

Video 2.5 HDD

Data Sheet

Reliable. Quiet. Low Power.

- Purpose-built 2.5-inch drive tuned for video streaming, 24×7 operation and low power consumption.¹
- Small form factor—1/6 the size of 3.5-inch solutions—allows system cost reduction, operational power savings and fanless design while supporting flexibility in a sleeker industrial system design.
- Eco-friendly power consumption enables energy-efficient, always-on systems with up to 55% in power savings in comparison to 3.5-inch solutions.
- Proven Seagate reliability of 0.55% AFR supports longevity in demanding consumer electronic environments.
- Designed for cool, quiet, worry-free operation.
- Media streaming optimised for smooth content delivery of up to 12 HD streams.

Best-fit Applications

- DVR and media centre applications
- Home cinema PCs
- Karaoke and audio jukeboxes
- Cable, satellite and IPTV set-top boxes
- In-camera or surveillance systems

¹ Seagate[®] Video 2.5 HDD was previously known as the Pipeline HD[®] Mini hard drive



Video 2.5 HDD



Specifications	500GB1	320GB1	250GB1
Model Number	ST500VT000	ST320VT000	ST250VT000
Interface Options	SATA 3Gb/s	SATA 3Gb/s	SATA 3Gb/s
Performance			
Cache, Multi-segmented (MB)	16	16	16
Simultaneous HDTV Streams Supported (Assumes 20MB host buffer per stream)	12	12	12
Power-on to Ready (typical, sec)	3.0	3.0	3.0
Standby to Ready (typical, sec)	2.5	2.5	2.5
Sustained Data Transfer Rate (MB/s)	100	100	100
Voltage			
Voltage Tolerance (including noise)	5V ± 5%	5V ± 5%	$5V \pm 5\%$
Reliability			
Non-recoverable Read Errors per Bits Read	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴
Annualised Failure Rate (AFR)	0.55%	0.55%	0.55%
Load/Unload Cycles	20,000	20,000	20,000
(software/hardware-controlled power cycles)	600,000	600,000	600,000
Power Management			
Start-up Current 5V (amps max)	1.0	1.0	1.0
Operating Seeks (W)	1.5	1.5	1.5
Idling Average (W)	0.66	0.66	0.66
Standby/Sleep Mode (typical, W)	0.18	0.18	0.18
Environmental			
Temperature (°C) Operating (drive case max) Non-operating (drive case min)	60 0	60 0	60 0
Non-operating (ambient)	-40 to 70	-40 to 70	-40 to 70
Temperature Gradient, Operating/Non-operating (°C per hour max)	20/35	20/35	20/35
Relative Humidity, Operating/Non-operating (non-condensing, %)	5 to 95	5 to 95	5 to 95
Wet bulb Temperature, Operating/Non-operating (°C max)	37.7/40.0	37.7/40.0	37.7/40.0
Shock Operating: 2ms (max, Gs) Non-operating: 1ms (max, Gs)	400 1,000	400 1,000	400 1,000
Vibration, Operating 5Hz to 200Hz (Gs, max displacement applies below 10Hz) 200Hz to 500Hz (Gs, 0 to peak)	2.0 1.0	2.0 1.0	2.0 1.0
Vibration, Non-operating 5Hz to 500Hz (Gs, max displacement applies below 22Hz)	5.0	5.0	5.0
Acoustics			
PVR Profile (typical/max, bels)	2.2/2.4	2.2/2.4	2.2/2.4
Physical			
Height (mm/in) ²	7.0/0.276	7.0/0.276	7.0/0.276
Width (mm/in) ²		70.4/0.70	70.1/2.76
	70.1/2.76	70.1/2.76	10.1/2.10
Depth (mm/in) ²	70.1/2.76 100.56/3.959	100.56/3.959	100.56/3.959
Depth (mm/in) ² Weight (g/lb, max)			
	100.56/3.959	100.56/3.959	100.56/3.959
Weight (g/lb, max)	100.56/3.959 95/0.209	100.56/3.959 95/0.209	100.56/3.959 95/0.209

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

² These base deck dimensions conform to the Small Form Factor Standard (SFF-8203) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.

www.seagate.com

AMERICAS ASIA/PACIFIC EUROPE, MIDDLE EAST AND AFRICA Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, +1 408 658 1000 Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, +65 6485 3888 Seagate Technology SAS 16-18 rue du Dôme, 92100 Boulogne-Billancourt, France, +33 1 41 86 10 00

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