

High performance 6Gb/sec. SAS-2 hard disk drives, up to 300GB<sup>1</sup> with best-in-class environmental benefits

# 2.5-Inch, 10,000 RPM

## SAS Enterprise Hard Disk Drives

MBD2147RC • MBD2300RC

Fujitsu introduces the latest 2.5-inch enterprise drive with SAS 6Gb/sec. interface for maximum performance.

- ▶ Available in 147GB and 300GB preferred capacity points for mainstream server and disk storage array applications
- ▶ Improvement in maximum internal transfer rates
- ▶ Best-in-class power consumption at 3.4 watts idle
- ▶ Part of the Fujitsu Green Policy Innovation program
- ▶ Environmental benefits offer an ecological solution for enterprise applications requiring performance and power efficiencies



<sup>1</sup> One gigabyte (GB) = one billion bytes; accessible capacity will be less and actual capacity depends on the operating environment and formatting.

One megabyte (MB) = 1,000,000 bytes

One gigabyte (GB) = 1,000 megabytes

One gigabit (Gb) = 1,000 megabits

RPM = Revolutions Per Minute

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THE POSSIBILITIES ARE INFINITE

# 2.5-Inch, 10,000 RPM

## SAS Enterprise Hard Disk Drives

MBD2147RC • MBD2300RC

Utilizing the vast experience and innovative technology developed over 40 years, Fujitsu introduces a new enterprise class 2.5-inch SAS drive offering industry leading performance and environmental benefits.

The MBD2-RC series is the first enterprise hard disk drive from Fujitsu to be halogen free\*. The 10,000 RPM 6Gb/sec. SAS-2 interface enterprise drive doubles its capacity from previous generation models through the adoption of perpendicular magnetic recording.

The higher capacity and performance meets a wide range of enterprise applications, from mid-range volume servers to disk storage arrays. In addition, the best-in-class low power values are ideal for servers and storage systems used in data centers, which require minimal energy usage and mounting space. The 6Gb/sec. SAS interface and improved areal densities enable higher data rates.

2.5-Inch, 10,000 RPM Series Hard Disk Drive Specifications			
		MBD2147RC	MBD2300RC
Functional Specifications			
Storage Capacity (formatted) <sup>1</sup>		147.0GB	300.0GB
Bytes/Sector		512	
Seek Time	Track to track	0.2 ms typ. (Read), 0.4 ms typ. (Write)	
	Average	3.8 ms typ. (Read), 4.3 ms typ. (Write)	
	Maximum	8.0 ms typ. (Read), 9.0 ms typ. (Write)	
Average Latency		2.99 ms	
Rotational Speed		10,025 RPM	
Data Transfer to/from Host		Max 600 MB/s (SAS 6Gb/sec.)	
Interface		SAS-2	
Buffer Size <sup>2</sup>		16 MB	
Physical Specifications			
Power Requirements	Voltage	5 V ± 5%, 12V ± 5%	
	Spin-up	12V ± 5%: 1.2A (peak), 1.5A (peak < 100us), 5 V ± 5%: 1.0 A (peak).	
	Idle	3.2W typ.	3.4W typ.
Dimensions	Height	15.0 mm	
	Width	69.85 mm	
	Depth	100.45 mm	
Weight		220 g or less	
Ambient Temperature	Operating	5°C to 55°C (HDD Surface 60°C max)	
	Non-operating	-40°C to 70°C	
	Gradient	20°C / H or less	
Relative Humidity	Operating	5% to 95% RH	
	Non-operating	5% to 95% RH	
	Max wet bulb	29°C (no condensation)	
Vibration	Operating	0.6mm (5 to 20Hz) / 9.8m/s² (1.0G) (20Hz to 300Hz)	
	Non-operating	3.1mm (5 to 20Hz) / 49m/s² (5.0G) (20Hz to 300Hz)	
Shock	Operating	980m/s² (100G) max (1ms)	
	Non-operating	3,920m/s² (400G) max (1ms)	
Altitude	Operating	3,048m (max)	
	Non-operating	12,192m (max)	
Acoustics Noise	HDD Idle	2.9 bels (typ.) or less	

<sup>1</sup> One gigabyte (GB) = one billion bytes; accessible capacity will be less and actual capacity depends on the operating environment and formatting

<sup>2</sup> Buffer Size: A small portion of buffer memory is used for drive firmware control



As part of the Fujitsu Green Policy Innovation program, the new series provides the best-in-class power consumption at 3.4 watts idle, achieving up to 28% reduction from previous generation models, and up to 74% reduction from current 3.5" 15K RPM offerings.

\* Halogen free as defined by levels of chlorine (Cl) and bromine (Br) or a compound in which they are combined reduced to be less than the standards of IEC61249-2-21:2003, as stated below:  
Chlorine: less than 900ppm, Bromine: less than 900ppm, Chlorine + bromine: less than 1500ppm

### About Fujitsu Computer Products of America, Inc.

Fujitsu Computer Products of America, Inc. is a subsidiary of Fujitsu Limited, a leading provider of customer-focused IT and communications 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, scanners and scanner maintenance, palm vein recognition technology, 10Gb Ethernet switches and degaussers.

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