# Surveillance HDD

**Data Sheet**

## Helps Improve Costs and Data Integrity

- The industry's first surveillance-optimized hard drive platform with capacities up to 6TB improves video streaming, drive performance and data integrity in surveillance applications.

- Seventh-generation Seagate® surveillance drive is tuned for high write-cycle workloads typical in video surveillance storage systems.

- The Surveillance HDD 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

- Supplement your backups with Seagate Recovery Services for data recovery in the event of data loss or accident.

- 24×7 operational capabilities while maintaining high MTBF of 1M hours

- Options for a current-limited startup of less than 2A supports the use of embedded system power supplies.

- Low power consumption options support always-on surveillance systems.

- 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 | 6TB[1] | 5TB[1] | 4TB[1] | 3TB[1] | 2TB[1] | 1TB[1] |
|---|---|---|---|---|---|---|
| Marketing Name | Surveillance HDD | Surveillance HDD | Surveillance HDD | Surveillance HDD | Surveillance HDD | Surveillance HDD |
| Model Number | ST6000VX0001 | ST5000VX0001 | ST4000VX000 | ST3000VX002 | ST2000VX003 | ST1000VX001 |
| Seagate Recovery Services Model Number | ST6000VX0011 | ST5000VX0011 | ST4000VX002 | — | — | — |
| Interface | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s |
| Cache, MB | 128 | 128 | 64 | 64 | 64 | 64 |
| Bytes per Sector | 4096 | 4096 | 4096 | 4096 | 4096 | 4096 |
| **Surveillance Performance** | | | | | | |
| R/V (Rotational Vibration) Sensor | Y | Y | Y | Y | N | N |
| Drive Bays Supported | 1 to 16 | 1 to 16 | 1 to 16 | 1 to 16 | 1 to 8 | 1 to 8 |
| Cameras Supported | up to 32 | up to 32 | up to 32 | up to 32 | up to 32 | up to 32 |
| Max Sustained Data Rate, OD Read (MB/s) | 180 | 180 | 180 | 180 | 180 | 180 |
| **Voltage** | | | | | | |
| Voltage Tolerance, Including Noise (5V) | ±5% | ±5% | ±5% | ±5% | ±5% | ±5% |
| Voltage Tolerance, Including Noise (12V) | ±10% | ±10% | ±10% | ±10% | ±10% | ±10% |
| **Power Management** | | | | | | |
| Startup Current 12V (A) | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.2 |
| Operating Mode, Typical (W) | 8 | 8 | 5.6 | 5.6 | 5.6 | 5.6 |
| Idle Average (W) | 6.7 | 6.7 | 4.0 | 4.0 | 4 | 4 |
| Standby Mode (W) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Sleep Mode (W) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Environmental** | | | | | | |
| Temperature<br>  Operating (ambient, min °C)<br>  Operating (drive case, max °C)<br>  Nonoperating (ambient, min °C)<br>  Nonoperating (ambient, max °C) | 5<br>60<br>−40<br>70 | 5<br>60<br>−40<br>70 | 0<br>70<br>−40<br>70 | 0<br>70<br>−40<br>70 | 0<br>70<br>−40<br>70 | 0<br>70<br>−40<br>70 |
| **Reliability** | | | | | | |
| Load/Unload Cycles | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Nonrecoverable Read Errors per Bits Read, Max | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 |
| Mean Time Between Failures (MTBF, hours) | 1M | 1M | 1M | 1M | 1M | 1M |
| Power-On Hours | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 |
| Warranty, Limited (years) | 3 | 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 | 26.11/ 1.028 | 19.98/0.787 |
| Width (mm/in) | 101.85/4.010 | 101.85/4.010 | 101.6/4.0 | 101.6/4.0 | 101.6/4.2 | 101.6/4.0 |
| Depth (mm/in) | 147.0/5.878 | 147.0/5.878 | 146.99/5.787 | 146.99/5.787 | 146.99/5.789 | 146.99/5.787 |
| Weight (g/lb) | 780/1.720 | 780/1.720 | 610/1.345 | 610/1.345 | 610/1.347 | 400/0.88 |
| Carton Unit Quantity | 20 | 20 | 20 | 20 | 20 | 25 |
| Cartons per Pallet | 40 | 40 | 40 | 40 | 40 | 40 |
| Cartons per Layer | 8 | 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.

# Surveillance HDD

**Seagate** ®

| Specifications | 3TB[1] | 2TB[1] | 1TB[1] |
|---|---|---|---|
| Marketing Name | SV35 Series™ | SV35 Series | SV35 Series |
| Model Number | ST3000VX000 | ST2000VX000 | ST1000VX000 |
| Seagate Recovery Services Model Number | ST3000VX004 | ST2000VX004 | ST1000VX002 |
| Interface | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s |
| Cache, MB | 64 | 64 | 64 |
| Bytes per Sector | 4096 | 4096 | 4096 |
| **Surveillance Performance** | | | |
| R/V (Rotational Vibration) Sensor | N | N | N |
| Drive Bays Supported | 1 to 8 | 1 to 8 | 1 to 8 |
| Cameras Supported | up to 32 | up to 32 | up to 32 |
| Max Sustained Data Rate, OD Read (MB/s) | 210 | 210 | 210 |
| **Voltage** | | | |
| Voltage Tolerance, Including Noise (5V) | ±5% | ±5% | ±5% |
| Voltage Tolerance, Including Noise (12V) | +10%/−7.5% | +10%/−7.5% | +10%/−7.5% |
| **Power Management** | | | |
| Startup Current 12V (A) | 2.0 | 2.0 | 2.0 |
| Operating Mode, Typical (W) | 8.0 | 8.0 | 5.90 |
| Idle Average (W) | 5.40 | 5.40 | 3.36 |
| Standby Mode (W) | 0.75 | 0.75 | 0.63 |
| Sleep Mode (W) | 0.75 | 0.75 | 0.63 |
| **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 |
| **Reliability** | | | |
| 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 |
| Mean Time Between Failures (MTBF, hours) | 1M | 1M | 1M |
| Power-On Hours | 8760 | 8760 | 8760 |
| Warranty, Limited (years) | 3 | 3 | 3 |
| **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) | 146.99/5.787 | 146.99/5.787 | 146.99/5.787 |
| Weight (g/lb) | 626/1.38 | 626/1.38 | 400/0.88 |
| Carton Unit Quantity | 20 | 20 | 25 |
| Cartons per Pallet | 40 | 40 | 40 |
| Cartons per Layer | 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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