

# TECHSPECS

Compaq Professional  
Workstation

## System Unit

<b>Dimensions(HxWxD)</b>	5.0 x 19.9 x 17.5 in/12.7 x 50.5 x 44.5 cm	
<b>Weight</b> (approximate)	35 lb/15.9 kg	
<b>Power Supply</b>		
Operating Voltage Range	90 - 132 VAC/180 - 264 VAC	
Rated Voltage Range	100 - 120 VAC/220 - 240 VAC	
Rated Line Frequency	47 - 63 Hz	
Rated Input Current	6A/3A	
Maximum Rated Power	240 W	
<b>Temperature</b>		
Operating	50° to 95°F/10° to 35°C	
Nonoperating	-4° to 140°F/-20° to 60°C	
<b>Humidity</b> (noncondensing)		
Operating	8% to 90%	
Nonoperating	5% to 95%	
<b>Maximum Altitude</b> (unpressurized)		
Operating	10,000 ft/3048 m	
Nonoperating	30,000 ft/9144 m	

## Compaq Enhanced Keyboard

<b>Dimensions(HxWxD)</b>	1.5 x 18.0 x 6.5 in/3.81 x 45.72 x 16.51 cm	
<b>Weight</b>	2.58 lb/1.7 kg	

## 1.44-MB Diskette Drive

<b>Diskette Size</b>	3.5-in	
<b>LED Indicators</b>	Green	
<b>Read/Write Capacity/Diskette</b> (high/low density)	1.44 MB/720 KB	
<b>Drive Height</b>	One-third	
<b>Drive Rotation</b>	300 rpm	
<b>Transfer Rate</b> (high/low density)	500/250 Kb/s	
<b>Bytes/Sector</b>	512	
<b>Sectors/Track</b> (high/low density)	18/9	
<b>Tracks/Side</b> (high/low density)	80/80	
<b>Seek Time</b>		
Track-to-Track (high/low density)	3/3 ms	
Average (high/low)	94/94 ms	
Settling Time	15 ms	
Latency Average	100 ms	
<b>Cylinders</b> (high/low)	80/80	
<b>Read/Write Heads</b>	2	

## Fast-Wide SCSI-2 Hard Drives<sup>1</sup>

<b>Capacity</b>	<b>2.1-GB</b> 2104.3 MB	<b>4.3-GB</b> 4293.6 MB
<b>Height</b>	Third	Half
<b>Size</b>	3.5 in	3.5 in
<b>Interface</b>	Fast-Wide SCSI-2	Fast-Wide SCSI-2
<b>Transfer Rate</b>	20 MB/s	20 MB/s

TECHSPECS (cont'd)

Fast Wide SCSI-2  
Hard Drives<sup>1</sup>(cont'd)

	2.1-GB	4.3-GB
<b>Sector Interleave</b>	1:1	1:1
<b>Seek Time</b> (typical including settling)		
Track to Track	1.9 ms	2.5 ms
Average	10.0 ms	9.5 ms
Full Stroke	20.0 ms	18.0 ms
Rotation Speed	7,200 rpm	7,200 rpm
<b>Physical Configuration</b>		
Cylinders	3,511	4,390
Heads (data + servo)	11+1	16 (Embedded Servo)
Sectors Per Track (zone bit recording)	86-125 (26 zones)	82-135 (10 zones)
Bytes Per Sector	512	512

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

Internal 8X CD-ROM  
Drive (IDE)

<b>Disk</b>	
Applicable Disk	CD-ROM (Mode 1 and 2), CD-DA, CD-XA (Mode 2, Form 1 and 2), Photo CD (single and multi session), Mixed Mode (audio and data combined)
Capacity	550 MB (Mode 1, 12 cm) 640 MB (Mode 2, 12 cm) 180 MB (8 cm)
Block Size	2048, 1024 bytes (Mode 1) 2340, 2336, 1024 bytes (Mode 2) 2352 bytes (CD-DA)
Rotational Speed	1840-4240 rpm
Diameter	4.7 in, 3.15 in/12 cm, 8 cm
Center Hole	.6 in/15 mm diameter
Thickness	.05 in/1.2 mm
Track Pitch	1.6 µm
<b>Interface</b>	IDE
<b>Access Time</b> (typical)	
Random	150 ms
Full Stroke	350 ms
<b>Audio Output Level</b>	
Line Out	0.7 VRMS at 47 kOhms
Headphone	0.6 VRMS at 32 Ohms (maximum volume)
<b>Data Transfer Rate</b>	
Sustained	1200 KB/s
Burst	4 MB/s
<b>Cache Buffer</b>	128 KB
<b>Startup Time</b>	Less than 7 seconds
<b>Stop Time</b>	Less than 4 seconds
<b>Laser Parameters</b>	
Type	Semiconductor Laser GaAlAs
Wave Length	790 ± 25 nm
Divergence Angle	53.5° ± 1.5°
Output Power	0.14 mW

TECHSPECS (cont'd)

Internal 8X CD-ROM  
Drive (IDE) (cont'd)

**Operating Conditions**

Temperature 41-113° F/5-45° C  
Humidity 10-80%

**Dimensions**(HxWxD, maximum)

1.69 x 5.75 x 8.19 in/4.29 x 14.6 x 20.8 cm

**Weight**

2.09 lb/.95 kg

Integrated Business  
Pro Audio

**Type**

ESS 1868 16-Bit, Plug and Play

**Sound Quality**

16-bit CD Quality

**Sampling**

44 KHz

**Audio Compression/ Decompression**

With ESPCM compression, a 15:1 compression ratio is provided allowing voice files to be transferred quickly and stored efficiently

**Volume Control**

64 software levels

**Full Duplex**

Yes, in mono

**Synthesizer**

High quality, 20 voice ESFM music synthesizer

**Connectors**

(4) 3.5 millimeter connectors, (4) line-in, line-out, microphone and headphones

**Operating System Driver Support**

Windows 95, Windows NT 3.51 and 4.0

Integrated NetFlex-3  
Controller

**Network Interface**

10Base-T or 100 Base-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  
100Base-TX (Half-Duplex) 100 Mb/s

**Connectors**

Ethernet RJ-45 and BNC supports 10Base-T, 100Base-TX

**Standards Compliance**

Ethernet IEEE 802.3  
100 Mb/s Ethernet 100Base-TX, IEEE 802.3u

**I/O Address**

Auto-configured

**Environmental Requirements**

Operating 10° to 50°C; 20% to 80% humidity.  
(noncondensing); 3048 m altitude  
Nonoperating 10° to 50°C; 5% to 90% humidity  
(noncondensing); 9144 altitude  
Shipping 30° to 50°C; 20% to 80% humidity  
(noncondensing); 3084 m altitude

**Communication Processor**

Texas Instruments ThunderLAN

**OS Driver Support**

MS Windows NT Workstation 3.51 and 4.0 NDIS 3.0 Compliant  
MS Windows 95 NDIS 3.0 Compliant

TECHSPECS (cont'd)

Matrox MGA Millennium  
Graphics Controller

<b>Dimensions</b>	7.25 x 5.00 in/18.4 x 12.7 cm				
<b>Resolution</b>	<b>Standard 2 MB WRAM, Colors Supported</b>	<b>Requires 4-MB WRAM, Additional Colors Supported</b>	<b>Requires 8-MB WRAM, Additional Colors Supported</b>	<b>Maximum Refresh Rate</b>	
640 x 480	256, 65K, 16.7M	16.7M	16.7M	60 - 200 Hz	
800 x 600	256, 65K, 16.7M	16.7M	16.7M	60 - 200 Hz	
1024 x 768	256, 65K,	16.7M	16.7M	60 - 120 Hz	
1152 x 864	256, 65K	16.7M	16.7M	60 - 120 Hz	
1280 x 1024	256	16.7M	16.7M	60 - 110 Hz	
1600 x 1200	256	65K	16.7M	60 - 85 Hz	
<b>Acceleration</b>	2D GUI, 220 MHz RAMDAC				
<b>Memory</b>	2 MB WRAM with upgrades to 4 and 8 MB available				

Technical Specifications

<b>Controller</b>	Matrox MGA 2064W
<b>Bus Type</b>	PCI
<b>RAMDAC</b>	TVP 3026 220 MHz
<b>Memory Type</b>	WRAM
<b>Memory Amount</b>	2 + 2 or 6 Mbytes
<b>Maximum Memory</b>	8 Mbytes
<b>Memory Speed</b>	60ns
<b>Data Path</b>	64-bit
<b>Controller Clock Speed</b>	50 MHz
<b>Maximum Vertical Refresh Rate</b>	200 MHz
<b>Maximum Horizontal Scan Rate</b>	105.7 MHz
<b>Maximum Pixel Rate</b>	220 MHz
<b>Video Features:</b>	
Interface	VGA Feature Connector
MPEG HW Acceleration	Yes- Media XL option
Scaling	Yes
Color Space Conversion	Yes
<b>Engine Acceleration:</b>	
BitBLT	Yes
Line Draw	Yes
Polygon	Yes
3D	Yes
<b>Performance:</b>	
Random 10-Pixel Solid Lines	200 K/sec
Filled 25-Pixel Triangles	190 K/sec
<b>Operating Systems</b>	Windows 95, Windows NT 3.51, Windows NT 4.0

TECHSPECS (cont'd)

Gloria-L Graphics  
Controller

<b>Dimensions</b>	10.25 x 5.00 in/26.0 x 12.7 cm					
<b>Resolution</b>	<b>3D Acceleration with Double Buffering, Colors Supported</b>	<b>3D Acceleration without Double Buffering, Colors Supported</b>	<b>8MB VRAM +8MB DRAM, Available Texture Memory</b>	<b>8MB VRAM +16MB DRAM, Available Texture Memory</b>	<b>Maximum Refresh Rates, 32K Colors</b>	<b>Maximum Refresh Rates, 16.7M Colors</b>
800 x 600	256, 32K, 16.7M	256, 32K, 16.7M	6.17 MB	14.17 MB	200 Hz	200 Hz
1024 x 768	256, 32K, 16.7M	256, 32K, 16.7M	5.00 MB	13.00 MB	200 Hz	180 Hz
1152 x 864	256, 32K, 16.7M	256, 32K, 16.7M	4.20 MB	12.20 MB	160 Hz	140 Hz
1280 x 1024	256, 32K	256, 32K, 16.7M	3.00 MB	11.00 MB	120 Hz	110 Hz
1600 x 1200	256, 32K	256, 32K, 16.7M	0.68 MB	8.68 MB	83 Hz	77 Hz

Technical Specifications

<b>3D/2D Controller</b>	3 Dlabs GLINT Delta + 500TX
<b>VGA Controller</b>	S3 ViRGE
<b>Bus Type</b>	PCI
<b>RAMDAC</b>	IBM RGB526DB 200 MHz
<b>Memory Type</b>	VRAM & DRAM
<b>Memory Amount</b>	8 Mbytes VRAM, 8 + 8 Mbytes DRAM (GLINT) 1 Mbyte DRAM (S3)
<b>Memory Speed</b>	60ns VRAM, 50ns DRAM (GLINT) 70ns DRAM (S3)
<b>Data Path</b>	64-bit (GLINT) 32-bit (S3)
<b>Controller Clock Speed</b>	50 MHz (GLINT 500TX) 40 MHz (GLINT Delta) 50 Mhz (S3)
<b>Maximum Vertical Refresh Rate</b>	200 MHz
<b>Maximum Pixel Clock</b>	200 MHz
<b>Hardware Accelerated 3D:</b>	
32-bit Z-buffering	Yes
Gouraud shading	Yes
Stencils	Yes
Texture mapping	Yes
<b>Performance:</b>	
Random 10-Pixel Solid Lines	3M/sec
Filled 25- Pixel Triangles	600 K/sec
<b>Operating Systems</b>	Windows 95, Windows NT 3.51, Windows NT 4.0