

Dell™ OptiPlex™ 320

Tech Specs



MINITOWER



DESKTOP

CHIPSET	ATI Radeon® Xpress 1100 Professional Chipset	
OPERATING SYSTEM	Dell Supports: Microsoft® Windows® XP Professional Microsoft® Windows® XP Home Edition	
PROCESSOR	Intel® Pentium® D 800MHz FSB Socket T with Dual Core technology XD, EM64T, 2x2MB L2 cache, and EIST (900 series) Intel® Pentium® D 800MHz FSB Socket T with Dual Core technology XD, EM64T, 2x1MB L2 cache (800 series) Intel® Pentium® 4 800MHz FSB Socket T with HT, XD, EM64T, and 2MB L2 cache (600 series) Intel® Pentium® 4 800MHz FSB Socket T with HT, XD, EM64T, and 1MB L2 cache (500 series) Intel® Celeron® D 533 MHz FSB Socket T with XD and EM64T (300 series)	
NETWORK CONTROLLER	Integrated Broadcom® Ethernet LAN solution 10/100 LOM with Remote Wake Up and PXE support	
MEMORY		
DIMM Slots	Two	Two
Type	Single channel shared DDR2 SDRAM system memory. Unbuffered, non-ECC DIMMs only	
Speed	533MHz (4-4-4 latency)	
Modules Types Supported	256-MB, 512-MB, 1-GB, or 2-GB	
Minimum memory	Single-channel: 256 MB	
Maximum memory	4 GB	
Bandwidth	Up to 4.3GB/s of theoretical memory bandwidth for 533MHz memory in single channel mode	
DRIVE BAYS AVAILABLE		
3 1/2 bay	One	One
5 1/4 bay	Two	One
Hard Drives Supported	Two	One
INTERFACES & CONNECTORS		
SATA Connectors	Four SATA connectors Supporting one device each	Two SATA connectors Supporting one device each
PATA Connectors	Two PATA connectors	One PATA connector

Dell™ OptiPlex™ 320 Tech Specs	MINITOWER	DESKTOP
HARD DRIVE OPTIONS		
Supported Types	Serial ATA or Serial ATA 3.0	
Available Drives	7200RPM SATA 3.0Gb/s: 40GB, 80GB, 160GB	
SMART Technology	SMART III	
Burst Transfer Rate	300 Mbit/s	
Partition Support	MS Windows XP Professional SP2: Support both FAT16 and FAT32. FAT32 will be the default configuration MS Windows XP Home SP2: Support both FAT16 a	
SYSTEM BOARD CONNECTORS		
Primary IDE drive	40-pin connector	
Serial ATA	four 7-pin connectors	
Floppy drive	34-pin connector	
Serial	12-pin connector for optional second serial port card	
Fan	5-pin connector	
PCI 2.2	120-pin connector	
CD drive audio interface	4-pin connector	
Front panel	40-pin connector	
STANDARD I/O PORTS		
<i>* Front ports may be disabled</i>		
Display Port	1 VGA Out (15-hole)	
USB 2.0	Two front and four rear	
Serial Port	One, rear. A second serial port is optional. (9-pin, 16550 compatible)	
Parallel Port	One, rear (25-hole, bi-directional)	
Ethernet Network	One, rear (RJ45)	
Stereo line-in	One minijack, rear	
Speakers, line-out	One minijack, rear	
Microphone-in	None	
Headphone	One minijack, front	
Optional Adapters	Optional PS/2, Serial	
COMPUTER INFORMATION		
System Clock	Utilizes the CK-410 clock synthesizer chip, which incorporates Intel specifications for clock generation	
Data bus width	64 bits	
Address bus width	32 bits	
DMA channels	eight	
Interrupt levels	24	
EXPANSION BUS INFORMATION		
PCI 2.3	PCI: 33 MHz	
PCI Express 1.0a	PCI Express x16: 80 Gbps	
SATA 1.0a and 2.0	SATA: 3.0 Gbps	
USB 2.0	USB: 480 Mbps	
PCI		
Available slots	Two Full-Height	Two Low-Profile
Connector size	120 pins	
Data Bus	32Bit/33MHz	
Voltage	3.3 Volt External Operation (some pins 5 Volt Tolerant); 1.8V internal regulation	
PCI Express x16		
Available slots	One Full-Height	One Low-Profile
Connector Size	164 pins	
Data Bus	16 bi-directional differential lane pair (2.5Gb/s per lane) 40Gb/s total	
Voltage	12V	
Power	25 W maximum	

**Dell™ OptiPlex™ 320
Tech Specs**

MINITOWER

DESKTOP

Integrated ATI Radeon® X300 Graphics

Graphics Core	ATI Radeon® X300 Graphics
Memory	None dedicated. Uses up to 224MB shared with system memory
Maximum Resolution	1900 x 1200 @ 85Hz (Single VGA—analog)
RAMDAC	400MHz, 24-bit
Display Interface	VGA DB-15 (analog)
Dual Monitor Support	Yes, in conjunction with discrete graphics card
Display Rotation Support	No
Core Processor Speed	333MHz
3D Setup & Render Engine	Supports D3D and OGL Pixelation Rules
Controller clock speed (MHz)	Core frequency of 333MHz 4-lane, 100MHz Direct Media Interface to ICH7

128MB ATI Radeon® X1300

Memory	128MB DDR SDRAM
Card Type	PCI Express X16
Maximum Resolution	1920 x 1200 @ 75 Hz & 16.7 million colors
RAMDAC	Dual 400MHz
Display Interface	Single DVI-I (VGA via included DVI to VGA Adapter) and S-Video TV-Out
Dual Monitor Support	Yes, in conjunction with integrated graphics
Display Rotation Support	Yes
Options	Full height (Minitower) or low profile (Desktop)

AUDIO

Type	ADI 1983 High Definition
Stereo conversion	24-bit analog-to-digital; 24-bit digital-to-analog



Dell™ OptiPlex™ 320 Tech Specs	MINITOWER	DESKTOP
POWER		
DC Power Supply - Wattage	305W	280W
Power Efficiency	76%	76%
Heat Dissipation *	1041 BTU/hr	956 BTU/hr
Voltage - Manual selection	Manual selection power supplies: 90 to 135 V at 50/60 Hz; 180 to 265 V at 50/60 Hz	
Backup battery	3-V CR2032 coin cell, Lithium ion	
	* NOTE: Heat dissipation is calculated based upon the power supply rating. Does not include peripherals.	
POWER MANAGEMENT		
ACPI Wake-Up Event	System Wakes From	
Power Button	Suspend or soft-off	
RTC Alarm	Suspend or soft-off	
Wake On LAN (w/NIC)	Suspend or soft-off	
PME	Suspend or soft-off	
Serial Port Ring	N/A	
USB	Suspend only	
Keyboard	Suspend only	
Mouse	Suspend only	
CHASSIS DIMENSIONS		
Height	41.1 cm (16.3 inches)	11.4 cm (4.5 inches)
Width	18.7 cm (7.3 inches)	39.9 cm (15.7 inches)
Depth	43.8 cm (17.3 inches)	35.3 cm (13.9 inches)
Weight	12.34 kg (27.2 lb)	10.4 kg (23 lb)
Volume	33 Liters	15.7 Liters
PHYSICAL ATTRIBUTES		
Temperature		
Operating	10° to 35°C (50° to 95°F)	
Storage	-40° to 65°C (-40° to 149°F)	
Relative humidity	20% to 80% (noncondensing)	
Maximum vibration		
Operating	5 to 350 Hz at 0.0002 G2/Hz	
Storage	5 to 500 Hz at 0.001 to 0.01 G2/Hz	
Maximum shock		
Operating	45 G +/- 5% with pulse duration of 2 msec +/- 10% (equivalent to 20 in/sec [51 cm/sec])	
Storage	105 G +/- 5% with pulse duration of 2 msec +/- 10% (equivalent to 50 in/sec [127 cm/sec])	
Altitude		
Operating	-15.2 to 3048 m (-50 to 10,000 ft)	
Storage	-15.2 to 10,668 m (-50 to 35,000 ft)	

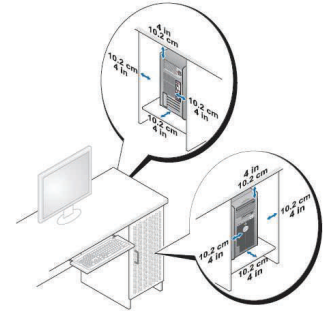
ENCLOSURE & VENTILATION REQUIREMENTS

Enclosure Ventilation

If your enclosure has doors, they need to be of a type that allows at least 30% airflow through the enclosure (front and back).

Enclosure Minimum Clearance

Leave a 10.2 cm (4 in.) minimum clearance on all vented sides of the computer to permit the airflow required for proper ventilation.



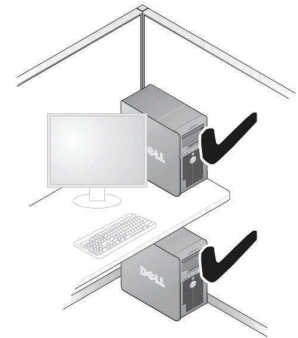
Recommended Enclosure

Do not install your computer in an enclosure that does not allow airflow. This restricts the airflow and impacts your computer's performance, possibly causing it to overheat.



Open Desk Minimum Clearance

If your computer is installed in a corner, on a desk, or under a desk, leave at least 5.1 cm (2 in.) clearance from the back of the computer to the wall to permit the airflow required for proper ventilation.



STANDARDS

TC099, Blue Angel, Green PC, Energy Star, BSMI, C-TICK, CE, FCC, IRAM, NEMKO, NFPA99, SABS, SASO, TCO, TUV, UL, VCCI, USB 2.0, WEEE

BIOS Factory Defaults (All Chassis)

BIOS address	F0000h	USB front panel	On	Low power mode	Off (except Energy Star)
BIOS chip (NVRAM)	4 Mb	Module bay	On	Password	Disabled
Setup Option	Default Factory Value	Comm Port	Auto	POST hot keys	Setup & Boot Menu
PATA drives	On	Parallel Port mode	PS/2	Keyboard Num lock	Report
SATA drives	On	Parallel Port address	378	Keyboard error report	On
Floppy	Internal	Wake on LAN	Off	Onboard USB	On
Onboard Video	Auto	Limit CPUID	Off	Fast Boot	On
EIST	Off	HD Acoustic mode	Bypass	Onboard Audio	On
Onboard Video buffer	8MB	HD Password	Disabled	Onboard Modem	On
Primary Video	Add-in	Hyper-threading	On	Flex bay	On (no boot)
Suspend mode	S3	Auto Power on	Off	Execute Disable	On
Chassis intrusion	On	Auto Power time	12:00am	Onboard NIC	On (without PXE)
SERR	On	PS2 Mouse	On	A/C recovery	Off
Smart drive error report	Off				

Dell™ OptiPlex™ 320 Tech Specs		MINITOWER	DESKTOP
DISPLAYS	CRT	17" E773s (16.0" viewable) Conventional CRT 17" E773MM (16.0" viewable) Multimedia CRT	
	Dell Flat Panel Analog	15" E157FP Flat Panel 17" E177FP Flat Panel 19" E197FP Flat Panel	
	Dell UltraSharp™ Digital Flat Panel Adjustable Stand, VGA/DVI	17" UltraSharp™ 1707FP 17" UltraSharp™ 1707FPV 19" UltraSharp™ 1907FP 19" UltraSharp™ 1907FPV 20" UltraSharp™ 2007FP	
PERIPHERALS			
	Keyboard	Dell USB Keyboard, No Hot Keys Dell USB Enhanced Multimedia Keyboard Smart Card Reader USB Keyboard Bluetooth Keyboard	
	Mouse	Dell USB 2-Button Entry Mouse with Scroll, Black Dell USB 2-Button Optical Premium Mouse with Scroll, Black Bluetooth Mouse	
	Audio	Internal Dell Business Audio Speaker Dell A225 Stereo Speakers Dell A525 Speakers Dell AS501 Sound Bar - UltraSharp Flat Panel Attachable Speakers Dell AS501PA Sound Bar - Entry FP Attachable Speakers	
	Optical Storage Drive	48X CD-ROM 16X DVD-ROM 48X32 CDRW/DVD Combo 16X DVD+/-RW	
	Additional Storage	3.5" 1.44MB FDD USB 2.0 Memory Key: 128MB, 256MB, 512MB	
	Communications	Integrated Broadcom 10/100 LOM Dell V.92 PCI Data/Fax Controllerless Modem Dell Wireless 1450 (802.11 a/b/g) WLAN USB 2.0 DT Adapter, 13 Channel	



- Up to 224MB of system memory may be allocated to support graphics, depending on system memory size and other factors.
- For hard drives, GB means 1 billion bytes; actual capacity varies with preloaded material and operating system and will be less.
- Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.
- For a copy of Dell's guarantees or limited warranties, please write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit www.dell.com/us/en/gen/services/service_service_plans.htm.
- Service may be provided by third-party. Technician will be dispatched if necessary following phone based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.

Dell OptiPlex is a trademark of Dell Inc. Intel, Intel inside logo and Pentium are registered trademarks of Intel Corporation. Microsoft Windows XP is a registered trademarks of Microsoft Corporation. Other trademarks and trade names are used to identify the entities claiming the marks and names of their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own. © Copyright 2005 Dell Inc. All rights reserved.