

10 Tbyte, 3.5-inch, 7200 rpm SAS-3 Disk Drive, 12Gb/sec Interface Specification

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This document provides the specification for the 10 Tbyte, 3.5-inch, 7200 rpm SAS-3 Disk Drive, 12Gb/sec Interface.

Drive Installation

For information on how to install a storage drive, refer to your system or drive enclosure documentation. Refer to product documentation at <https://docs.oracle.com>.

The Drive Bracket Assembly consists of the storage drive assembled within the bracket assembly. The Drive Bracket Assembly should not be disassembled for any reason by the user.

Drive Specification

TABLE 1 Power Requirements

Condition	+5 VDC (+/-5%)	+12 VDC (+/-5%)
Motor start (Surge current 20 sec) Amp. peak	0.52 A	1.49 A
Idle power	0.40 A	0.32 A
Maximum power	0.82 A	1.80 A

TABLE 2 Physical Characteristics

Height	Width	Depth	Weight
1.028 in.	4 +/-0.010 in.	5.787 in.	23.28 oz
26.1 mm	101.6 +/-0.25 mm	147 mm	0.660 kg

TABLE 3 Usage Information

Usage	Description
Useful life	Minimum 5 years
Expected annualized failure rate (AFR) for normal 24/7 operating conditions	0.35%
Operating temperature (Case)	0 to 50 degrees Celsius Note - Derating of AFR applies above 40 degrees Celsius.
Maximum temperature	60 degrees Celsius (maximum sustained temperature) Note - Drive may be rendered unusable above 65 degrees Celsius.
Other environmental factors	Conforms to IEC standards

TABLE 4 Drive Capacity and Performance

Attribute	Value
Capacity, formatted	9,796,820,402,176 bytes (512 bytes per sector)
Rotational latency average	4.16 msec (7,200 rpm)
Seek times (read/write)	Typical
Single track seek (typical)	0.22/0.30 msec
Average seek	7.81/8.49 msec
Maximum seek	15.14/15.82 msec
Random 2 KB reads per sec	Typical
Queue=1, 100% Volume (RR)	80 IOPS

Attribute	Value
Queue=32, 100% Volume (RR)	185 IOPS
HDA data transfer rate	Typical
Sustained sequential read	237 MiB/s (OD) / 163 MiB/s (ID)
Interface data transfer rate	12 Gbps/6 Gbps/3 Gbps/1.5 Gbps (auto negotiation, dual port, full duplex)
Maximum instantaneous data transfer rate	1200 Mbytes per sec (12 Gbps mode)
Power On to Ready	20 sec (typical)
Spin down	30 sec (typical)

Product Documentation Library

Documentation for this product is available in the storage section of the Oracle Help Center, located at <http://docs.oracle.com/en/storage/>.

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