

Overview

Models

40-GB SATA 1.5-Gb/s 7200 rpm Hard Drive	PB371A
80-GB SATA 1.5-Gb/s 7200 rpm Hard Drive	DE705A
160-GB SATA 1.5-Gb/s 7200 rpm Hard Drive	DE706A

Introduction

Serial ATA Hard Drives maximize the performance of HP Business PCs by providing the technologies to meet your increasing storage demands. These high-capacity drives offer superior reliability and performance. Serial ATA is the next generation ATA interface. It provides faster data transfer speeds, enhanced system cooling airflow, more bandwidth, more headroom for speed increases in future generations and better data integrity helping to improve productivity. A next-generation technology, Serial Advanced Technology Attachment (SATA) interface connects hard drives to the PC platform. SATA point-to-point topology provides a direct path between the hard drive and the PC enabling easy aggregation of multiple hard drives into a single PC. This offers you the additional benefits of dedicated bandwidth, the ability to more easily identify device failures and scalability. Serial ATA Hard Drives offer data transfer rates of up to 1.5 Gb per second.

SMART III technology

Self Monitoring Analysis and Reporting Technology (SMART) hard drive technology is designed to allow hard drives to monitor their own health and to raise flags if imminent failures are predicted. If the drive determines that a failure is imminent, the SMART hard drive technology enables the intelligent manageability or management software to generate a fault alert. The latest SMART III hard drive technology uses "off-line data collection" to monitor the entire hard drive during periods of inactivity. This SMART III technology offers greater data integrity over SMART II because the entire hard drive is monitored for bad sectors whereas with SMART II only monitors hard drive activity for data that is retrieved by the operating system. An alert is sent over the network to the system administrator and Insight Manager. These alert messages give the user or administrator time to back up the hard drive and replace it prior to experiencing possible downtime or loss of data.

NOTE: GB = 1 billion bytes. Actual available capacity is less.

Performance

Serial ATA Hard Drives offer data transfer rates of up to 1.5 Gb per second.

Benefits

Serial ATA hard drives brings these powerful benefits for storage solution

- Improved protocol for better data integrity
- Performance increase to 1.5 Gb/s maximum external (burst) data transfer rate
- Thinner and smaller serial cables and connectors for easy routing and improved system cooling
- Maximum cable length increased from 1.5 feet to 1 meter (3.28 feet) for increased design and layout flexibility in a system
- Features SMART and Drive Self Test hard drive technology

Compatibility

Serial ATA 1.5-Gb/s Hard Drives are compatible with HP Compaq d330, d530, dx5150, dx6100, dc5000 and dc7100 Business Desktops.

NOTE: Not all hard drive models are available in all regions.

Overview

Service and Support

Your Option Limited Warranty is a one (1) year (HP Option Limited Warranty Period) parts replacement warranty on any HP-branded or Compaq-branded options (HP Options). If your HP Option is installed in an HP Hardware Product, HP may provide warranty service either for the HP Option Limited Warranty Period or the remaining Limited Warranty Period of the HP Hardware Product in which the HP Option is being installed, whichever period is the longer but not to exceed three (3) years from the date you purchased the HP Option.

Technical Specifications

Hard Drives	160 GB	Capacity	171,798,691,840 bytes			
		Height	1 in (2.54 cm)			
		Width	Media diameter: 3.5 in (8.89 cm) Physical size: 4 in (10.2 cm)			
		Interface	Serial ATA			
		Synchronous Transfer Rate (Maximum)	Up to 1.5 Gb/s			
		Cache	8 MB			
		Seek Time (typical reads, includes controller overhead, including settling)	Single Track	0.9 ms		
			Average	9.3 ms		
			Full-Stroke	18 ms		
		Rotational Speed	7,200 rpm			
		Logical Blocks	312,581,808			
		Operating Temperature	41° to 131° F (5° to 55° C)			
		80 GB	80 GB	Capacity	85,899,345,920 bytes	
				Height	1 in (2.54 cm)	
Width	Media diameter: 3.5 in (8.89 cm) Physical size: 4 in (10.2 cm)					
Interface	Serial ATA					
Synchronous Transfer Rate (Maximum)	Up to 1.5 GB/s					
Cache	8 MB					
Seek Time (typical reads, includes controller overhead, including settling)	Single Track			0.9 ms		
	Average			9.3 ms		
	Full-Stroke			18 ms		
Rotational Speed	7,200 rpm					
Logical Blocks	153,301,488					
Operating Temperature	41° to 131° F (5° to 55° C)					

Technical Specifications

40 GB

Capacity	40,020,000,000 bytes
Height	1 in (2.54 cm) or less
Width	Media diameter: 3.5 in (8.89 cm) Physical size: 4 in (10.2 cm)
Interface	Serial ATA
Synchronous Transfer Rate (Maximum)	Up to 1.5 Gb/s
Cache	2 MB
Seek Time (typical reads, includes controller overhead, including settling)	Single Track 1.0 ms Average 8.5 ms Full-Stroke 18.0 ms
Rotational Speed	7,200 rpm
Logical Blocks	78,165,360
Operating Temperature	41° to 131° F (5° to 55° C)

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