

Data Sheet

SV35 Series™

High-performance, high-capacity drives
for surveillance digital video recording

2TB, 1TB and 500GB • SATA 6Gb/s

Key Advantages

- The SATA 6Gb/s interface provides access to the newest and fastest hard drive controllers as well as legacy SATA 1.5Gb/s and 3Gb/s controllers.
- Leading areal densities deliver 2TB, 1TB and 500GB capacities on 3-, 2- and 1-disk platforms, boosting performance and enhancing reliability with a smaller mechanical part count.
- Spin-up is current-limited at 2A to allow the use of the most energy-efficient and cool-running power supplies.
- Available ATA-7 streaming commands optimize error correction and performance for either video or metadata content.
- Available temperature reporting and recording functions allow for monitoring and control of system temperature to further optimize reliability and performance.
- Spin control features enable power-on in standby mode or drive spin-down capability to save power and improve reliability.
- Designed for 24x7 operation with predicted MTBF of 1M hours and backed by the Seagate® 5-Year Limited Warranty



Best-Fit Applications

- Surveillance digital video recorders (DVR)
- Network surveillance video recorders (NVR)
- Direct- and network-attached JBOD surveillance systems



SV35 Series™

High-performance, high-capacity drives for surveillance digital video recording



The need for high-capacity, high-performance and reliable storage for modern video surveillance systems has never been greater. Seagate responds with the sixth-generation SV35 Series™ hard drives. Tailored for the unique needs of surveillance system designers, SV35 Series drives offer performance and fine-tuning, all backed by a 5-year limited warranty.

Capacity

2TB, 1TB and 500GB capacities offer the industry's largest selection of high-capacity hard drives optimized for surveillance.

Performance

SV35 Series drives are built on a platform leveraging leading areal densities to deliver fast data transfer rates to support many concurrent video surveillance cameras. Combined with surveillance-optimized firmware and the new SATA 6Gb/s interface, SV35 Series drives provide the storage power, performance and reliability to meet the needs of modern video surveillance systems.

Feature-Rich

SV35 Series drives offer an array of features that give surveillance system developers the best capabilities to fine-tune their storage solution by optimizing and managing power, monitoring and managing temperature, and targeting data delivery for video or metadata packets. An Advanced Format 4K sector hard drive is offered in the 2TB capacity.

Reliability

Backed by the Seagate® 5-Year Limited Warranty and designed to operate under 24x7 workloads, surveillance engineers can be sure that SV35 Series drives will measure up to their expectations.

| Specifications | 2TB ¹ | 1TB ¹ | 500GB ¹ |
|---|------------------|------------------|--------------------|
| Model Number | ST2000VX002 | ST31000526SV | ST3500411SV |
| Interface Options | SATA 6Gb/s NCQ | SATA 6Gb/s NCQ | SATA 6Gb/s NCQ |
| Performance | | | |
| Spin Speed (RPM) | 5900 | 7200 | 7200 |
| Cache, Multisegmented (MB) | 64 | 32 | 16 |
| SATA Data Transfer Rates Supported (Gb/s) | 6.0/3.0/1.5 | 6.0/3.0/1.5 | 6.0/3.0/1.5 |
| Power-On to Ready (sec) | <17 | <10 | <10 |
| Sustained Data Rate, Sequential Write (MB/s) | 144 | 140 | 140 |
| Configuration/Organization | | | |
| Heads/Disks | 6/3 | 4/2 | 2/1 |
| Bytes per Sector | 4096 | 512 | 512 |
| Voltage | | | |
| Voltage Tolerance (including noise) 5V | ±5% | ±5% | ±5% |
| Voltage Tolerance (including noise) 12V | ±10% | ±10% | ±10% |
| Reliability/Data Integrity | | | |
| Contact Start-Stop Cycles | — | 50,000 | 50,000 |
| Load/Unload Cycles (25°C, 50% Humidity) | 300,000 | — | — |
| Nonrecoverable Read Errors per Bits Read, Max | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 |
| Annualized Failure Rate (AFR) | <1% | <1% | <1% |
| MTBF (hours) | >1M | >1M | >1M |
| Power-On Hours | 8760 | 8760 | 8760 |
| Limited Warranty (years) | 5 | 5 | 5 |
| Power Management | | | |
| Maximum Startup Current (12 V typical, amps) | 2 | 2 | 2 |
| Operating Mode (typical, W) | 5.8 | 7.0 | 7.0 |
| Standby Mode (W) | 0.5 | 1.0 | 1.0 |
| Sleep Mode (W) | 0.5 | 1.0 | 1.0 |
| Environmental | | | |
| Temperature | | | |
| Operating (ambient min °C) | 0 | 0 | 0 |
| Operating (drive case max °C) | 70 | 70 | 70 |
| Nonoperating (ambient min °C) | -40 | -40 | -40 |
| Nonoperating (ambient max °C) | 70 | 70 | 70 |
| Physical | | | |
| Height (mm/in) | 26.11/1.028 | 26.11/1.028 | 19.98/0.787 |
| Width (mm/in) | 101.6/4.0 | 101.6/4.0 | 101.6/4.0 |
| Depth (mm/in) | 147.00/5.78 | 146.99/5.787 | 146.99/5.787 |
| Weight (g/lb) | 635/1.39 | 677/1.493 | 544/1.199 |

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

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