Surveillance HDD

Data Sheet



The New Generation SV Drive

- The industry's first surveillance-optimized hard drive precision-tuned for high write surveillance workloads operating 24x7
- Capacities up to 8TB support 64 cameras per drive and 8+[1] drives per system
- Engineered for workloads of 180TB/year, three times that of desktop drives
- Low power consumption and startup current to minimize heat and vibration emission, improving long-term drive reliability
- Tarnish-resistant components to help protect drive from environmental elements, increasing field reliability
- Customize 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

1 Drives 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.

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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	256MB	128MB	128MB	64MB	64MB	64MB	64MB
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	226MB/s	226MB/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	9.0W	9.0W	9.0W	5.6W	5.6W	5.6W	5.6W
Idle Average (W)	7.6W	7.2W	7.2W	4.0W	4.0W	4.0W	4.0W
Standby Mode	0.6W	0.6W	0.6W	0.5W	0.5W	0.5W	0.5W
Sleep Mode	0.6W	0.6W	0.6W	0.5W	0.5W	0.5W	0.5W
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	70°C
Nonoperating (ambient, min)	–40°C	–40°C	–40°C	–40°C	–40°C	–40°C	–40°C
Nonoperating (ambient, max)	70°C	70°C	70°C	70°C	70°C	70°C	70°C
Reliability							
Tarnish Resistant[1]	Yes	Yes	Yes	Yes	No	No	No
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Nonrecoverable 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)	1000000hr	1000000hr	1000000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Power-On Hours	8760	8760	8760	8760	8760	8760	8760
Warranty, Limited (years)	3	3	3	3	3	3	3
Physical							
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	19.99mm/0.787in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.6mm/4.0in	101.6mm/4.0in	101.6mm/4.0in	101.60mm/4.0in
Depth (mm/in, max)	147.00mm/5.878in	147.00mm/5.878in	147.00mm/5.878in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	780g/1.72lb	780g/1.72lb	700g/1.54lb	610g/1.345lb	626g/1.38lb	535g/1.18lb	415g/0.915lb
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.

Specifications	SV35 Series™		
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	64MB	64MB	64MB
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)	2.0	2.0	2.0
Average Operating Power	8.0W	8.0W	5.90W
Idle Average (W)	5.4W	5.4W	3.36W
Standby Mode	0.75W	0.75W	0.63W
Sleep Mode	0.75W	0.75W	0.63W
Environmental/Temperature			
Operating (ambient, min)	0°C	0°C	0°C
Operating (drive case, max)	70°C	70°C	70°C
Nonoperating (ambient, min)	–40°C	–40°C	–40°C
Nonoperating (ambient, max)	70°C	70°C	70°C
Reliability			
Tarnish Resistant[1]	—	—	—
Load/Unload Cycles	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
MTBF (Hours)	1,000,000hr	1,000,000hr	1,000,000hr
Power-On Hours	8760	8760	8760
Warranty, Limited (years)	3	3	3
Physical			
Height (mm/in)	26.11mm/1.028in	26.11mm/1.028in	19.99mm/0.787in
Width (mm/in, max)	101.6mm/4.0in	101.6mm/4.0in	101.6mm/4.0in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	626g/1.38lb	626g/1.38lb	400g/0.88lb
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.

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