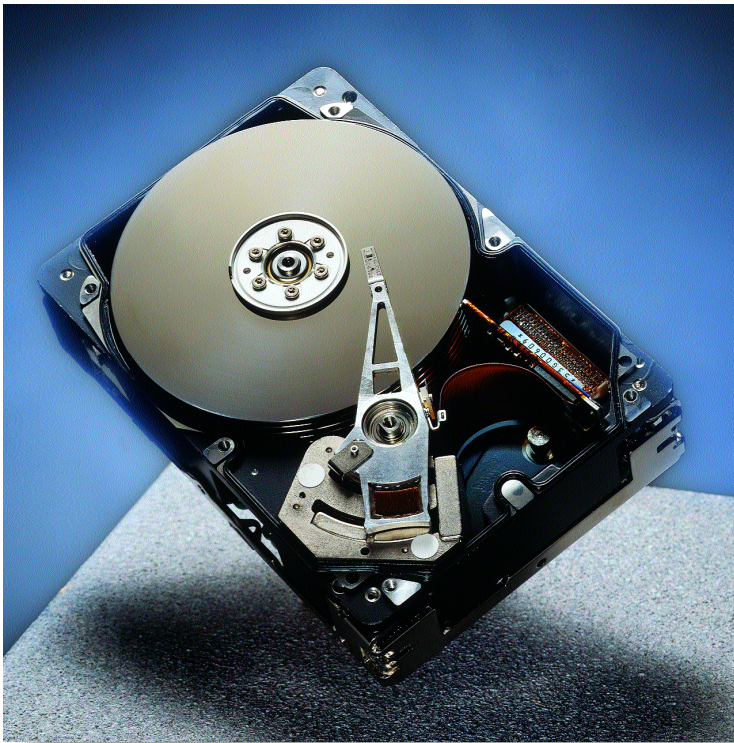


Enterprise 18 Series: 3.5-inch Disk Drives



High-performance hard drives with more than 18GB of formatted capacity.

- 4th generation Magneto-Resistive (MR) heads
- Rotational speeds up to 7,200 rpm
- Advanced interfaces including UltraSCSI and Fibre Channel
- Data transfer rates up to 100MB/second
- Seek times under 8ms
- 1,000,000 hour MTBF
- Five-year No Excuses™ warranty

Capacity, performance and reliability.

These are the hallmarks of Fujitsu's enterprise disk drives. Designed specifically for such demanding applications as network servers and graphics workstations, this enterprise-class solution delivers storage capacities up to 18GBs and the industry's highest-performance UltraSCSI and Fibre Channel interfaces. And it's backed by one of the highest reliability ratings in the business —1,000,000 hours MTBF—and Fujitsu's exclusive five-year No Excuses warranty.

**Maximum Capacity/
Exceptional Performance**

Fujitsu's enterprise series combines fourth-generation Magneto-Resistive (MR) head and partial response/maximum likelihood (PRML) technologies to deliver more than 18GBs of storage in a standard 1.6-inch high package. Slim-line, one-inch-high drives are also available in 9.1 and 4.55GB capacity points. Rotational speeds of 7,200 rpm, low 4.17 ms latency, fast seek times, and data transfer rates up to 100MB/second, plus a host of other performance-driven features make Fujitsu's enterprise drives mass storage leaders.

Innovative Technology

Fujitsu invests more than \$3 billion annually in research and development. And that investment enabled the company to be one of the first hard drive makers to ship—in volume—reliable MR head and PRML electronics to the enterprise market. Fujitsu's newest generation adds UltraSCSI, LVD and Fibre Channel interfaces, once again demonstrating the company's industry leading design and manufacturing capabilities.

Outstanding Reliability

Fujitsu's quality sets the standard in the computing industry. And the company's enterprise drives deliver outstanding reliability, demonstrated by their 1,000,000 hour MTBF rating and five year warranty.

Absolutely No Excuses

Fujitsu stands firmly behind its enterprise drives with the No Excuses warranty program. Should anything go wrong with your drive during the first five years of operation, Fujitsu will replace that product within two business days. No questions asked. No Excuses.

Enterprise 18 Series Disk Drive Specifications

Description		MAB3045	MAB3091	MAA3182
Functional Specifications				
Capacity (formatted)		4.55 GB	9.1 GB	18.2 GB
Disks/Heads		3/5	5/10	10/19
Track capacity (formatted)		110,416 to 162,250 bytes (13 zones)		102,500 to 162,250 bytes (14 zones)
Bytes/sector		512		
Cylinders		8,490		9,040
Sectors/track		167 to 248 (13 zones)		160 to 248 (14 zones)
Recording density		121,000 to 159,000 BPI (13 zones)		121,000 to 159,000 BPI (14 zones)
Track density		9,620 TPI		
Buffer size		512 KB		
Interface		SCSI-2, SCSI-3, Ultra 2 (LVD), FC		
Seek time	Track to Track	Read: 0.8 ms (typ) / Write: 1.0 ms (typ)		Read: 0.9 ms (typ) / Write: 1.1 ms (typ)
	Average	Read: 7.5 ms (typ) / Write: 8.5 ms (typ)		Read: 8 ms (typ) / Write: 9 ms (typ)
	Full Track	Read: 16 ms (typ) / Write: 17 ms (typ)		Read: 18 ms (typ) / Write: 19 ms (typ)
Data transfer rate	To/from media	13.3 to 19.5 MB/s		12.3 to 19.5 MB/s
	To/from host	10/20/40/80/100 (burst sync)		
Start time		30 s (typ)		
Stop time		30 s (typ)		
Rotational speed (RPM)		7,200		
Average latency		4.17 ms		
Physical Specifications				
Power requirements	Voltage	12 VDC± 5% @ 0.44A 5 VDC± 5% @ 0.75A		12 VDC± 5% @ 0.77A 5 VDC± 5% @ 0.75A
	Spin-up	12V @ 1.8 A 5V @ 0.75 A		12V @ 2.5 A 5V @ 0.75 A
	Read/write (80) iops	12V @ 0.70 A 5V @ 1.1 A		12V @ 1.1 A 5V @ 1.1 A
	Idle (ready)	11.0 W (Typ)		13.0 W (Typ)
	Sleep	N/A		
	Dimensions			
	Height	25.4 mm (1.0 in.)		41.4 mm (1.6 in.)
	Width	101.6 mm (4.0 in.)		101.6 mm (4.0 in.)
	Depth	146.0 mm (5.7 in.)		146.0 mm (5.7 in.)
Weight		60 g		100 g
Ambient temperature	Operating	5°C to 55°C		
	Non-operating	-10°C to 60°C		
	Gradient	15°C/H Max		
Relative humidity	Operating	20% to 80% RH		
	Non-operating	20% to 80% RH (non-condensing)		
	Max wet bulb	29°C		
Vibration	Operating	0.5 G (20 to 250 Hz)		
	Non-operating	5.0 G (20 to 250 Hz)		
Shock	Operating	5 G (half-sin pulse, 10 ms duration)		
	Non-operating	50 G (half-sin pulse, 10 ms duration)		
Altitude	Operating	3,000 m (10,000 ft.) Max		
	Non-operating	12,000 m (40,000 ft.) Max		
Acoustic noise	Idle/Seek	43/46 dBA		
Reliability Specifications				
MTBF		1,000,000 hours		
MTTR		Depot		
Start/stop cycles		N/A		
Error rates	Recoverable	N/A		
	Unrecoverable	10 per 10 ⁹ bits read		
	Seek	10 per 10 ⁹ seeks		
Warranty:		5 years No Excuses (from date of purchase) 2 business day turn-around time		
Technologies				
Encoding/decoding		8,9 PR4ML		
Head positioning method		Rotary VCM (embedded servo)		

**About Fujitsu Computer
Products of America**

Fujitsu Computer Products of America is a wholly owned subsidiary of Fujitsu Limited, the world's second largest computer company with \$39 billion in worldwide revenue. Benefiting from Fujitsu Limited's \$3 billion annual investment in research and development, Fujitsu Computer Products provides innovative solutions for the U.S. market-place. Current product offerings include high-performance hard disk drives, tape drives, magneto-optical drives, high-volume scanners and printers.



FUJITSU COMPUTER PRODUCTS OF AMERICA, INC.
2904 Orchard Parkway, San Jose, CA 95134
408-432-6333
800-626-4686
Web Site: <http://www.fcpc.com>
Email: info@fcpc.fujitsu.com