

TECHSPECS

Compaq Professional
Workstation 510C

System Unit

Dimensions(HxWxD)	
Desktop	5.0 x 19.9 x 17.5 in/12.7 x 50.5 x 44.5 cm
Weight (with drive cage and one hard drive installed)	35 lb/15.9 kg
Power Supply	
Operating Voltage Range	90 VAC - 256 VAC
Rated Voltage Range	115 VAC - 230 VAC
Rated Line Frequency	47 Hz - 63 Hz
Rated Input Current	6A @ 115 VAC; 3A @ 230 VAC
Maximum Rated Power	280 Watt Output; 500 Watt Input
Physical Dimensions	6.5✧ x 3.78✧ x 6.9✧
Weight	5 lbs.
Temperature	
Operating	50° to 93°F/10° to 35°C
Nonoperating	-22° to 140°F/-30° to 60°C
Humidity (noncondensing)	
Operating	20 to 80%
Nonoperating	5% to 90%
Maximum Altitude (unpressurized)	
Operating	10,000 ft/3048 m
Nonoperating	30,000 ft/9144 m

Compaq Erase-Ease Keyboard

Dimensions(HxWxL)	2.1 x 7.1 x 19.7 in/5.3 x 18 x 50 cm
Weight	3.15 lb/1.59 kg
Cable Length	8 ft/2.4 m

1.44-MB Diskette Drive

Diskette Size	3.5-in
LED Indicators	Green
Read/Write Capacity/Diskette (high/low density)	1.44 MB/720 KB
Drive Height	One-third
Drive Rotation	300 rpm
Transfer Rate (high/low density)	500/250 Kb/s
Bytes/Sector	512
Sectors/Track (high/low density)	18/9
Tracks/Side (high/low density)	80/80
Seek Time	
Track-to-Track (high/low density)	3/6 ms
Average (high/low)	169/94 ms
Settling Time	15 ms
Latency Average	100 ms
Cylinders (high/low)	80/80
Read/Write Heads	2

Wide-Ultra SCSI SMART Hard Drives¹

	2.1-GB	4.3-GB
Capacity	2.14 GB	4.35 GB
Height	Third	Third
Size	3.5 in	3.5 in

Wide-Ultra SCSI
SMART Hard Drives¹
(cont'd)

	2.1-GB	4.3-GB
Interface	Wide-Ultra SCSI	Wide-Ultra SCSI
Transfer Rate		
Media	7.3 to 11.4 MB/s	7.3 to 11.4 MB/s
Asynchronous	5.0 MB/s	5.0 MB/s
Synchronous (max)	40 MB/s	40 MB/s
Sector Interleave	1:1	1:1
Seek Time (typical including settling)		
Track to Track	1.9 ms	1.9 ms
Average	9.5 ms	9.5 ms
Full Stroke	18.5 ms	18.5 ms
Rotation Speed	7,200 rpm	7,200 rpm
Seek Time (typical including settling)		
Track to Track	2.2 ms	2.2 ms
Average	10.5 ms	10.5 ms
Full Stroke	20 ms	20 ms
Rotation Speed	7,200 rpm	7,200 rpm
Physical Configuration		
Cylinders	5,178	5,178
Heads (data + servo)	5	10
Sectors Per Track (zone bit recording)	119 to 186 (11 zones)	119 to 186 (11 zones)
Bytes Per Sector	512	512

¹ Hard drive specifications may vary slightly depending on vendor.Internal 24X
CD-ROM Drive (IDE)

Disk	
Applicable Disk	CD-ROM Modes 1 and 2 Mixed Mode (Audio and Data Combined) CD-DA Photo CD (single and multi-session) CD-XA Ready CDi Ready
Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)
Block Size	
Mode 1	2048 bytes
Mode 2	2340, 2336 bytes
CD-DA	2352 bytes
CD-XA	2328 bytes
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
Interface	IDE
Access Time (typical)	
Random	Less than 85 ms
Full Stroke	Less than 150 ms
Audio Output Level	
Line Out	0.7 VRMS at 47 kOhms
Headphone	0.6 VRMS at 32 Ohms

TECHSPECS (cont'd)

Internal 24X
CD-ROM Drive (IDE)
(cont'd)

Data Transfer Rate	
Sustained	150 KB/s
Variable	1500-3600 KB/s (10X-24X)
Cache Buffer	128 KB
Startup Time	
Single	Less than 7 seconds
Multisession	Less than 30 seconds
Stop Time	Less than 4 seconds
Laser Parameters	
Type	Semiconductor Laser GaAlAs
Wave Length	780 ± 25 nm
Divergence Angle	53.5° ± 1.5°
Output Power	0.14 mW
Operating Conditions	
Temperature	41° to 113° F/5° to 45° C
Humidity	10 to 80%
Dimensions(HxWxD, maximum)	4.29 x 15.01 x 20.8 cm
Weight	1.2 kg

PremierSound™ 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
Speaker	
Frequency Response	90 Hz to 20 kHz
Equalizer	5 stage
Design	Ported Enclosure
Volume Control	64 software levels
Full Duplex	Yes, in mono
Synthesizer	High quality, 20 voice ESFM music synthesizer
Connectors	Five 3.5 millimeter connectors: line-in, line-out, microphone and headphones
Operating System Driver Support	Windows NT 4.0 and 3.51, Windows 95

Netelligent 10/100 TX
Embedded UTP/Coax
Controller

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 and BNC supports 10Base-T, 10Base-2, 100Base-TX

Netelligent 10/100 TX
Embedded UTP/Coax
Controller (cont'd)

Standards Compliance

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

I/O Address

Auto-configured

Communication Processor

Texas Instruments ThunderLAN 3.14

MGA Millennium II
Graphics Controller

OS Driver Support

MS Windows NT Workstation 4.0 and 3.51
MS Windows 95

Dimensions

7.25 x 4.75 in/18.4 x 12.1 cm

	Standard 4 MB WRAM, Colors Supported	Requires 8 MB WRAM, Additional Colors Supported	Requires 12 MB WRAM, Additional Colors Supported	Maximum Refresh Rate
Resolution				
640 x 480	16.7M	16.7M	16.7M	200 Hz
800 x 600	16.7M	16.7M	16.7M	180 Hz
1024 x 768	16.7M	16.7M	16.7M	140 Hz
1152 x 854	16.7M	16.7M	16.7M	120 Hz
1280 x 1024	16.7M	16.7M	16.7M	100 Hz
1600 x 1024	65, 536	16.7M	16.7M	100 Hz
1600 x 1200	65, 536	16.7M	16.7M	90 Hz
1920 x 1035	65, 536	65,536	65,536	85 Hz
1920 x 1080	65, 536	65,536	65,536	80 Hz
1920 x 1200	256	65,536	65,536	75 Hz
1800 x 1440	256	65,536	65,536	70 Hz

Acceleration

2D GUI, 250 MHz RAMDAC

Memory

4 MB WRAM with upgrades to 8 and 16 MB available

Controller

Matrox MGA 2164W

Bus Type

PCI

RAMDAC

TVP 3026 250 MHz

Memory Type

WRAM

Memory Amount(standard)

4-MB

Memory Upgrade

4 MB or 12 MB upgrade

Maximum Memory

16 MB

Memory Speed

50 ns

Data Path

64-bit

Controller Clock Speed

66 MHz with 4 MB base

Maximum Vertical Refresh Rate

200 Hz

Maximum Horizontal Scan Rate

114 kHz

Maximum Pixel Rate

250 MHz

TECHSPECS (cont'd)

MGA Millennium II
Graphics Controller
(cont'd)

Video Features	
Interface	VGA Feature Connector, VGA Output Connector, Rainbow Runner Multimedia Upgrade Option (to be available from Matrox)
MPEG HW	Yes
Acceleration	
Scaling	Yes
Color Space Conversion	Yes
Engine Acceleration	
BitBLT	Yes
Line Draw	Yes
Polygon	Yes
3D	Yes
Performance	
Random 10-Pixel	310 K/s
Solid Lines	
Filled 25-Pixel Triangles	140 K/s
Operating Systems	
Windows NT 4.0 and 3.51, Windows 95	

STB MVP Workstation
Graphics Controller

Dimensions	10.0 x 5.0 in/25.4 x 12.7 cm	
Resolution	Maximum Colors Supported	Maximum Refresh Rate
640 x 480	16.7M	100 Hz
800 x 600	16.7M	85 Hz
1024 x 768	16.7M	85 Hz
1152 x 864	256	85 Hz
1280 x 1024	64K	85 Hz
1600 x 1200	256	60 Hz
VGA Controller	S3 ViRGE DX	
Bus Type	PCI	
RAMDAC	Integrated 170 MHz	
Memory Type	EDO DRAM	
Memory Amount	8 MB EDO RAM (4 MB per port)	
Memory Speed	35 ns	
Data Path	64-bit	
Maximum Vertical Refresh Rate	160 Hz	
Maximum Pixel Clock	170 MHz	
Operating Systems	Windows NT 4.0 and 3.51	

GLoria-XL 3D Graphics
Controller

Dimensions		10.25 x 5.00 in/26.0 x 12.7 cm				
Resolution	3D Acceleration with Double Buffering, Colors Supported	3D Acceleration without Double Buffering, Colors Supported	16MB VRAM 24MB DRAM, Available Texture Memory	16MB VRAM 40MB DRAM, Available Texture Memory	Maximum Refresh Rates, 32K Colors	Maximum Refresh Rates, 16.7M Colors
800 x 600	256, 32K, 16.7M	256, 32K, 16.7M	14.17 MB	30.17 MB	386 Hz	386 Hz
1024 x 768	256, 32K, 16.7M	256, 32K, 16.7M	13.00 MB	29.00 MB	235 Hz	235 Hz
1152 x 864	256, 32K, 16.7M	256, 32K, 16.7M	12.20 MB	28.20 MB	186 Hz	186 Hz
1280 x 1024	256, 32K, 16.7M	256, 32K, 16.7M	11.00 MB	27.00 MB	141 Hz	141 Hz
1600 x 1200	256, 32K, 16.7M	256, 32K, 16.7M	8.68 MB	24.68 MB	96 Hz	96 Hz
1600 x 1280	256, 32K, 16.7M	256, 32K, 16.7M	8.19 MB	24.19 MB	90 Hz	90 Hz
1920 x 1080	256, 32K, 16.7M	256, 32K, 16.7M	8.09 MB	24.09 MB	89 Hz	89 Hz
1920 x 1200	256, 32K, —	256, 32K, 16.7M	7.21 MB	23.21 MB	80 Hz	—
3D/2D Controller	3D Labs GLINT Delta MX					
VGA Controller	S3 Trio64V2					
Bus Type	PCI					
RAMDAC	IBM RGB640 250 MHz					
Memory Type	VRAM & DRAM					
Memory Amount	16 MB VRAM					
Z-Buffer and Texture Mapping Memory Amount	24 MB DRAM (Glint) upgradeable to 40 MB 1 MB DRAM (S3)					
Memory Speed	60 ns VRAM, 50ns DRAM (GLINT) 70 ns DRAM (S3)					
Data Path	64-bit (GLINT) 32-bit (S3)					
Controller Clock Speed	55 MHz (GLINT MX) 40 MHz (GLINT Delta) 50 MHz (S3)					
Maximum Vertical Refresh Rate	230 Hz					
Maximum Pixel Clock	250 MHz					
Hardware Accelerated 3D						
32-bit Z-buffering	Yes					
Gouraud shading	Yes					
Stencils	Yes					
Texture mapping	Yes					
Performance						
Filled 25- Pixel Triangles	1 M/sec					
Pixel Fill Rate						
Bilinear	15 M/sec					
Trilinear	30 M/sec					
Operating Systems	Windows NT 4.0 or 3.51, Windows 95					