

# Fibrenetix Certified Hard Disk Drives



## Enterprise class, high reliability drives for the surveillance industry.

Built for 24/7, 365 day operation - Helium based

Fibrenetix certified HDDs are built for 24/7 operation and long-term reliability. The robust SATA and SAS Hard Disk Drives have been developed for the most demanding surveillance environments, using Storage Video Servers, with scalable storage of multiple Petabytes (1000's of Terabytes).

For great reliability and scalability in RAID environments, Fibrenetix certified HDD's use RV sensors to compensate for rotational vibration. The large capacities and great performance of these HDD's enable storage of high resolution camera feeds, support for long data retention periods, as well as support for multiple camera streams.



SAS Hard Drives	SATA Hard drives	Formatted capacity
HDD- 4000-SAS-N1	HDD-4000-SATA-S1	4 Terabytes
HDD- 6000-SAS-N1	HDD-6000-SATA-S1	6 Terabytes
HDD- 8000-SAS-H1	HDD-8000-SATA-S1	8 Terabytes
HDD- 10000-SAS-H1	HDD-10000-SATA-S1	10 Terabytes
HDD-12000-SAS-H1	HDD-12000-SATA-S1	12 Terabytes
HDD-14000-SAS-H1	HDD-14000-SATA-S1	14 Terabytes

### SATA HDD Specifications

Interface	Serial ATA-2.6 or Serial ATA-3.0
Interface Speed	6.0 Gbit/sec
Buffer Speed	64 MB, FIFO ring buffer
Rotation Speed	7,200 rpm
Average Latency Time	4.17 milliseconds
<b>Environmental Compliance</b>	
RoHS	Compatible

### Reliability

MTBF	1,000,000 hours
Formatted Capacity	1 per 10 <sup>14</sup> bits read

### Power Requirements

Supply Voltage	5 V ±5 % , 12 V ±5 %
Power Consumption (Read / Write)	11.3 watts
Power Consumption (Low Power /Idle)	6.0 watts

### Environmental Limits

Temperature (Operating / Non-operating)	0 to 70 °C / -40 to 70 °C
Humidity (Operating / Non-operating)	5% to 90% RH (no condensation) / 5% to 95% RH (no condensation)
Shock (Operating / Non-operating)	686m/s <sup>2</sup> {70G}, 2ms half sine wave / 2940m/s <sup>2</sup> {300G}, 2ms half sine wave
Vibration (Operating / Non-operating)	7.35m/s <sup>2</sup> {0.75G}, 5Hz to 300Hz / 2.45m/s <sup>2</sup> {0.25G}, 300Hz to 500Hz
Altitude (Operating / Non-operating)	-305m to +3,048m / -305m to +12,192m

**fibrenetix**

# Fibrenetix Certified Hard Disk Drives



## SAS HDD Specifications

Interface	Serial Attached SCSI 3.0
Interface Speed	12.0 Gbit/second or 6.0 Gbit/second

### Performance

Buffer size	256MB
Rotation Speed	7200 RPM $\pm 0.1$ %
Average Latency Time	4.17 milliseconds
Data Transfer Speed (Sustained)	255 MB/second

### Reliability

Unrecoverable Error Rate	10 per $10^{16}$ bits read
MTTF	2,500,000 hours
24 x 7 Operation	Yes (H1 drives are based on Helium drives, with with the best reliability in the industry)
Workloads	550 Terabytes per year

### Power requirement

Supply Voltage	5 Volts $\pm 5\%$ / 12 Volts $\pm 5\%$
Power Consumption (Read / Write)	10.1 watts
Power Consumption (Idle-B)	6 watts

### Environmental Data

Temperature (Operating / Non-Operating)	5 to 55 °C / -40 to 70 °C
Humidity (Operating / Non-operating)	5% to 90% RH (no condensation) / 5% to 95% RH (no condensation)
Shock (Operating / Non-operating)	686m/s <sup>2</sup> {70G}, 2ms half sine wave / 2940m/s <sup>2</sup> {300G}, 2ms half sine wave
Vibration (Operating / Non-operating)	7.35m/s <sup>2</sup> {0.75G}, 5Hz to 300Hz / 2.45m/s <sup>2</sup> {0.25G}, 300Hz to 500Hz
Altitude (Operating / Non-operating)	-305m to +3,048m / -305m to +12,192m

### Environmental Compliance

RoHS	Compatible
------	------------