

Desktop Class Spinpoint F1 DT



Capacity		80GB	160GB	250GB	320GB	500GB	640GB	750GB	1TB
Model	8MB	HD083GJ	HD161GJ	HD251HJ	HD321HJ	HD501IJ			
	16MB		HD162GJ	HD252HJ	HD322HJ	HD502IJ	HD642JJ		
	32MB							HD753LJ	HD103UJ

FEATURES

- MAX.334GB Formatted Capacity Per Disk
- Serial ATA 3.0Gbps Interface Support
- Improved recording stability over temperature with PMR
- Advanced dynamic FOD control for best data integrity
- Intelligent compensation of external disturbance
- SATA Native Command Queuing Feature
- Device Initiated SATA Power Management
- Rotational vibration sensor
- Environment friendly product with RoHS compliance
- Improved performance with dual-ARM based firmware
- ATA S.M.A.R.T. Compliant
- ATA Automatic Acoustic Management Feature
- ATA 48-bit Address Feature
- ATA Device Configuration Overlay Feature
- NoiseGuard™
- SilentSeek™

DRIVE CONFIGURATION

Interface	Serial ATA 3.0Gbps
Buffer DRAM Size ²	8 / 16 / 32 MB
Byte per Sector	512 bytes
Rotational Speed	7,200 RPM

PERFORMANCE SPECIFICATIONS

Average Seek time (typical)	8.9 ms
Average Latency	4.17 ms
Data Transfer Rate	
Media to/from Buffer (Max.)	175 MB/sec
Buffer to/from Host (Max.)	300 MB/sec
Drive Ready Time (typical)	
160~320GB	8 sec
500~640GB	12 sec
750~1000GB	

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 ¹⁵ bits
Start/Stop Cycles	50,000

ACOUSTICS³

Idle	160~320GB	2.45 Bel
	500~1000GB	2.70 Bel
Performance Seek	250/320GE	2.80 Bel
	500~1000G	2.90 Bel

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%		
Capacity ¹	160GB	500GB	750GB
	250GB	650GB	1000GB
	320GB		

Spin-up Current (Max)	2.0A	2.3A	2.4A
Seek (typical) ⁴	5.7W	6.9W	7.6W
Read/Write (typical)	6.1W	7.4W	8.4W
Idle (typical)	4.4W	5.7W	6.7W
Standby (typical)	0.7/1W	0.7/1W	0.7/1W
Sleep (typical)	0.7/1W	0.7/1W	0.7/1W

ENVIRONMENTAL SPECIFICATIONS

Temperature		
Operating		0 ~ 60 °C
Non-operating		-40 ~ 70 °C
Humidity (non-condensing)		
Operating		5 ~ 90 %
Non-operating		5 ~ 95 %
Linear Shock (1/2 sine pulse)		
Operating		70G
Non-operating		160~320GB 350 G
		500~1000GB 300 G
Altitude (relative to sea level)		
Operating		-300 to 3,000 m
Non-operating		-300 to 12,000 m

PHYSICAL DIMENSION

Height (Max.)	26.1 mm	
Width	101.5 mm	
Length	147.0 mm	
Weight (avg.)	160~320GB	470 g
	500/640GB	610 g
	750/1000GB	650 g

* Note : Design and specifications are subject to change without prior not

1.1MB = 1,000,000 Bytes, 1GB=1,000,000,000 Bytes

2. A small portion of the 8/16/32MB buffer memory is reserved for firmware use

3 Average value with a high performance cover.

4 Random seek with 30% duty cycle.(Average value)

