

Surveillance HDD

Data Sheet

Helps Improve Costs and Data Integrity

- The industry's first surveillance-optimised hard drive platform with 1, 2, 3 and 4TB capacity options improves video streaming and data integrity in surveillance applications.
- Seventh-generation Seagate® surveillance drive is tuned for high write-cycle workloads typical in video surveillance storage systems.
- 4TB of storage capacity supports higher-resolution cameras and up to 16 drives per system, with up to 32 cameras per drive.
- Reliably performs in multi-drive systems with RAID support from RV sensors
- 24×7 operational capabilities while maintaining high AFR of <1%
- 2A current-limited startup to support the use of embedded system power supplies
- Never miss a frame with quick time-to-ready.
- Idle3 spin control features enable power-on in standby mode or drive spin-down to conserve power and improve reliability during archival periods.

Best-Fit Applications

- NVR
- Embedded SDVR
- Hybrid SDVR
- Surveillance DVR



Surveillance HDD



| Specifications | 4TB¹ | 3TB¹ | 3TB¹ | 2TB¹ | 1TB¹ |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|
| Marketing Name | Surveillance HDD | Surveillance HDD | SV35 Series™ | SV35 Series | SV35 Series |
| Model Number | ST4000VX000 | ST3000VX002 | ST3000VX000 | ST2000VX000 | ST1000VX000 |
| Interface | SATA 6 Gb/s | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s |
| Cache Multi-segmented (MB) | 64 | 64 | 64 | 64 | 64 |
| Bytes per Sector | 4,096 | 4,096 | 4,096 | 4,096 | 4,096 |
| Surveillance Performance | | | | | |
| RV (Rotational Vibration) Sensor | Υ | Υ | N | N | N |
| Drive Bays Supported | 1 to 16 | 1 to 16 | 1 to 6 | 1 to 6 | 1 to 6 |
| Cameras Supported | up to 32 |
| Seek Average, Read (ms) | <9.5 | <9.5 | <8.5 | <8.5 | <8.5 |
| Seek Average, Write (ms) | <9.5 | <9.5 | <9.5 | <9.5 | <9.5 |
| Average Data Rate, Read/Write (MB/s) | 146 | 146 | 156 | 156 | 156 |
| Max Sustained Data Rate, OD Read (MB/s) | 180 | 180 | 210 | 210 | 210 |
| Voltage | | | | | |
| Voltage Tolerance, Including Noise (5V) | ±5% | ±5% | ±5% | ±5% | ±5% |
| Voltage Tolerance, Including Noise (12V) | ±10% | ±10% | +10%/-7.5% | +10%/-7.5% | +10%/-7.5% |
| Power Management | | | | | |
| Startup Power (A) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Operating Mode, Typical (W) | 5.6 | 5.6 | 8.0 | 8.0 | 5.90 |
| Idling Average (W) | 4.0 | 4.0 | 5.40 | 5.40 | 3.36 |
| Standby Mode (W) | 0.5 | 0.5 | 0.75 | 0.75 | 0.63 |
| Sleep Mode (W) | 0.5 | 0.5 | 0.75 | 0.75 | 0.63 |
| Environmental | | | | | |
| Temperature Operating (ambient, min °C) Operating (drive case, max °C) Non-operating (ambient, min °C) Non-operating (ambient max °C) | 0 70 -40 70 | 0 70 –40 70 | 0 70 -40 70 | 0 70 -40 70 | 0 70 –40 70 |
| Reliability | | | | | |
| Load/Unload Cycles | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Non-recoverable Read Errors per Bits Read, Max | 1 per 10 ¹⁴ | 1 per 10 ¹⁴ | 1 per 10 ¹⁴ | 2 per 10 ¹⁴ | 3 per 10 ¹⁴ |
| Annualised Failure Rate (AFR) | <1% | <1% | <1% | <1% | <1% |
| Power-on Hours | 8,760 | 8,760 | 8,760 | 8,760 | 8,760 |
| Warranty, Limited (years) | 3 | 3 | 3 | 3 | 3 |
| Physical | | | | | |
| Height (mm/in) | 26.11/1.028 | 26.11/1.028 | 26.11/1.028 | 26.11/1.028 | 20.17/0.7825 |
| Width (mm/in) | 101.6/4.0 | 101.6/4.0 | 101.6/4.0 | 101.6/4.0 | 101.6/4.0 |
| Depth (mm/in) | 146.99/5.787 | 146.99/5.787 | 146.99/5.787 | 146.99/5.787 | 146.99/5.787 |
| Weight (g/lb) | 610/1.345 | 610/1.345 | 626/1.38 | 626/1.38 | 400/0.88 |
| Carton Unit Quantity | 20 | 20 | 20 | 20 | 25 |
| Cartons per Pallet | 40 | 40 | 40 | 40 | 40 |
| Cartons per Layer | 8 | 8 | 8 | 8 | 8 |

¹ One gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.





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