# SKYHAWK AI
## SURVEILLANCE

SEAGATE

# Smart. Safe. Secure.
# Surveillance Optimised and Edge Ready

Seagate® SkyHawk™ AI 18 TB is a surveillance-optimised drive designed for NVRs with artificial intelligence (AI) for edge applications.

## Best-Fit Applications

- Network video recorders (NVR)
- AI-enabled NVR systems

## SKYHAWK
### HEALTH

## Rescue
### DATA RECOVERY SERVICES

# Key Advantages

**ImagePerfect™ AI firmware** delivers zero dropped frames while supporting heavier workloads.

**Versatile capabilities** intelligently adapt to the scale of your AI environment, supporting up to 64 HD video streams and 32 AI streams.

**Rest easy with three years of Rescue Data Recovery Services,** offering an industry-leading 90% success rate against unexpected data loss from power outages, natural disasters, user error, viruses and more.

**SkyHawk Health Management** actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options.[1] Included RAID RapidRebuild™ provides 3× faster volume rebuilds.

**Higher reliability** with 2M hours MTBF and a 550 TB/year workload rate for more than 3× that of standard surveillance hard drives.

**Powerful processing** to welcome workload challenges — SkyHawk AI supports video analysis and recording simultaneously with GPU analytics workloads.

**Enjoy consistent performance** with built-in rotational vibration sensors providing reliable storage for NAS with little lag or downtime.

**Multi-bay support** helps you meet your growing storage demands with up to 16+ bays.

1 Contact your Seagate sales representative for further information.

| Specifications | 18 TB | 16 TB | 14 TB | 12 TB | 10 TB |
|---|---|---|---|---|---|
| Capacity | 18TB | 16TB | 14TB | 12TB | 10TB |
| Standard Model Numbers | ST18000VE002 | ST16000VE002 | ST14000VE0008 | ST12000VE001 | ST10000VE0008 |
| Interface | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s |
| Recording Technology | CMR | CMR | CMR | CMR | CMR |
| Drive Design | Helium | Helium | Helium | Helium | Helium |
| **Features and Performance** | | | | | |
| Drive Bays Supported | 16+ | 16+ | 16+ | 16+ | 16+ |
| AI Channels | 32 | 32 | 32 | 32 | 32 |
| AI Real Time Capture Events/Sec[1,2] | Up to 120 | Up to 120 | Up to 120 | Up to 120 | Up to 120 |
| AI Real Time Compare Events/Sec[1,2] | Up to 96 | Up to 96 | Up to 96 | Up to 96 | Up to 96 |
| HD Cameras Supported[3] | Up to 64 | Up to 64 | Up to 64 | Up to 64 | Up to 64 |
| RV Sensors | Yes | Yes | Yes | Yes | Yes |
| Max. Sustained Transfer Rate OD (MB/s) | 260MB/s | 250MB/s | 250MB/s | 250MB/s | 250MB/s |
| Cache (MB) | 256 | 256 | 256 | 256 | 256 |
| **Reliability/Data Integrity** | | | | | |
| Tarnish Resistant | Yes | Yes | Yes | Yes | Yes |
| Load/Unload Cycles | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Non-recoverable Read Errors Rate, Max | 1 per 10E15 | 1 per 10E15 | 1 per 10E15 | 1 per 10E15 | 1 per 10E15 |
| Power-On Hours per year | 8,760 | 8,760 | 8,760 | 8,760 | 8,760 |
| Workload Rate Limit (WRL)[4] | 550 | 550 | 550 | 550 | 550 |
| Mean Time Between Failures (MTBF) (hours) | 2,000,000 hr | 2,000,000 hr | 2,000,000 hr | 2,000,000 hr | 2,000,000 hr |
| Warranty, Limited (years)[5] | 3 | 3 | 3 | 3 | 3 |
| Rescue Data Recovery Services (years)[6] | 3 | 3 | — | 3 | 3 |
| **Power Management** | | | | | |
| Startup Current, Typical (12V, A) | 2 | 1.8 | 1.8 | 1.8 | 1.8 |
| Average Operating Power (W) | 8 W | 6.71 W | 6.9 W | 6.9 W | 6.9 W |
| Idling Average (W) | 5.3 W | 5.1 W | 4.9 W | 4.9 W | 4.9 W |
| Standby Mode/Sleep Mode, Typical (W) | 1.3/1.3 | 1.05/1.05 | 1.2/1.2 | 1.2/1.2 | 1.2/1.2 |
| Voltage Tolerance (5 V) | ±5% | ±5% | ±5% | ±5% | ±5% |
| Voltage Tolerance (12 V) | ±10% | ±10% | ±10% | ±10% | ±10% |
| **Environmental/Temperature** | | | | | |
| Operating (ambient, min °C) | 0 | 5 | 5 | 5 | 5 |
| Operating (drive case, max °C)[7] | 65 | 70 | 70 | 70 | 70 |
| Non-operating (ambient, min °C) | -40 | -40 | -40 | -40 | -40 |
| **Physical** | | | | | |
| Height (mm/in, max) | 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 |
| Width (mm/in, max) | 101.85 mm/4.01 in | 101.85 mm/4.01 in | 101.85 mm/4.01 in | 101.85 mm/4.01 in | 101.85 mm/4.01 in |
| Depth (mm/in, max) | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in |
| Weight (g/lb, typical) | 670 g/1.477 lb | 670 g/1.477 lb | 690 g/1.521 lb | 690 g/1.521 lb | 690 g/1.521 lb |
| Carton Unit Quantity | 20 | 20 | 20 | 20 | 20 |
| Cartons per Pallet / Cartons per Layer | 40/8 | 40/8 | 40/8 | 40/8 | 40/8 |

1 Events can be human, vehicle, or object capture.

2 Tested and verified using embedded AI NVR – 64-ch HD recording, 16-ch PB. Average picture size ~250 KB

3 1080P, H.265, 25 fps

4 SkyHawk AI surveillance drives are designed for always-on workloads of 550 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

5 Extended warranty options available. Consult your distributor for details.

6 From May 1, 2020, 3-year Rescue Data Recovery Services plan may be offered in addition to standard warranty. This is offered for selected regions only. Check with reseller on availability.

7 Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the product.

| Specifications | 8 TB |
|---|---|
| Capacity | 8TB |
| Standard Model Numbers | ST8000VE001 |
| Interface | SATA 6 Gb/s |
| Recording Technology | CMR |
| Drive Design | Air |
| **Features and Performance** | |
| Drive Bays Supported | 16+ |
| AI Channels | 32 |
| AI Real Time Capture Events/Sec[1,2] | Up to 120 |
| AI Real Time Compare Events/Sec[1,2] | Up to 96 |
| HD Cameras Supported[3] | Up to 64 |
| RV Sensors | Yes |
| Max. Sustained Transfer Rate OD (MB/s) | 235MB/s |
| Cache (MB) | 256 |
| **Reliability/Data Integrity** | |
| Tarnish Resistant | Yes |
| Load/Unload Cycles | 300,000 |
| Non-recoverable Read Errors Rate, Max | 1 per 10E15 |
| Power-On Hours per year | 8,760 |
| Workload Rate Limit (WRL)[4] | 550 |
| Mean Time Between Failures (MTBF) (hours) | 2,000,000 hr |
| Warranty, Limited (years)[5] | 3 |
| Rescue Data Recovery Services (years)[6] | 3 |
| **Power Management** | |
| Startup Current, Typical (12V, A) | 1.8 |
| Average Operating Power (W) | 8.73 W |
| Idling Average (W) | 7.5 W |
| Standby Mode/Sleep Mode, Typical (W) | 0.96/0.96 |
| Voltage Tolerance (5 V) | +10%/-5% |
| Voltage Tolerance (12 V) | ±10% |
| **Environmental/Temperature** | |
| Operating (ambient, min °C) | 5 |
| Operating (drive case, max °C)[7] | 70 |
| Non-operating (ambient, min °C) | -40 |
| **Physical** | |
| Height (mm/in, max) | 26.11 mm/1.028 in |
| Width (mm/in, max) | 101.85 mm/4.01 in |
| Depth (mm/in, max) | 146.99 mm/5.787 in |
| Weight (g/lb, typical) | 716 g/1.579 lb |
| Carton Unit Quantity | 20 |
| Cartons per Pallet / Cartons per Layer | 40/8 |

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2 Tested and verified using embedded AI NVR – 64-ch HD recording, 16-ch PB. Average picture size ~250 KB

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