



# 146 GByte, 2.5", 10,000 rpm Disk Drive Specification - 3Gb SAS 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 ( $\pm 5\%$ )	12 VDC ( $\pm 5\%$ )
Motor start (Surge Current, 20sec)	.87 A	1.59 A
Max I/O Conditions (Amp. rms)	.75 A	.41 A

## Physical Characteristics (Drive only, excluding bracket)

Height (max)	Width (max)	Depth (max)	Weight
0.591 in	2.760 in	3.95 in	0.500 lb
15.1 mm	70.10 mm	100.3 mm	0.227 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)	0.74% for normal, 24x7 operating conditions
Normal Drive Temperatures	5 degC to 45 degC. Derating of AFR Applies above 45 degC
Maximum Temperature	60degC maximum sustained temperature. Drive may be rendered unusable above 65degC
Other Environmental Factors	Conforms to IEC Standards

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## Performance

Attribute	Value
Capacity, formatted	146,810,536,448 bytes minimum (512 bytes per sector)
Rotational latency	
Average	2.99 msec (10,000 RPM)
Seek times (read/write)	(Typical)
Single track seek	0.4 msec
Average seek	3.9 msec
Maximum seek	8.8 msec
Random 2KB Reads Per Sec	(Typical)
Queue=1, 100% Volume	130 IOPs
Queue=32, 100% Volume	230 IOPs
HDA data transfer rate (Typical)	
Sustained Sequential Read	48 MB/sec (at ID) to 87 MB/sec (at OD)
Interface data transfer rate	3Gb/1.5Gb per sec. auto negotiation Dual Port, Full Duplex
Maximum instantaneous	300 Mbytes per sec (3Gb/sec mode)
Start/stop	
Power up to ready	25 sec typical
Spin down	30 sec typical

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