



# 500 GB, 2.5-inch, 5400 rpm SATA Interface Disk Drive

(3.0Gb SATA-III)

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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 "Sun Documentation on the Web" 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.

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## Power Requirements

Activity	+5 VDC ( $\pm 5\%$ )	12 VDC ( $\pm 5\%$ )
Motor start (Surge Current, 20sec )	1.0 A	0.0 A
Max I/O Conditions ( Amp. rms)	0.46 A	0.0 A

## Physical Characteristics ( *Drive only, excluding bracket* )

Height (max)	Width (max)	Depth (max)	Weight
0.500 in	2.760 in	3.955 in	0.326 lb
12.7 mm	70.10 mm	100.45 mm	0.148 kg

## Usage Information

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Shelf Life	Drive must be powered on at least once every six months
Useful Life	Minimum five years
Expected AFR (Annualized Failure Rate)	1.6% for normal, 24x7 operating conditions

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## Performance

<b>Attribute</b>	<b>Value</b>
Capacity, formatted	500,107,862,016 bytes minimum (512 bytes per sector)
Rotational latency	
Average	5.5 msec (5,400 RPM)
Seek times (read/write)	( Typical )
Single track seek	1.0 msec
Average seek	12 msec
Maximum seek	20 msec
Random 2KB Reads Per Sec	( Typical )
Queue=1, 100% Volume	58 IOPs
Queue=32, 100% Volume	77 IOPs
HDA data transfer rate ( Typical )	
Sequential Read	40 MB/sec (at ID) to 70 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	30 sec typical
Spin down	30 sec typical

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