSC/PAL composite TV out, microphone in, headphone out, stereo line-in

**Intelligent Manageability**

Lowers total cost of ownership by providing enhanced security, asset management and fault prediction

**Security Features**

Cable lock support; power-on and set-up passwords; ability to disable serial port, parallel port, PC Card slots, diskette drive, diskette drive boot sequence, infrared port

**Service and Support**

Compaq Services, includes a three-year, Worldwide Limited Warranty<sup>4</sup>, pick-up or carry-in; upgrade to on-site warranty available; lifetime toll-free 7x24 hardware technical phone support

**OPTIONS**

**Memory**

8-MB Memory Expansion Board	217914-001
16-MB Memory Expansion Board	217915-001
32-MB Memory Expansion Board	217916-001
64-MB Memory Expansion Board	287325-B21

**Diskette Drives/Hard Drives**

Floppy Diskette Drive Caddy	258574-B21
2.0-GB SMART Hard Drive	287262-B21

**PC Card/Communications**

SpeedPaq Cellular PC Card + SpeedPaq 336 Telephony Modem	221200-001
Netelligent 56K <sup>5</sup> PC Card Modem	295050-001
10/100 TX PC Card UTP Controller	292812-B21
10 T PC Card UTP Controller	292806-B21
10 2 PC Card Coax Controller	292807-B21
10/100 TX PC Card UTP Controller	292813-B21

**Upgrade**

For additional compatible PC Cards, view the Compaq PC Card Solution List on the Compaq Web site at <http://www.compaq.com/product/info/notebooks>.

**Expansion/Convenience Bases**

20X MAX <sup>2</sup> Mobile CD Unit	217929-003
Convenience Base (Ethernet)	217927-001
Convenience Base (Pass-Through)	217928-001

**Power**

Li-Ion Dual Bay Battery	217935-001
Li-Ion Handle Battery	217930-001
AC Adapter	217931-001
3-Wire AC Power Cord	217932-001
External Battery Charger	217933-001
Auto Adapter/Inverter	217934-002

**PC companion**

C120	266500-001
C120+	266502-001
C140	266550-001

**Monitors**

V50 Color	264150-001
V70 Color	255606-001
V90 Color	305609-001
P50 Color	264200-001
P70 Color	255650-001
P110 Color	284956-001
TFT500 Flat Panel	285006-001

**OPTIONS** *(cont'd)***Input Devices**

Optical Trackball Pointing Device 258793-001

**Display**

12.1-inch CTFT SVGA Display 259233-B21

**Other**

Compaq Armada Headset 220460-001

Compaq Multimedia Sound System<sup>6</sup> 294106-001

**Carrying Cases**

A full line of Compaq brand carrying cases are available through Targus/Fabrique. For information please contact Targus/Fabrique at 801-572-8908 or 714-523-5429.

<sup>1</sup> Li-Ion Dual Bay Battery standard on 4160T slimline model only.

<sup>2</sup> Data transfer rates will vary from 1276 KB/s to 3000 KB/s.

<sup>3</sup> When tested in standard configuration using the Ziff-Davis BatteryMark test version 1.0, the battery life of the Armada 4100 will range from 2 hours and 0 minutes to 3 hours and 0 minutes depending on individual usage.

<sup>4</sup> Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-OK-COMPAQ for details.

<sup>5</sup> Actual transmission rates will vary with line conditions.

<sup>6</sup> For use with P50, V70, P70, V90, P110 and TFT500 Flat Panel Monitors.

# FEATURES

Compaq Armada 4100

	Compaq Armada 4131T	Compaq Armada 4150	Compaq Armada 4160T	Compaq Armada 4160T Slimline
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## System Unit

Microprocessor				
Standard	Intel Pentium 133-MHz	Intel Pentium 150-MHz with MMX technology	Intel Pentium 166-MHz with MMX technology	Intel Pentium 166-MHz with MMX technology
Cache	256 KB level 2 write-back	256 KB level 2 write-back	256 KB level 2 write-back	256 KB level 2 write-back
Architecture	64-bit CPU cache and memory bus; PCI local bus graphics	64-bit CPU cache and memory bus; PCI local bus graphics	64-bit CPU cache and memory bus; PCI local bus graphics	64-bit CPU cache and memory bus; PCI local bus graphics
RAM				
Standard	8 MB	16 MB	16 MB	16 MB
Maximum <sup>1</sup>	72 MB	80 MB	80 MB	80 MB
Coprocessor	Integrated	Integrated	Integrated	Integrated
Advanced Power Management	Yes	Yes	Yes	Yes

## Display

Type	12.1-inch color CTFT	12.1-inch color STN	12.1-inch color TFT	12.1-inch color TFT
Resolution	800 x 600 with up to 64,000 colors	800 x 600 with up to 256 colors	800 x 600 with up to 64,000 colors	800 x 600 with up to 64,000 colors
Extended Text	Yes	Yes	Yes	Yes

## Graphics

32-bit PCI Local Bus Video	Yes	Yes	Yes	Yes
1024 x 768 External	Yes	Yes	Yes	Yes

## Storage

1.44-MB Diskette Drive	Standard	Standard	Standard	Standard
Upgradable SMART Hard Drives				
Standard	1.4-GB	1.6-GB	2.0-GB	2.0-GB
Optional	2.0-GB	2.0-GB	—	—
Mobile CD Unit	Optional	Optional	Optional	Optional

## Interfaces

PC Card	Two Type II/ One Type III slot(s)	Two Type II/ One Type III slot(s)	Two Type II/ One Type III slot(s)	Two Type II/ One Type III slot(s)
Infrared Communication Port	1	1	1	1
Enhanced Parallel	1	1	1	1
Serial	1	1	1	1
External Monitor	1	1	1	1
NTSC/PAL Video Output	1	1	1	1
External Keyboard/Pointing Device	1	1	1	1
Expansion Base Connector	1	1	1	1
AC Adapter/Automobile Adapter	1	1	1	1
Microphone In	1	1	1	1
Headphone Out	1	1	1	1
Stereo Line In	1	1	1	1

	Compaq Armada 4131T	Compaq Armada 4150	Compaq Armada 4160T	Compaq Armada 4160T Slimline
<b>Monitors</b>				
V50 Color	Optional	Optional	Optional	Optional
V70 Color	Optional	Optional	Optional	Optional
P50 Color	Optional	Optional	Optional	Optional
P70 Color	Optional	Optional	Optional	Optional
QVision 210 Color <sup>2</sup>	Optional	Optional	Optional	Optional
TFT500 Flat Panel	Optional	Optional	Optional	Optional
<b>Keyboard</b>				
101-key compatible keyboard with Inverted "T" Cursor Keys, Hotkeys, Right Ctrl Key and four user-programmable keys	Yes	Yes	Yes	Yes
External Enhanced III Keyboard	Optional	Optional	Optional	Optional
<b>Supported Operating Systems</b>				
Software	Microsoft Windows 3.1, Windows 95, Windows NT Workstation 3.51, 4.0, and IBM OS/2	Microsoft Windows 3.1, Windows 95 OSR2, Windows NT Workstation 3.51, 4.0, and IBM OS/2	Microsoft Windows 3.1, Windows 95 OSR2, Windows NT Workstation 3.51, 4.0, and IBM OS/2	Microsoft Windows 3.1, Windows 95 OSR2, Windows NT Workstation 3.51, 4.0, and IBM OS/2
<b>Physical Specifications</b>				
Dimensions (HxWxD)	1.49 x 11.6 x 10.3 in/3.78 x 29.64 x 26.16 cm	1.49 x 11.6 x 10.3 in/3.78 x 29.64 x 26.16 cm	1.49 x 11.6 x 10.3 in/3.78 x 29.64 x 26.16 cm	1.49 x 11.6 x 10.3 in/3.78 x 29.64 x 26.16 cm
Weight	6.1 lb/2.77 kg	6.1 lb/2.77 kg	6.1 lb/2.77 kg	6.1 lb/2.77 kg

# MEMORY

Compaq Armada 4100

## Compaq Armada 4131T

STANDARD  
MEMORY

8 MB [ ] System Board

OPTIONAL  
MEMORY



ADD

Total Memory

16 MB [ ] 8-MB Memory Expansion Board  
(P/N 217914-001)

OR

24 MB [ ] 16-MB Memory Expansion Board  
(P/N 217915-001)

OR

40 MB [ ] 32-MB Memory Expansion Board  
(P/N 217916-001)

OR

72 MB [ ] 64-MB Memory Expansion Board  
(P/N 287325-B21)

Compaq Armada 4150, 4160T and 4160T Slimline

STANDARD  
MEMORY

16 MB [ ] System Board

OPTIONAL  
MEMORY



ADD

Total Memory

24 MB [ ] 8-MB Memory Expansion Board  
(P/N 217914-001)

OR

32 MB [ ] 16-MB Memory Expansion Board  
(P/N 217915-001)

OR

48 MB [ ] 32-MB Memory Expansion Board  
(P/N 217916-001)

OR

80 MB [ ] 64-MB Memory Expansion Board  
(P/N 287325-B21)

**System Unit**

<b>Dimensions (HxWxD)</b>	1.49 x 11.4 x 10.2 in/3.78 x 28.96 x 25.95 cm
<b>Weight</b>	
Armada 4131T	
Standard Configuration	6.1 lbs/2.77 kg
Slimline Configuration	5.2 lbs/2.36 kg
Multimedia Configuration	8.2 lbs/3.72 kg
Armada 4150	
Standard Configuration	6.2 lb/2.81 kg
Slimline Configuration	5.2 lb/2.36kg
Multimedia Configuration	8.2 lb/3.72 kg
Armada 4160T and 4160T Slimline	
Standard Configuration	6.2 lb/2.81 kg
Slimline Configuration	5.2 lb/2.36 kg
Multimedia Configuration	8.2 lb/3.72 kg
<b>Stand-Alone Power Requirements</b>	
Nominal Operating Voltage	14.2 VDC
Maximum Operating Power	35 W
Peak Operating Power	40 W
<b>Temperature</b>	
Operating	5 to 95° F/10 to 35° C
Nonoperating	-4 to 140° F/-20 to 60° C
<b>Relative Humidity (noncondensing)</b>	
Operating	10 to 90%
Nonoperating	5 to 95%
<b>Shock</b>	
Operating	10 G, 11 ms, half sine
Non operating	60 G, 11 ms, half sine
<b>Vibration</b>	
Operating	.25 G, 5-500 Oct/Min sweep rate
Nonoperating	1.0 G, 5-500 Oct/Min sweep rate
<b>Maximum Altitude (unpressurized)</b>	
Operating	10,000 ft/3.15 km
Nonoperating	30,000 ft/9.14 km

**12.1-Inch Color TFT SVGA Display**

<b>Dimensions (HxW)</b>	7.26 x 9.68 in/18.45 cm x 24.6 cm
<b>Diagonal Size</b>	12.1 in/30.7 cm
<b>Mounting</b>	Internal Panel Supports
<b>Number of Colors</b>	64K Colors
<b>Contrast Ratio</b>	Greater than 100:1
<b>Brightness</b>	100 cd/m <sup>2</sup>
<b>Pixel Resolution</b>	
Pitch	.3075 x .3075 mm
Format	800 x 600
Configuration	RGB Stripe
<b>Backlight</b>	Edge Lit
<b>Character Display</b>	—
<b>Total Power Consumption</b>	3.9 W

**12.1-Inch Color TFT  
SVGA Display (cont'd)**

<b>Display Inverter Board</b>	
Input Voltage	10-20 Vdc
Output Voltage	600 Vrms
Maximum Input Power	3.2 W
Maximum Output Power	2.5 W

**12.1-Inch Color STN  
Display**

<b>Dimensions (HxW)</b>	7.26 x 9.68 in/18.45 x 24.6 cm
<b>Diagonal Size</b>	12.1 in/30.7 cm
<b>Mounting</b>	Internal Panel Supports
<b>Number of Colors</b>	256
<b>Contrast Ratio</b>	Greater than 30:1
<b>Brightness</b>	75 cd/m <sup>2</sup> @ 4.0 mA
<b>Pixel Resolution</b>	
Pitch	.3075 x .3075 mm
Format	800 x 600
Configuration	RGB Stripe
<b>Backlight</b>	Edge Lit
<b>Character Display</b>	—
<b>Total Power Consumption</b>	3.9 W
<b>Display Inverter Board</b>	
Input Voltage	10-20 Vdc
Output Voltage	600 Vrms
Maximum Input Power	3.2 W
Maximum Output Power	2.5 W

**SMART Hard Drives<sup>1</sup>**

	<b>1.4-GB</b>	<b>1.6-GB</b>	<b>2.0-GB</b>
<b>Formatted Capacity Per Drive</b>	1.4 GB	1.6 GB	2167.6-GB
<b>Drive Type</b>	65	65	65
<b>Transfer Rate</b>			
Media	39.5 to 61.8 Mb/s	36.3 to 67.4 Mb/s	61.6 to 39.1 Mb/s
Interface	16.67 MB/s	16.67 MB/s	16.6 MB/s
<b>Sector Interleave</b>	1:1	1:1	1:1
<b>Seek Times (typical, including settling)</b>			
Track-to-track	4 ms	3 ms	4 ms
Average	13 ms	12 ms	13 ms
Maximum	23 ms	24 ms	23 ms
<b>Disk Rotational Speed</b>	4009 rpm	4000 rpm	4006 rpm
<b>Physical Configuration</b>			
Cylinders	4975	5158	4975
Heads	4	4	6
Sectors per track	110 to 180	108 to 198	110 to 180
Bytes per sector	512	512	512

SMART Hard Drives<sup>1</sup>(cont'd)

	1.4-GB	1.6-GB	2.0-GB
<b>Logical Configuration</b>			
Cylinders	2796	3162	4200
Heads	16	16	16
Sectors per track	63	63	63
Bytes per sector	512	512	512
<b>Buffer Size</b>			
	96 KB	128 KB	128 KB

## Diskette Drive

<b>Diskette Size</b>	3.5-inch
<b>Light</b>	None
<b>Height</b>	.43 in/1.1 cm
<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

## AC Adapter

<b>Dimensions (HxWxL)</b>	1.42 x 2.83 x 4.69 in/3.6 x 11.9 x 7.2 cm
<b>Weight</b>	.66 lb/.3 kg
<b>Power Supply (Input)</b>	
Nominal Voltage	120 VAC
Current	<1.11 A
Voltage Range	90-265 VAC
Input Frequency	47 to 63 Hz
<b>Power Supply (Output)</b>	
Nominal Voltage	+18.5 +/- 0.25 VDC
Current	40 to 42 W
<b>Temperature</b>	
Normal Operating	140°F/60°C
Operating	41 to 104°F/5 to 40°C
Nonoperating	-4 to 185°F/-20 to 85°C
<b>Relative Humidity</b>	
Operating	10 to 95%
Nonoperating	10 to 95%

**Lithium Ion Modular  
Battery Pack**

<b>Dimensions</b> (HxWxL)	.77 x 4.35 x 5.34 in/1.9 x 11.0 x 13.6 cm
<b>Weight</b>	.88 lb/.39 kg
<b>Energy</b>	
Voltage	14.4V
Amp-hour capacity	2.8 Ah
Watt-hour capacity	40 Wh
<b>Temperature</b>	
Operating	50° to 104° F/10° to 40° C
Nonoperating	-12° F to 140°F/-30° to 60°C

**Lithium Ion Handle  
Battery Pack**

<b>Dimensions</b> (HxWxL)	.89 x 1.53 x 11 in/1.52 x 3.9 x 27.9 cm
<b>Weight</b>	.88 lb/.39 kg
<b>Energy</b>	
Voltage	14.4 V
Amp-hour capacity	2.8 Ah
Watt-hour capacity	40 Wh
<b>Temperature</b>	
Operating	50° to 104° F/10° to 40° C
Nonoperating	-12° F to 140°F/-30° to 60°C

**20X MAX<sup>2</sup> Mobile CD Unit**

<b>Dimensions</b> (HxWxD)	.86 x 11.69 x 8.95 in/2.18 x 29.7 x 22.7 cm
<b>Weight</b>	2.0 lb/.91 kg
<b>Power Supply</b> (Input)	
Operating Voltage	100 to 240 VAC
Operating Current	1.10 Amp Maximum
Rated Voltage	100 to 240 VAC
Rated Current	1.0 Amp Maximum
Line Frequency	47 to 63 Hz
<b>Temperature</b>	
Operating	50 to 95°F/10 to 35°C
Nonoperating	-4 to 140°F/-20 to 60°C
<b>Relative Humidity</b>	
Operating	20 to 80%
Nonoperating	5 to 90%
<b>Altitude</b>	
Operating	10,000 ft/3.15 km
Nonoperating	30,000 ft/9.14 km
<b>Shock</b>	
Operating	5 G, 11 ms, half sine
Nonoperating	140 G, 2 ms, half sine
<b>Vibration</b>	
Operating	0.25 G, 5 to 500 Hz, 0.5 octave/min sweep rate
Nonoperating	0.75 G, 5 to 500 Hz, 0.5 octave/min sweep rate

**20X MAX<sup>2</sup> CD-ROM Drive** (included with Mobile CD Unit)

<b>Compatible Disc Formats</b>	CD-ROM (Mode 1, 2 and 3) CD-DA CD-XA ready (Mode 2 Form 1, Form 2) CD-I ready (Mode 2, Form 1 and 2) CD-R (read only) CD Plus Photo CD (single and multi-session) CD Extra
<b>Center Hole Diameter</b>	15 mm
<b>Disc Diameter</b>	12 cm, 8 cm
<b>Disc Thickness</b>	1.2 mm
<b>Track Pitch</b>	1.6 µm
<b>Laser</b>	
Beam divergence	53.5 +/- 1.5°
Output power	0.13 +/- .1 mw
Type	Semiconductor Laser GaAlAs
Wave length	780 +/- 25 nm
<b>Access Times</b> (typical, including settling)	
Random	< 150 ms
Full stroke	< 600 ms
<b>Audio Output Level</b>	
Line out	0.7 Vrms
Headphone	none
<b>Cache Buffer</b>	128 KB
<b>Data Transfer Rate</b> (typical, including settling)	
Sustained	3.0 MB/s, 20X Outer Diameter 150 KB/s, single
Asynchronous Burst	8.3 MB/s
<b>Startup Time</b>	< 10 seconds

<sup>1</sup> Hard drive specifications may vary slightly depending on vendor.

<sup>2</sup> Data transfer rates will vary from 1276 kB/s to 3000 kB/s.