

www.fel.fujitsu.com



MHV2xxxAT Mobile Hard Disk Drives

- Available in 40 GB, 60 GB, 80 GB, 100GB and 120 GB
- ATA 6 interface, Ultra ATA 100
- 9.5 mm high
- 4,200 rpm
- RoHS compliant



FUJITSU

THE POSSIBILITIES ARE INFINITE



Fujitsu's **MHV2xxxAT** series now offer models with up to 120 GB capacity at a rotational speed of 4,200 rpm.

The latest generation of drives from Fujitsu the MHV2xxxAT series is available in capacities of 40, 60, 80, 100 and 120 GB and is available in a 2.5", 9.5mm profile.

The drives boast a best in class Read / Write power consumption of 1.6 W with an idle power consumption of only 0.5 W, track to track seek times of 1.5 ms and is also RoHS compliant meaning certain hazardous materials have been removed from the manufacturing process as per a recent European Commission Directive.

The drive is also exceptionally quiet with an operating acoustic noise of only 2.3 bels using Fujitsu's Silent HDD technologies. The series also utilizes Fujitsu's latest generation of FDB (Fluid Dynamic Bearing) motor and Head Load/Unload mechanism with Inertia Latch technology.

Available in a small form factor with increased capacity these drives are perfect for mobile computing applications as well as many emerging hard drive applicable markets such as consumer entertainment or transport.

Functional Specifications

Model	MHV2040AT	MHV2060AT	MHV2080AT	MHV2100AT	MHV2120AT
Storage capacity (formatted) *1	40 GB	60 GB	80 GB	100 GB	120 GB
Bytes/sectors	512				
Seek time	Track to track		1.5 ms (typ.)		
	Average		Read: 12 ms (typ.), Write: 14 ms (typ.)		
	Maximum		22 ms (typ.)		
Average latency time	7.14 ms				
Rotational speed	4,200 rpm				
Data transfer rate	to/from host		100 MB/s		
Interface	ATA-6				
Head positioning method	ROTARY VCM (Embedded Servo)				
Start time *2	3.5 sec (typ.)				
Buffer size	2 MB				8 MB

Physical Specifications

Power requirements	Voltage	5 V ±5%			
	Ripple / Spin-up	100 mV P-P / 0.90 A (max.)			
	Seek / Read / Write / Idle	1.9 W (typ.) / 1.6 W (typ.) / 1.6 W (typ.) / 0.5 W (typ.)			
	Standby / Sleep	0.2 W (typ.) / 0.1 W (typ.)			
Dimensions (H x W x D)	9.5 mm x 70 mm x 100 mm				
Weight	≤100 g				
Ambient temperature *3	Op. / Non-op. / Gradient	5°C to 55°C / -40°C to 65°C / 20°C/h			
Relative humidity	Op. / Non-op. / Max. wet bulb	8% to 90% RH (non-condensing) / 5% to 95% RH (non-condensing) / 29°C (operating)/40°C (non-operating)			
Vibration	Op. / Non-op.	9.8 m/s² (1.0G) (5 to 500 Hz) / 49 m/s² (5.0G) (5 to 500 Hz)			
Shock	Op. / Non-op.	2,940 m/s² (300G) 2 ms / 8,820 m/s² (900G) 1 ms, 1,176 m/s² (120G) 11 ms			
Altitude	Op. / Non-op.	-300 to 3,000 m / -300 to 12,000 m			
Acoustic noise *4	24 dBA (typ.) 2.3 bels (typ.)				

Reliability Specifications

Mean time between failures	More than 300,000 power on hours				
Mean time to repair	Less than 30 min				
Component life	5 years or 20,000 power on hours				
Error rates	Unrecoverable errors / Seek errors	1 per 10 ⁹ bits read / 1 per 10 ⁶ seeks			
Load/Unload cycles	600,000 cycles				
Emergency Unload cycles	20,000 cycles				

NOTES:

*1 Not including alternates, and typical sparing at 512 bytes per sector

*2 Start time indicates the time from power-on or start direction by command to HDD READY. Stop time indicates the time from power-off

*3 Op. = Operating
Non-op. = Non-operating

*4 HDD READY
(typical dBA at 30cm)

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.

Fujitsu Europe Limited

Hayes Park Central
Hayes End Road
Hayes Middlesex UB4 8FE
England
Tel: (+44-(0)20) 8573 4444
Fax: (+44-(0)20) 8573 2643
www.fel.fujitsu.com

Fujitsu Deutschland GmbH

Frankfurter Ring 211
80807 Munich
Germany
Tel: (+49-(0)89) 32378-0
Fax: (+49-(0)89) 32378-100
www.fdg.fujitsu.com

