



# 500 GByte, 2.5", 7,200 rpm Disk Drive Specification

3Gb SATA Interface

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## Disk Drive Installation

For information on how to install your disk drive, refer to your system or drive enclosure documentation.

See "[Accessing Sun Documentation](#)" on the back page if you need to order any documentation.

The Disk Drive Bracket Assembly consists of the disk drive assembled within the bracket assembly.

The Disk Drive Bracket Assembly should not be disassembled for any reason by the user.

## Power Requirements

Activity	+5 VDC (±5%)	12 VDC (±5%)
Motor start (Surge Current, 20sec)	0.45 A	0.65 A
Max I/O Conditions (Amp. rms)	0.40 A	0.20 A

## Physical Characteristics (Drive only, excluding bracket)

Height (max)	Width (max)	Depth (max)	Weight
0.600 in	2.760 in	3.955 in	0.43 lb
15.0 mm	70.10 mm	100.45 mm	0.196 kg

## Usage Information

Usage	Description
Shelf Life	Drive must be powered on at least once every six months
Useful Life	Minimum five years
Expected AFR (Annualized Failure Rate)	0.73% for normal, 24x7 operating conditions

## Performance

Attribute	Value
Capacity, formatted	500,107,862,016 bytes minimum (512 bytes per sector)
Rotational latency	
Average	4.16 msec (7,200 RPM)
Seek times (read/write)	(Typical)
Single track seek	0.5 msec
Average seek	8.0 msec
Maximum seek	20 msec
Random 2KB Reads Per Sec	(Typical)
Queue=1, 100% Volume	80 IOPs
Queue=32, 100% Volume	100 IOPs
HDA data transfer rate (Typical)	
Sequential Read	50 MB/sec (at ID) to 95 MB/sec (at OD)
Interface data transfer rate	Single Port, Full Duplex
Maximum instantaneous	300 Mbytes per sec (3Gb mode)
Start/stop	
Power up to ready	20 sec typical
Spin down	30 sec typical

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