



# Hard Drive

**MHS Series**  
2.5-inch Mobile  
Disk Drives

- Up to 30GB per platter data capacity offered in capacity points of 20GB, 30GB, 40GB and 60GB
- Low profile 9.5mm form factor
- Ramp Head, Load/Unload feature to improve reliability and increase shock tolerance
- High non-operating shock tolerance of 900G, 1 ms specification delivers extreme ruggedness
- High operating shock tolerance of 225G, 2 ms specification for highly reliable operation
- Fast Ultra ATA/100 interface and 4,200 RPM spindle speed
- Intelligent power management technology automatically regulates power usage as low as 0.1 Watt in sleep mode
- Fluid Dynamic Bearing Spindle Motor for lower acoustics and increased non-operating shock tolerance

*Enterprise*

*Mobile*

*Optical*

The Fujitsu MHS Series, 2.5-inch disk drives feature the latest technology, performance, capacity and reliability you need for today's fast growing mobile computing requirements.

No other supplier can offer the level of design breakthroughs featured on the Fujitsu MHS Series disk drives. From significant advancements in head and media technology to lower power consumption capabilities and extreme ruggedness and reliability, there is simply no match for the MHS Series disk drive in Mobile computing applications.

### **Impressive Capacity and Performance in a Mobile Drive**

Today's demanding mobile users expect disk drives to be extremely compact while offering incredible performance and capacity. The Fujitsu MHS Series disk drives deliver both without sacrificing efficiency or reliability.

High areal densities of up to 53.2 Gb/in<sup>2</sup>, combined with Specular Layer GMR heads, Synthetic Ferromagnetic Media, and MEEPRML read channel technologies, enable these large-capacity drives to deliver outstanding performance. The Fujitsu MHS Series drives incorporate FDB spindle motors and Ramp, Head Load/Unload in 2.5" disk drives for mobile applications. The FDB spindle motor technology dramatically improves non-operating shock tolerance and decreases acoustic noise.

As part of Fujitsu's environmental philosophy and a tangible result of its "Green Life 21" initiative, the MHS Series is produced using lead-free solder, Fujitsu's second generation 2.5" HDD series to be manufactured with this process.

With these technology benefits, Fujitsu sees the MHS Series as a stand-alone product in its class. With capacities of 20GB, 30GB, 40GB and 60GB, these drives are big enough to hold large multimedia presentations, fast enough to run them, and small enough to fit in today's compact mobile computers, notebooks and consumer electronic devices.

## About Fujitsu Computer Products of America, Inc.

Fujitsu Computer Products of America, Inc. is a wholly owned subsidiary of Fujitsu Limited, a leading provider of customer-focused IT and communication solutions for the global marketplace. FCPA provides innovative solutions for the U.S. marketplace. Current product and service offerings include: high-performance hard disk drives, magneto-optical drives, scanners and scanner maintenance.

MHS(AT) 4200 RPM Series Disk Drive Specifications				
Model	MHS2020AT	MHS2030AT	MHS2040AT	MHS2060AT
Storage capacity (formatted)	20.0 GB	30.0 GB	40.0 GB	60.0 GB
Disks/heads	1/2	1/2	2/3	2/4
Bytes/sector	512			
Seek time	Track to Track	1.5 ms typ.		
	Average	12 ms typ.		
	Maximum	22 ms typ.		
Average latency	7.14 ms			
Rotational speed	4,200 RPM			
Data transfer to/from host	Up to 100 MB/s			
Recording code	48/50 MEEPRML			
Interface	Ultra ATA/100 (ATA-6)			
Buffer size	2 MB			
Power requirements	Voltage	5 V± 5%		
	Spin-up	0.90A max		
	Operating	2.3W typ.		
	Idle	0.65W typ.		
	Standby	0.25W typ.		
	Sleep	0.10W typ.		
Dimensions	Height	9.5 mm (0.37 in.)		
	Width	70 mm (2.8 in.)		
	Depth	100 mm (3.9 in.)		
Weight	<99 g (3.49 oz.)			
Ambient temperature	Operating	5°C to 55°C (41°F to 131°F)		
	Non-operating	-40°C to 65°C (-40°F to 149°F)		
	Gradient	20°C (68°F)/H		
Relative humidity	Operating	8% to 90% RH (non-condensing)		
	Non-operating	5% to 95% RH (non-condensing)		
	Max wet bulb	29°C(Op.)/ 40°C(Non Op.)		
Vibration	Operating	9.8m/s <sup>2</sup> (1.0G) (5 to 500 Hz)		
	Non-operating	49m/s <sup>2</sup> (5.0G) (5 to 500 Hz)		
Shock	Operating	2,205m/s <sup>2</sup> (225G) 2ms		
	Non-operating	8,820m/s <sup>2</sup> (900G) 1ms		
		1,176m/s <sup>2</sup> (120G) 11ms		
Altitude	Operating	-300 to 3,000 m (-1,000 to 10,000 ft.)		
	Non-operating	-300 to 12,000 m (-1,000 to 40,000 ft.)		
Acoustic noise (Idle mode)	24 dBA at 30cm (typ.)			
Limited warranty	3 years (from date of purchase). Visit online at <a href="http://www.fcpa.fujitsu.com">www.fcpa.fujitsu.com</a> or call toll free at 1-800-626-4686, option 2, for full limited warranty details and restrictions.			

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