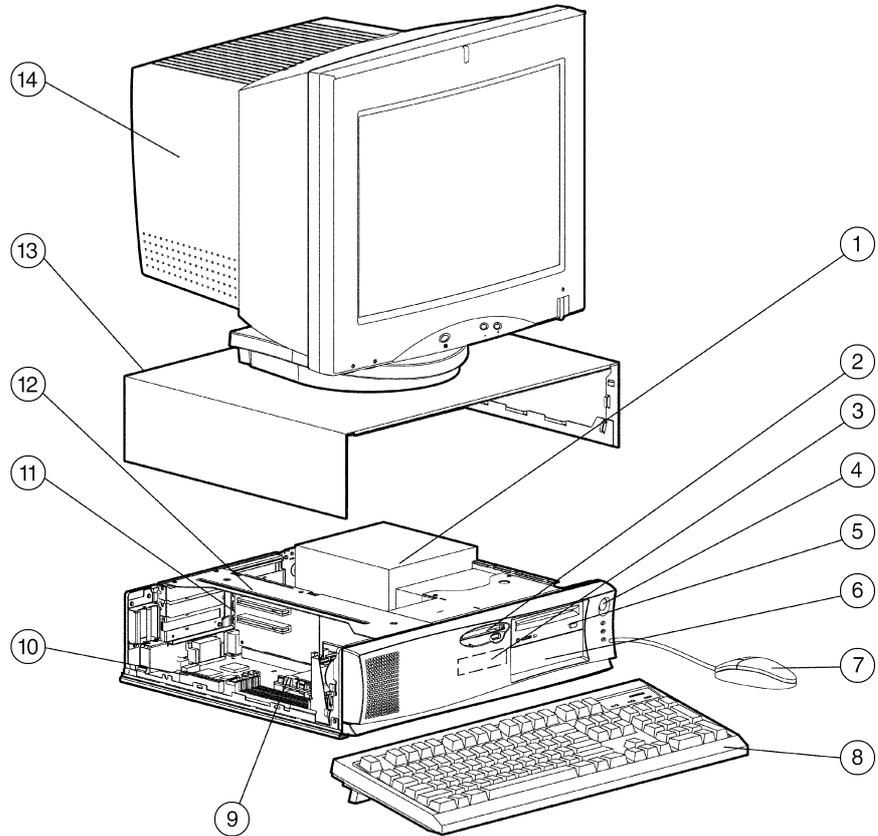


Overview

AT A GLANCE

- Desktop form factor
- Supports up to two Intel Pentium® III 700-, 600E-, or 550-MHz processors (100-MHz Front Side Bus)
- Intel 440BX Chipset
- 256-KB Full speed writeback Level 2 cache integrated on 700- and 600E-MHz processors
- 512-KB Half speed writeback Level 2 cache integrated on 550-MHz processor
- 128 MB of Registered ECC SDRAM, expandable to 1 GB
- Supports up to seven SCSI devices
- High-performance 9.1-GB Wide-Ultra or Ultra2 SCSI (7200 rpm) SMART hard drives
- Up to 54 GB of high- performance internal storage
- Compaq NC3161 Fast Ethernet NIC Embedded 10/100 with Wake-on-LAN support in either 10Base-T or 100Base-TX environments
- 32-bit, PCI-based system
- Six total slots (three PCI, one shared PCI/ISA, one ISA, one AGP)
- Five bays (three user-accessible, two internal)
- Internal 32X Max CD-ROM Drive (IDE) and Premier•Sound™ Audio
- Choice of Matrox Millennium G200, Matrox Productiva G100 Quad Multi-monitor Series or ELSA Synergy II Graphics Controllers
- Multiple monitor support
- Windows NT Workstation and Compaq support software pre-installed
- Intelligent Manageability Features
- Protected by Compaq Services, including a three-year limited warranty — Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details. Three year labor and onsite may not be available in all countries.



- | | |
|--|---------------------------------------|
| 1. 200-Watt Power Supply | 8. Compaq Keyboard |
| 2. 1.44-MB Diskette Drive | 9. Slide-Out System Board |
| 3. 3.5-inch Internal Drive Bay | 10. AGP Connector |
| 4. Power Switch with LEDs | 11. Expansion |
| 5. Internal 32X Max CD-ROM Drive (IDE) | 12. Removable Expansion Board Bracket |
| 6. 5.25-inch Drive Bay (available) | 13. Workstation Cover |
| 7. 3-button Mouse | 14. Compaq Color Monitor (optional) |

QUICK SPECS

Compaq Professional
Workstation AP400

Standard Features

MODELS

Compaq Professional Workstation AP400

Available in multiple configurations available in all countries. Check with your Authorized Compaq Reseller or Compaq.

Processor – One of the following:

Intel Pentium III 700 MHz
Intel Pentium III 600E MHz
Intel Pentium III 550 MHz

Cache Memory – One of the following:

256-KB Full speed Level 2 cache per processor standard
512-KB Half speed Level 2 cache per processor standard (550-MHz models)

Upgradability

Upgradable to dual processing

Memory

Standard 128 MB of 100-MHz Registered ECC SDRAM memory
Maximum 1 GB

Network Controller

Compaq NC3161 Fast Ethernet NIC Embedded 10/100 WOL standard

Expansion Slots

I/O (Total) 6, 5 available
Shared PCI/ISA 1, 1
PCI 3, 3 or 2 (depending on model)
ISA 1, 1
AGP 1, 1 or 0 (depending on model)

Storage Controller

Wide-Ultra SCSI and integrated Ultra ATA

Storage

Diskette Drives 1.44 MB
CD-ROM 32X Max CD-ROM Drive IDE
Hard Drives One of the following:
9.1-GB Wide-Ultra2 SCSI (7200 rpm)
(Wide-Ultra SCSI or Wide Ultra2 SCSI capable depending on controller.)
9.1-GB Wide-Ultra SCSI (7200 rpm)

Interfaces

Parallel	1
USB	2
Serial	2
Wide-Ultra SCSI (50-pin)	1
Keyboard (PS/2)	1
Pointing Device (PS/2 mouse)	1
Video	1
Microphone Jack	1
Headphone Jack	1
Line-In	1
Line-Out	1
RJ-45	1

Graphics – One of the following:

2D: Matrox Millennium G200 (AGP) Graphics Controller
2D/3D: ELSA Synergy II (AGP) Graphics Controller
Multi-Display: Matrox Productiva G100 Quad Multi-monitor Series

Standard Features

Audio

Integrated 16-bit *Premier•Sound* Audio
Integrated speaker
Integrated five stage equalizer

Software

Compaq Insight Manager
Compaq SmartStart
Compaq Management Agents for Workstations
Compaq PC Diagnostics and Setup for Workstations
Compaq support software
Microsoft Windows NT Workstation 4.0
Diagnostics for Windows NT
Microsoft Internet Explorer
Microsoft Service Pack 4A

Intelligent Manageability

AssetControl
Fault Management
Security Management
Remote Management
 Remote Wakeup via Magic Packet Support
 Remote ROM Flash
 Remote Security
 Remote Shut Down
Pre-Failure Warranty (processors, hard drives and memory)

Security

Diskette write and boot control
Flash ROM lock
Keyboard password
Network server mode
Parallel interface control
Power-on password
Serial interface control
Setup password
Cable lock provision

Power Supply

200-Watt Power Supply

Service and Support

Protected by Compaq Services, including a three-year limited warranty with three year parts coverage, three year on-site service, and three year labor; 7 x 24 hardware technical phone support and on-line support through the Internet; Pre-Failure Warranty coverage of hard drives, memory, and processors

Note: Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details.
Three year onsite and labor not available in all countries.

QUICK SPECS

Compaq Professional
Workstation AP400

Standard Features

Models

40D/700/128S/9S/2
161733-xx1

Processor	Intel Pentium III 700-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	256-KB Full speed L2	Hard Drive	9.1-GB Wide Ultra2 SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Matrox Millennium G200
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

40D/700/128S/9S/2+
161733-xx3

Processor	Intel Pentium III 700-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	256-KB Full speed L2	Hard Drive	9.1-GB Wide Ultra2 SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	ELSA Synergy II
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

40D/700/128/9S/X
161733-xx4 and graphics option

Processor	Intel Pentium III 700-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	256-KB Full speed L2	Hard Drive	9.1-GB Wide Ultra2 SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Choice of Graphics Option: Matrox Productiva G100 Quad (101479-B21) Matrox Millennium G200 (294308-B21) ELSA Synergy II (103382-B21)
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

AP4 600E/128/9S/2
195278-xx1

Processor	Intel Pentium III 600E-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	256-KB Full speed L2	Hard Drive	9.1-GB Wide Ultra2 SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Matrox Millennium G200
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

AP4 600E/128/9S/4X
195278-xx2

Processor	Intel Pentium III 600-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	256-KB Full speed L2	Hard Drive	9.1-GB Wide Ultra2 SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Matrox Productiva G100 Quad MMS
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

QUICKSPECS

Compaq Professional
Workstation AP400

Standard Features

AP4 550S1/128/9S/2
126968-xx1

Processor	Intel Pentium III 550-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	512-KB Half speed L2	Hard Drive	9.1-GB Wide-Ultra SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Matrox Millennium G200
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

AP4 550S1/128/9S/4X
126968-xx3

Processor	Intel Pentium III 550-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	512-KB Half speed L2	Hard Drive	9.1-GB Wide-Ultra SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Matrox Productiva G100 Quad MMS
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

AP4 550S1/128/9S/2+
126968-xx4

Processor	Intel Pentium III 550-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	512-KB Half speed L2	Hard Drive	9.1-GB Wide-Ultra SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	ELSA Synergy II
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

AP4 550S1/128/9S/X
126968-xx5 and graphics option

Processor	Intel Pentium III 550-MHz	Optical Drive	32X Max CD-ROM Drive
Cache Memory	512-KB Half speed L2	Hard Drive	9.1-GB Wide-Ultra SCSI 7200 rpm
Memory	100-MHz ECC SDRAM	Controller	Wide-Ultra SCSI
Standard	128 MB	Graphics	Choice of Graphics Option: Matrox Productiva G100 Quad (101479-B21) Matrox Millennium G200 (294308-B21) ELSA Synergy II (103382-B21)
Maximum	1 GB	Audio	16-bit <i>Premier•Sound</i>
		OS	Windows NT Workstation 4.0

Country Code Key

XX=00	U.S. English
XX=A2	Europe: English, French, Italian, German
XX=A4	Europe: Dutch, French, English, Spanish
XX=29	Japan: Japanese
XX=37	Asia/Pacific: English
XX=39	Japan: English

Options

Processor

Pentium III 700/256K processor upgrade	157133-B21
Pentium III 600E/256K processor upgrade (do not mix with 600 MHz)	195310-B21
Pentium III 600/512K processor upgrade (do not mix with 600E MHz)	157132-B21
Pentium III 550/512K processor upgrade	136266-B21

Memory (DIMMs)

256-MB Memory Module (100-MHz Registered SDRAM)	317739-B21
128-MB Memory Module (100-MHz Registered SDRAM)	317738-B21
64-MB Memory Module (100-MHz Registered SDRAM)	317737-B21

Monitors

TFT8020 Flat Panel Color 18-inch (Opal)	326100-xxx
TFT8020 Flat Panel Color 18-inch (Carbon)	159244-xxx
TFT7000 Flat Panel Color 17-inch (not available in NA)	136143-xxx
TFT5010 Flat Panel Color 15-inch (opal)	104741-xxx
TFT5010 Flat Panel Color 15-inch (carbon)	154486-xxx
P1100 Color CRT 21-inch	325606-xxx
P900 Color CRT 19-inch	386326-xxx
P700 Color CRT 17-inch	380207-xxx
V1100 Color CRT 21-inch	386472-xxx
V700 Color 17-inch	325800-xxx

Note: AssetControl monitor. AssetControl features are accessible with Compaq Workstations featuring Intelligent Manageability.

Graphics

Matrox Millennium G200 (AGP)	294308-B21
Matrox Millennium G200 (PCI)	402544-B21
8-MB Memory Upgrade (Matrox Millennium G200 PCI)	294418-B21
Matrox Productiva G100 Quad Multi-monitor Series	101479-B21
ELSA Synergy II (AGP)	103382-B21

Diskette Drives

100-MB ATAPI ZIP	294402-B21
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Hard Drives

Ultra3 (Ultra 160) SCSI Drives (requires Ultra3 (Ultra 160) SCSI controller)

18.2-GB Ultra3 (Ultra 160) SCSI	147503-B21
9.1-GB Ultra3 (Ultra 160) SCSI 10,000 rpm (10K-mounting/cooling kit required if installing in drive bay 4 or 5)	159763-B21

Wide Ultra2 SCSI Drives

18.2-GB Wide Ultra2 SCSI	388143-B21
9.1-GB Wide Ultra2 SCSI 10,000 rpm (10K-mounting/cooling kit required if installing in drive bay 4 or 5)	328942-B21
9.1-GB Wide Ultra2 SCSI	349526-B21
10K Drive Cooling Kit	329302-B21

Ultra ATA Drives

20-GB Ultra ATA	124724-B21
13.5-GB Ultra ATA	124723-B21
10-GB Ultra ATA	127452-B21

Options

Storage Controllers

Compaq Dual Channel Ultra3 (Ultra 160) SCSI Controller	144387-B21
Symbios Wide Ultra2 SCSI PCI Controller	102196-B21
Mylex AcceleRAID 150 Array Controller	402381-B21
SMART 221 Array Controller	388099-B21
Dual Channel Wide-Ultra SCSI Controller	295554-B21

External Storage

SCSI Storage Expander	142185-001
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Tape Drives

TR5 10/20 GB Tape Drive	294243-B21
12/24-GB DDS-3 DAT Drive	295513-B21
4/8-GB SLR Drive	295480-B21
AIT 35/70-GB Internal Tape Drive	388504-B21

Biometrics

Compaq Fingerprint Identification Technology	294307-001
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Multimedia

10X DVD-ROM (without MPEG2 decoder)	294414-B21
Hardware MPEG2 Decoder (supported with Synergy+, Synergy II, Millennium G200)	294422-B21

Communications

Intel PRO/100+ Management Adapter	127453-B21
Compaq NC3123 Fast Ethernet NIC PCI 10/100 WOL	174830-B21
Compaq NC3122 Fast Ethernet NIC PCI Dual 10/100	317450-B21
Compaq NC6134 Gigabit NIC 64 PCI 1000SX	174818-B21
Compaq NC4621 TR PCI 4/16 WOL	379956-B21
56k ISA Fax/Modem (available in North America and Latin America)	294900-001

Uninterruptible Power Systems

Compaq Tower UPS Model T1000 (low voltage)	242688-001
Compaq Tower UPS Model T700 (low voltage)	295372-B21
Compaq Tower UPS Model T1000h (high voltage, not available in North America)	242688-002
Compaq Tower UPS Model T700h (high voltage, not available in North America)	295372-B22

Other

Compaq Spaceball 4000 3D Motion Control Input Device	112138-B21
Compaq Mouse (3 Button)	269192-B22
External SCSI Adapter 68-/50-pin	270187-B21
12/24-GB DAT Cartridge (10 pack)	295515-B21
DAT Cleaning kit	242781-001
4/8-GB SLR Cartridge (5 pack)	295482-B21
SLR Cleaning Cartridge	295483-B21
Floor Stand Kit	354499-B21
4-Device SCSI Cable Kit	328913-B21
4-Device Ultra2 SCSI Cable Kit	401706-B21

Memory

Compaq Professional Workstation AP400 (128 MB)

STANDARD MEMORY

128-MB 100-MHz Registered ECC SDRAM Standard (Like pairs are not required.)

Standard	Slot			
	1	2	3	4
128 MB	128 MB	Empty	Empty	Empty

STANDARD MEMORY PLUS

OPTIONAL MEMORY

Support for up to 896 MB of 100-MHz Registered ECC SDRAM memory is available with the installation of optional Memory Kits. (Example Configuration)

Up To	Slot			
	1	2	3	4
320 MB	128 MB	64 MB	64 MB	64 MB
512 MB	128 MB	128 MB	128 MB	128 MB
896 MB	128 MB	256 MB	256 MB	256 MB

STANDARD MEMORY REPLACED

WITH OPTIONAL MEMORY

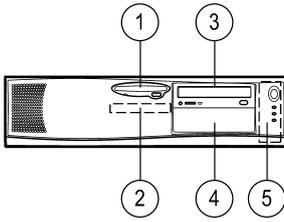
Support for up to 1 GB of 100-MHz Registered ECC SDRAM memory is available with the removal of the standard 128-MB SDRAM module and the installation of optional 100-MHz Registered ECC SDRAM Memory Kits.

Up To	Slot			
	1	2	3	4
1024 MB	256 MB	256 MB	256 MB	256 MB

Note: This chart does not represent all possible memory configurations. The Compaq AP400 will support 1 GB of memory. If memory exceeds 1 GB, the unit will not boot.

- 256-MB 100-MHz Registered ECC SDRAM Memory Kit 317739-B21
- 128-MB 100-MHz Registered ECC SDRAM Memory Kit 317738-B21
- 64-MB 100-MHz Registered ECC SDRAM Memory Kit 317737-B21

Storage



DRIVE SUPPORT

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	1	Integrated
IDE CD-ROM Drive	Up to 1	3, 4	Integrated EIDE
10X DVD-ROM	Up to 1	3, 4	Integrated EIDE
100-MB ATAPI ZIP Drive	Up to 1	3, 4	Integrated EIDE
Hard Drives			
<i>Ultra3 (Ultra 160) SCSI Drives</i>			
<u>1-inch</u>			Dual Channel Ultra3 (Ultra 160) SCSI
18.2-GB	Up to 3	2, 4, 5	
9.1-GB 10,000 rpm	Up to 2	4, 5	
<i>Wide Ultra2 SCSI Drives</i>			
<u>1-inch</u>	Up to 2	4, 5	Wide Ultra2 SCSI
9.1-GB 10,000 rpm			
<u>1-inch</u>	Up to 3	2, 4, 5	Wide Ultra2 SCSI
18.2-GB			
9.1-GB			
<i>Wide-Ultra SCSI Drives</i>			
<u>1-inch</u>	Up to 3	2, 4, 5	Wide-Ultra SCSI
9.1-GB			
<i>Ultra ATA Drives</i>			
<u>1-inch</u>	Up to 3	2, 4, 5	Integrated EIDE
20-GB			
13.5-GB			
10-GB			
Maximum Storage Capacity			
Internal	54 GB		
Tape Drives			
AIT 35/70-GB Internal	Up to 1	4	Wide-Ultra SCSI
12/24-GB DAT	Up to 1	4	Wide-Ultra SCSI
TR5 10/20-GB	Up to 1	4	IDE
4/8-GB SLR	Up to 1	4	Wide-Ultra SCSI

Technical Specifications

System Unit

Dimensions (HxWxD)	5 x 19.9 x 17.5 in/12.7 x 50.5 x 44.5 cm
Desktop	
Weight (standard configuration)	35 lbs/15.9 kg
Power Supply	
Operating Voltage Range	90 VAC to 132 VAC; 180VAC to 264 VAC
Rated Voltage Range	100 VAC to 127 VAC; 200VAC to 250 VAC
Rated Line Frequency	50 Hz to 60 Hz
Rated Input Current	5.5A @ 115 VAC; 2.75A @ 230 VAC
Maximum Rated Power	200-Watt output; 310-Watt input
Physical Dimensions	6.5 in x 3.78 in x 6.9 in
Weight	5 lbs/2.27 kg
Temperature (Values are subject to change)	
Operating	50° to 93°F/10° to 35°C
Non-operating	-4° to 140°F/-20° to 60°C
Humidity (non-condensing) (Values are subject to change)	
Operating	8% to 90%
Non-operating	5% to 95%
Maximum Altitude (unpressurized)	
Operating	10,000 ft/3,048 m
Non-operating	30,000 ft/9,144 m

Compaq Keyboard

Dimensions (HxWxL)	1.3 x 6.4 x 18.3 in/3.3 x 16.26 x 46.48 cm
Weight	3 lbs/1.4 kg
Cable Length	8 ft/2.4 m

1.44-MB Diskette Drive

Diskette Size	3.5 in
LED Indicators (front panel)	Green
Read/Write Capacity per Diskette (high/low)	1.44 MB/720 KB
Drive Height	One-third
Drive Rotation	300 rpm
Transfer Rate (high/low)	500/250 Kb/s
Bytes/Sector	512
Sectors/Track (high/low)	18/9
Tracks/Side (high/low)	80/80
Access Times	
Track-to-Track (high/low)	3/6 ms
Average (high/low)	94/173 ms
Settling Time	15 ms
Latency Average	100 ms
Cylinders (high/low)	80/80
Read/Write Heads	Two

QUICK SPECS

Compaq Professional
Workstation AP400

Technical Specifications

Ultra3 (Ultra 160) SCSI Hard Drive

18.2 GB	Capacity	18209 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	6.9 ms
	Interface	Ultra3 (Ultra 160) SCSI	Full-Stroke	15 ms
	Transfer Rate Synchronous (Maximum)	160 MB/s	Rotational Speed	7,200 rpm
			Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	35,566,000
			Operating Temperature 50° to 95°F/10° to 35°C	

9.1 GB	Capacity	9,100 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.0 ms
	Interface	Ultra3 (Ultra 160) SCSI	Full-Stroke	13.5 ms
	Transfer Rate Synchronous (Maximum)	160 MB/s	Rotational Speed	10,000 rpm
			Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,500
			Operating Temperature 50° to 95°F/10° to 35°C	

Wide Ultra2 SCSI Hard Drives

18.2 GB	Capacity	18209.3 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	6.9 ms
	Interface	Wide Ultra2 SCSI	Full-Stroke	15 ms
	Transfer Rate Synchronous (Maximum)	80 MB/s	Rotational Speed	7,200 rpm
			Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	35,565,080
			Operating Temperature 50° to 95°F/10° to 35°C	

9.1 GB	Capacity	9100 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.4 ms
	Interface	Wide Ultra2 SCSI	Full-Stroke	12.2 ms
	Transfer Rate Synchronous (Maximum)	80 MB/s	Rotational Speed	10,000 rpm
			Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,524
			Operating Temperature 50° to 95°F/10° to 35°C	

9.1 GB	Capacity	9100 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	1.9 ms
	Width	3.5 in/88.9 mm	Average	7.5 ms
	Interface	Wide Ultra2 SCSI	Full-Stroke	15 ms
	Transfer Rate Synchronous (Maximum)	80 MB/s	Rotational Speed	7,200 rpm
			Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,524
			Operating Temperature 50° to 95°F/10° to 35°C	

QUICK SPECS

Compaq Professional
Workstation AP400

Technical Specifications

Wide-Ultra SCSI Hard Drives

9.1 GB	Capacity	9100.0 MB	Seek Time (typical reads, including settling)		
	Height	1 in/25.4 mm	Single Track	1.9 ms	
	Width	3.5 in/88.9 mm	Average	7.5 ms	
	Interface	Wide-Ultra SCSI or Wide Ultra2 SCSI	Full-Stroke	15 ms	
	Transfer Rate Synchronous (Maximum)	40 MB/s or 80 MB/s	Rotational Speed	7,200 rpm	
				Physical Configuration	
				Bytes/Sector	512
				Logical Blocks	17,773,500
				Operating Temperature	
				50° to 95°F/10° to 35°C	

Ultra ATA Hard Drives

20 GB	Capacity	20,000 MB	Seek Time (typical reads, including settling)		
	Height	1 in/25.4 mm	Single Track	1.7 ms	
	Width	3.5 in/88.9 mm	Average	8.5 ms	
	Interface	Ultra ATA	Full Stroke	15 ms	
	Transfer Rate Synchronous (Maximum)	33 MB/s	Rotational Speed	7,200 rpm	
				Physical Configuration	
				Bytes/Sector	512
				Logical Blocks	39,102,336
				Operating Temperature	
				41° to 131°F/5° to 55°C	

13.5 GB	Capacity	13,500 MB	Seek Time (typical reads, including settling)		
	Height	1 in/25.4 mm	Single Track	1.7 ms	
	Width	3.5 in/88.9 mm	Average	8.5 ms	
	Interface	Ultra ATA	Full Stroke	15 ms	
	Transfer Rate Synchronous (Maximum)	33 MB/s	Rotational Speed	7,200 rpm	
				Physical Configuration	
				Bytes/Sector	512
				Logical Blocks	26,406,576
				Operating Temperature	
				41° to 131°F/5° to 55°C	

10 GB	Capacity	10,000 MB	Seek Time (typical reads, including settling)		
	Height	1 in/25.4 mm	Single Track	1.7 ms	
	Width	3.5 in/88.9 mm	Average	8.5 ms	
	Interface	Ultra ATA	Full Stroke	15.0 ms	
	Transfer Rate Synchronous (Maximum)	33 MB/s	Rotational Speed	7,200 rpm	
				Physical Configuration	
				Bytes/Sector	512
				Logical Blocks	19,541,088
				Operating Temperature	
				41° to 131°F/5° to 55°C	

Technical Specifications

32X Max CD-ROM
Drive IDE

Disk	
Applicable Disk	CD-ROM (Mode 1 and 2) CD-DA Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined) CD-XA ready CDi ready
Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)
Diameter	4.7 in, 3.15 in/12 cm, 8 cm
Rotational Speed	7,000 rpm maximum
Center Hole	0.6 in/15 mm diameter
Thickness	0.05 in/1.2 mm
Track Pitch	1.6 μ m
Block Size	
Mode 1	2,048 bytes
Mode 2	2,340, 2,336 bytes
CD-DA	2,352 bytes
CD-XA	2,328 bytes
Interface	
	IDE (ATAPI)
Access Times (typical)	
Random	< 100 ms
Full-Stroke	< 150 ms
Audio Output Level	
Line-Out	0.7 VRMS at 47 kOhms
Headphone	0.6 VRMS at 32 Ohms (maximum)
Data Transfer Rate	
Sustained	150 KB/s
Burst	2100 to 4800 KB/s (14X to 32X)
Cache Buffer	
	128 KB
Start-Up Time (typical)	
	< 7 seconds
Stop Time	
	< 4 seconds
Laser Parameters	
Type	Semiconductor Laser GaAlAs
Wave Length	780 \pm 25 nm
Divergence Angle	53.5 $^{\circ}$ \pm 1.5 $^{\circ}$
Output Power	0.14 mW
Operating Conditions	
Temperature	41 $^{\circ}$ to 113 $^{\circ}$ F/5 $^{\circ}$ to 45 $^{\circ}$ C
Humidity	10% to 80%
Dimensions	
(HxWxD, maximum)	1.7 x 5.9 x 8.19 in/4.29 x 15 x 20.8 cm
Weight	
	2.65 lbs/1.2 kg

QUICK SPECS

Compaq Professional
Workstation AP400

Technical Specifications

Premier•Sound Audio

Type	ESS 1869 <i>AudioDrive</i> ® with Plug and Play support
Sound Quality	16-bit stereo (CD quality)
Sampling	4 kHz to 48 KHz
Audio Compression/Decompression	ESPCM® and ADPCM compression
Speaker	
Frequency Response	150 Hz to 15 KHz
Equalizer	5 stages of fixed equalization
Design	High-performance, long excursion, infinite baffle loudspeaker
Volume Control	16 software controlled levels for master volume and each audio input
Full Duplex	Yes
Synthesizer	High-quality, 20 voice ESFM music synthesizer
Connectors	4 stereo mini-jacks: line-in, line-out, headphone, and single monolithic microphone jack
Operating System Driver Support	Windows NT 4.0 and 3.51, Windows 95 and Windows 98

Compaq NC3161 Fast Ethernet NIC Embedded 10/100 WOL

Network Interface	10Base-T or 100Base-TX
Expansion Bus Architecture	32-bit PCI bus-master
Network Transfer Rate	
10Base-T (Half-Duplex)	10 Mb/s
10Base-T (Full-Duplex)	20 Mb/s
Connectors	
Ethernet	RJ-45 supports 10Base-T or 100Base-TX
Standards Compliance	
Ethernet	IEEE 802.3
100 Mb/s Ethernet	100Base-TX, IEEE 802.3u
I/O Address	Auto-configured
Communication Processor	Intel 82558

QUICKSPECS

Compaq Professional
Workstation AP400

Technical Specifications

Matrox Millennium G200 Graphics Controller

Dimensions (HxW)	6.13 x 3.55 in/15.57 x 9.02 cm			
Resolution	Maximum Colors Supported/8 MB	Maximum Refresh Rate/8 MB	Maximum Colors Supported/16 MB	Maximum Refresh Rate/16 MB
640 x 480	16.7M	200 Hz	16.7M	200 Hz
800 x 600	16.7M	180 Hz	16.7M	180 Hz
1024 x 768	16.7M	140 Hz	16.7M	140 Hz
1152 x 864	16.7M	120 Hz	16.7M	120 Hz
1280 x 1024	16.7M	100 Hz	16.7M	100 Hz
1600 x 1200	16.7M	75 Hz	16.7M	75 Hz
1920 x 1080	16.7M	70 Hz	16.7M	70 Hz
1920 x 1200	16.7M	65 Hz	16.7M	65 Hz
1800 x 1440	65,536	70 Hz	65,536	70 Hz
2D Controller	MGA-G200			
VGA Controller	Integrated			
Bus Type	AGP			
RAMDAC	Integrated 250 MHz			
Memory Type	SGRAM			
Memory Amount	8-MB SGRAM			
Maximum Memory Speed	132 MHz			
Data Path	128 bit			
Controller Clock Speed	66 MHz			
Maximum Pixel Clock	250 MHz			
Performance				
Primitives	1 million polygons/s (25 pixels/polygon) - perspective corrected, bilinear filtered, texture mapped, Z-buffering			
Fill Rate	84 million pixels/s - perspective corrected, bilinear filtered, texture mapped			
Operating Systems	Windows NT 4.0 and 3.51, Windows 95 and 98, Windows 2000			

Technical Specifications

Matrox Productiva G100
Quad Multi-Monitor
Series Graphics
Controller

Dimensions (H x W)	4.2 x 12.28 in/10.67 x 31.19 cm	
Resolution	Maximum Colors Supported	Maximum Refresh Rate
640 x 480	16.7M	180 Hz
800 x 600	16.7M	180 Hz
1024 x 768	16.7M	140 Hz
1152 x 864	16.7M	120 Hz
1280 x 1024	16.7M	100 Hz
1600 x 1200	65,536	75 Hz
VGA Controller/Processor	MGA-G100 (4)	
Bus Type	PCI	
RAMDAC	Integrated 230 MHz	
Memory Type	SGRAM	
Memory Amount	16-MB SGRAM (4 MB per port)	
Data Path	64 bit	
Maximum Vertical Refresh Rate	200 MHz	
Maximum Pixel Clock	230 MHz	
Operating Systems	Windows NT 4.0 and 3.51, Windows 95 and 98, Windows 2000	

Technical Specifications

ELSA Synergy II Graphics Controller

Dimensions (HxW)	3.25 x 6.25 in/8.3 x 15.9 cm		
Resolution	Maximum Colors Supported	Maximum Refresh Rate	Memory Dedicated to Texture Support
640 x 480	16.7M	120 Hz	29.1 MB
800 x 600	16.7M	120 Hz	27.1 MB
1024 x 768	16.7M	120 Hz	23.5 MB
1152 x 864	16.7M	120 Hz	21.1 MB
1280 x 1024	16.7M	120 Hz	17.9 MB
1600 x 1000	16.7M	75 Hz	14 MB
1600 x 1000	65K	85 Hz	14 MB
1600 x 1200	16.7M	75 Hz	10.2 MB
1600 x 1200	65K	85 Hz	10.2 MB
1600 x 1280	16.7M	75 Hz	8.7 MB
1600 x 1280	65K	85 Hz	8.7 MB
1920 x 1080	16.7M	75 Hz	8.4 MB
1920 x 1080	65K	85 Hz	8.4 MB
1920 x 1200	16.7M	75 Hz	5.7 MB
1920 x 1200	65K	75 Hz	5.7 MB
3D/2D Controller	Nvidia TNT 2		
VGA Controller	Integrated		
Bus Type	AGP 2X/4X		
RAMDAC	Integrated 300 MHz		
Memory Type	SDRAM		
Memory Amount	32 MB (Maximum)		
Memory Speed	143 MHz		
Controller Clock Speed	125 MHz		
Color Planes	24 bits double buffered		
Stencil Planes	8 bit		
Alpha Planes	0		
Z-buffer	24 bit		
Total bits/pixel	96		
Maximum Vertical Refresh Rate	120 Hz		
Maximum Pixel Clock	300 MHz		
Multi-display support	No		
Operating Systems	Windows NT 4.0, Windows 95, Windows 98		

Note: All drivers and enhanced software, including *POWERdraft*, *ELSAview*, and *MAXtreme*, can be found on the Compaq web site at www.compaq.com/support/files/workstations/us/index.html.