

T166 Series



CAPACITY ^{†1}		80GB	160GB	320GB	500GB
MODEL	8MB 16MB	HD080GJ	HD160HJ	HD320KJ HD321KJ	HD500LJ HD501LJ

FEATURES

- Max. 167GB Formatted Capacity Per Disk
- SATA Native Command Queuing Feature set
- Enable / Disable Staggered Spin-up
- Hot-Plug and Presence Detect
- Device Initiated Power Management
- ATA S.M.A.R.T. Compliant
- ATA Automatic Acoustic Management Feature Set
- ATA 48-bit Address Feature Set
- Asynchronous Notification
- NoiseGuard™
- SilentSeek™

DRIVE CONFIGURATION

Interface	Serial ATA 3.0Gbps
Rotational Speed ^{†2}	7,200 RPM
Bytes per Sector	512 bytes

PERFORMANCE SPECIFICATIONS

Read Seek Time (typ.)	
Average	8.9 ms
Average Latency	4.17 ms
Data Transfer Rate	
Media to/from Buffer (max.)	138MB/sec
Interface Transfer Rate (max.)	300MB/sec
Drive Ready Time (typ.)	10 sec

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 ¹⁴ bits
Start/Stop Cycles (Ambient)	50,000

ACOUSTICS (AVERAGE SOUND POWER)^{†3}

	80-160GB	250-500GB
Idle	2.35 Bel	2.70 Bel
Performance Seek	2.75 Bel	2.90 Bel
Quick Seek	2.70 Bel	2.80 Bel

ENVIRONMENTAL SPECIFICATIONS

Temperature			
Operating			0 ~ 60 °C
Non-operating			-40 ~ 70 °C
Thermal Gradient (max.)			20°C/hr
Humidity (non-condensing)			
Operating			5 ~ 90 %
Non-operating			5 ~ 95 %
Linear Shock (1/2 sine pulse)			
Operating, 2ms			63 G
Non-operating, 2.0 ms	80-160GB		350 G
	250-500GB		300 G
Altitude (relative to sea level)			
Operating			-300 to 3,000 m
Non-operating			-300 to 12,000 m

POWER REQUIREMENTS

Voltage	+5V±5%,		+12V±10%
	80/160GB	250/320GB	400/500GB
Spin Up Current (12V)	2.0A	2.3A	2.4A
Seek ^{†4}	7.6W	9.9W	10.6W
Read/Write	6.5/6.3W	8.7W	9.5W
Idle	5.4W	7.6W	8.2W
Standby ^{†5}	0.6/1.3W	0.7/1.2W	0.7/1.2W
Sleep ^{†5}	0.6/1.3W	0.7/1.2W	0.7/1.2W

PHYSICAL DIMENSION

Height		25.4 mm
Width		101.6 mm
Depth		146.1 mm
Weight	80-160GB	512.6 g
	250-320GB	612.4 g
	400-500GB	639.6 g

Specifications are subject to change without notice.

^{†1} 1MB=1,000,000 Bytes 1GB=1,000,000,000 Bytes.

Accessible capacity may vary depending on operating environment and formatting

^{†2} 7,200 RPM class. Actual speed can be different a little.

^{†3} Averaged value with a high performance cover.

^{†4} Random seek with 30% duty cycle.

^{†5} Power consumption with/without slumber mode.

