

# Surveillance HDD

Data Sheet

#### The New Generation SV Drive

- The industry's first surveillance-optimised hard drive precision-tuned for high write surveillance workloads operating 24x7
- Capacities up to 8TB support 64 cameras per drive and 8+<sup>1</sup> drives per system
- Engineered for workloads of 180TB/year, three times that of desktop drives
- Low power consumption and startup current to minimise heat and vibration emission, improving long-term drive reliability
- Tarnish-resistant components to help protect drive from environmental elements, increasing field reliability
- Customise power settings for incremental savings during system downtime without compromising time to record
- Reliable performance in multi-drive systems with support from RV sensors
- Optional 3-year +Rescue Data Recovery Service plan to help protect against data loss from viruses, software issues or mechanical and electrical breakdowns

#### **Best-Fit Applications**

- NVR
- Embedded SDVR
- Hybrid SDVR
- Surveillance DVR

1Drives with Rotational Vibration sensors can be used in systems with 8+ drive bays. Drives without Rotational Vibration are ideal for systems with 8 or fewer drives.





## Surveillance HDD



Specifications				Surveillance HDD			
Capacity	8TB	6TB	5TB	4TB	3TB	2TB	1TB
Standard Model Numbers	ST8000VX0002	ST6000VX0001	ST5000VX0001	ST4000VX000	ST3000VX006	ST2000VX003	ST1000VX001
+Rescue Model Numbers	ST8000VX0012	ST6000VX0011	ST5000VX0011	ST4000VX002	ST3000VX005	ST2000VX005	ST1000VX003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache	256 MB	128 MB	128 MB	64 MB	64 MB	64 MB	64 MB
Bytes per Sector	4096	4096	4096	4096	4096	4096	4096
Performance							
R/V (Rotational Vibration) Sensor	Yes	Yes	Yes	Yes	No	No	No
Drive bays supported	8+	8+	8+	8+	1 to 8	1 to 8	1 to 8
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
Max Sustainable Transfer Rate	230MB/s	180MB/s	180MB/s	180MB/s	180MB/s	180MB/s	180MB/s
+Rescue Data Recovery Service							
3-Year Option With +Rescue Model	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voltage							
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%
Power Management							
Startup Power (12V, A)	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Average Operating Power	9 W	9 W	9 W	5.6 W	5.6 W	5.6 W	5.6 W
Idling Average (W)	7.6 W	7.2 W	7.2 W	4 W	4 W	4 W	4 W
Standby Mode	0.6 W	0.6 W	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
Sleep Mode	0.6 W	0.6 W	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
Environmental/Temperature							
Operating (ambient, min)	5°C	5°C	5°C	0°C	0°C	0°C	0°C
Operating (drive case, max)	70°C	70°C	70°C	70°C	70°C	70°C	75°C
Non-operating (ambient, min)	-40°C	-40°C	-40°C	-40°C	-40°C	-40°C	-40 °C
Non-operating (ambient, max)	70°C	70°C	70°C	70°C	70°C	70°C	70°C
Reliability							
Tarnish Resistant <sup>1</sup>	Yes	Yes	Yes	Yes	No	No	No
Load/Unload Cycles <sup>2</sup>	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
MTBF (Hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr
Power-on Hours	8,760	8,760	8,760	8,760	8,760	8,760	8,760
Warranty, Limited (years)	3	3	3	3	3	3	3
Physical	·					·	
Height (mm/in)	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	20 mm/0.787 in
Width (mm/in, max)	101.85 mm/4.01 in	101.85 mm/4.01 in	101.85 mm/4.01 in	101.6 mm/4 in	101.6 mm/4 in	101.6 mm/4 in	101.85 mm/4 in
Depth (mm/in, max)	147 mm/5.878 in	147 mm/5.878 in	147 mm/5.878 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	147 mm/5.787 in
Weight (lb/g)	780 g/1.72 lb	780 g/1.72 lb	780 g/1.54 lb	610 g/1.345 lb	610 g/1.38 lb	610 g/1.18 lb	400 g/0.92 lb
Carton Unit Quantity	20	20	20	20	20	20	25
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8

1 Product will ship with tarnish-resistant components in early 2016. 2 Load/Unload tested to 600,000 cycles.



### Surveillance HDD



Specifications	SV35 Series <sup>™</sup>				
Capacity	3TB	2TB	1TB		
Standard Model Numbers	ST3000VX000	ST2000VX000	ST1000VX000		
+Rescue Model Numbers	ST3000VX004	ST2000VX004	ST1000VX002		
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s		
Cache	64 MB	64 MB	64 MB		
Bytes per Sector	4096	4096	4096		
Performance					
R/V (Rotational Vibration) Sensor	No	No	No		
Drive bays supported	1 to 8	1 to 8	1 to 8		
Cameras Supported	Up to 32	Up to 32	Up to 32		
Max Sustainable Transfer Rate	210MB/s	210MB/s	210MB/s		
+Rescue Data Recovery Service					
3-Year Option With +Rescue Model	Yes	Yes	Yes		
Voltage					
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%		
Voltage Tolerance, Inc. Noise (12V)	+10%/-7.5%	+10%/-7.5%	+10%/-7.5%		
Power Management	_				
Startup Power (12V, A)	2	2	2		
Average Operating Power	8 W	8 W	5.9 W		
Idling Average (W)	5.4 W	5.4 W	3.36 W		
Standby Mode	0.75 W	0.75 W	0.63 W		
Sleep Mode	0.75 W	0.75 W	0.63 W		
Environmental/Temperature	_				
Operating (ambient, min)	0°C	0°C	0°C		
Operating (drive case, max)	70°C	70°C	70°C		
Non-operating (ambient, min)	-40 ° C	-40°C	-40°C		
Non-operating (ambient, max)	70°C	70°C	70°C		
Reliability					
Tarnish Resistant <sup>1</sup>	_	_			
Load/Unload Cycles <sup>2</sup>	300,000	300,000	300,000		
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14		
MTBF (Hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr		
Power-on Hours	8,760	8,760	8,760		
Warranty, Limited (years)	3	3	3		
Physical					
Height (mm/in)	26.11 mm/1.028 in	26.11 mm/1.028 in	19.99 mm/0.787 in		
Width (mm/in, max)	101.6 mm/4 in	101.6 mm/4 in	101.6 mm/4 in		
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in		
Weight (lb/g)	626 g/1.38 lb	626 g/1.38 lb	400 g/0.88 lb		
Carton Unit Quantity	20	20	25		
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8		

1 Product will ship with tarnish-resistant components in early 2016.

2 Load/Unload tested to 600,000 cycles.

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