

# 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

<sup>1</sup>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.



# Surveillance HDD



| Specifications                                 | Surveillance HDD  |                   |                   |                    |                    |                    |                 |
|--|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-----------------|
|  | 8TB               | 6TB               | 5TB               | 4TB                | 3TB                | 2TB                | 1TB             |
| Capacity                                       | 8TB               | 6TB               | 5TB               | 4TB                | 3TB                | 2TB                | 1TB             |
| Standard Model Numbers                         | ST8000VX0002      | ST6000VX0001      | ST5000VX0001      | ST4000VX0000       | ST3000VX0006       | ST2000VX0003       | ST1000VX0001    |
| +Rescue Model Numbers                          | ST8000VX0012      | ST6000VX0011      | ST5000VX0011      | ST4000VX0002       | ST3000VX0005       | ST2000VX0005       | ST1000VX0003    |
| 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            |
| <b>Performance</b>                             |                   |                   |                   |                    |                    |                    |                 |
| 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         |
| <b>+Rescue Data Recovery Service</b>           |                   |                   |                   |                    |                    |                    |                 |
| 3-Year Option With +Rescue Model               | Yes               | Yes               | Yes               | Yes                | Yes                | Yes                | Yes             |
| <b>Voltage</b>                                 |                   |                   |                   |                    |                    |                    |                 |
| Voltage Tolerance, Inc. Noise (5V)             | ±5%               | ±5%               | ±5%               | ±5%                | ±5%                | ±5%                | ±5%             |
| Voltage Tolerance, Inc. Noise (12V)            | ±10%              | ±10%              | ±10%              | ±10%               | ±10%               | ±10%               | ±10%            |
| <b>Power Management</b>                        |                   |                   |                   |                    |                    |                    |                 |
| 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           |
| <b>Environmental/Temperature</b>               |                   |                   |                   |                    |                    |                    |                 |
| 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            |
| <b>Reliability</b>                             |                   |                   |                   |                    |                    |                    |                 |
| 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               |
| <b>Physical</b>                                |                   |                   |                   |                    |                    |                    |                 |
| 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          |

<sup>1</sup> Product will ship with tarnish-resistant components in early 2016.

<sup>2</sup> Load/Unload tested to 600,000 cycles.



# Surveillance HDD



| Specifications                                 | SV35 Series™       |                    |                    |
|--|--------------------|--------------------|--------------------|
|  | 3TB                | 2TB                | 1TB                |
| 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               |
| <b>Performance</b>                             |                    |                    |                    |
| 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            |
| <b>+Rescue Data Recovery Service</b>           |                    |                    |                    |
| 3-Year Option With +Rescue Model               | Yes                | Yes                | Yes                |
| <b>Voltage</b>                                 |                    |                    |                    |
| Voltage Tolerance, Inc. Noise (5V)             | ±5%                | ±5%                | ±5%                |
| Voltage Tolerance, Inc. Noise (12V)            | +10%/–7.5%         | +10%/–7.5%         | +10%/–7.5%         |
| <b>Power Management</b>                        |                    |                    |                    |
| 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             |
| <b>Environmental/Temperature</b>               |                    |                    |                    |
| 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               |
| <b>Reliability</b>                             |                    |                    |                    |
| 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                  |
| <b>Physical</b>                                |                    |                    |                    |
| 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             |

<sup>1</sup> Product will ship with tarnish-resistant components in early 2016.

<sup>2</sup> Load/Unload tested to 600,000 cycles.

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