

T133 Series



CAPACITY ^{†1}	300GB	400GB
MODEL PATA, 8MB	HD300LD	HD400LD
SATA, 8MB	HD300LJ	HD400LJ

FEATURES

- Ultra ATA-100 or Serial ATA 3.0 Compliant
- Fluid Dynamic Bearing Spindle Motor Technology
- High Speed Dual Digital Signal Processor (DSP) Based Architecture
- ATA S.M.A.R.T. Compliant
- ATA Security Mode Feature Set
- ATA Host Protected Area Feature Set
- ATA Automatic Acoustic Management Feature Set
- ATA 48-bit Address Feature Set
- ATA Streaming Feature Set^{†4}
- ATA Device Configuration Overlay Feature Set
- Multi-Burst On-The-Fly Error Correction
- NoiseGuard™
- SilentSeek™
- Hot-Plug & Hot-Swap capable^{†3}

DRIVE CONFIGURATION

Interface	ATA-6 or Serial ATA 3.0
Buffer DRAM Size ^{†2}	8 MB
Bytes per Sector	512

PERFORMANCE SPECIFICATIONS

Read Seek Time (typ.)	
Track to Track	0.8 ms
Average	8.9 ms
Full Stroke	18 ms
Average Latency	4.17 ms
Rotational Speed	7,200 rpm
Maximum Data Transfer Rate	
Media to/from Buffer (max.)	400/1000 Mbits/sec
Buffer to/from Host	100 or 300 ^{†3} MB/sec
Drive Ready Time (typ.)	10 sec

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 ¹⁴ bits
MTBF	600,000 POH
Start/Stop Cycles (Ambient)	50,000
Component Design Life	5 years

ACOUSTICS (AVERAGE SOUND POWER)

Idle	2.7 Bel
Random Read/Write	2.9 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, 2ms	300 G
Vibration (swept sine, 0.5 octave per minute)	
Operating	
5-300-5 Hz	1.0 G0-p
Non-operating	
5-500-5 Hz	2.0 G0-p
Altitude (relative to sea level)	
Operating	-1,000 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%
Spin Up Current (max.)	800 / 2250 mA
Seek ^{†5} (typ.)	9.2 or 9.4 ^{†6} W
Read On-Track (typ.)	8.4 or 8.7 ^{†6} W
Idle (typ.)	8.0 or 7.2 ^{†6} W
Standby (typ.)	0.7 or 0.6 ^{†6} W
Sleep (typ.)	0.45 or 0.6 ^{†6} W

PHYSICAL DIMENSION

Height	1 in
Width	4 in
Depth	5.75 in
Weight	1.44 lb

Specifications are subject to change without notice.

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

^{†2} 128 KB is used for firmware

^{†3} For Serial-ATA interface models only

^{†4} For ATA-6 interface models only

^{†5} 30% duty cycle, random seek

^{†6} Power based on enabled DIPM and SATA 3.0Gbps speed

