

Data Sheet

Pipeline HD™ Pro

The Gold Standard in
High-Definition Recording

1 TB* • SATA • 7200 RPM

Key Advantages

- High capacities starting at 1 TB enable premium television services, such as video on demand, high-definition DVRs and home media centers.
- High-performance 7200-RPM Pipeline HD Pro drives store, retrieve and play back up to 12 simultaneous streams of HD content with ease.
- 1-TB capacity stores up to 200 hours of high-definition TV or up to 1000 hours of standard-definition TV.
- Capable of operating at drive case temperatures up to 75°C
- Designed and tested for always-on applications, 24x7, 8760
- Proven Seagate reliability—designed for worry-free DVR operation with segment-leading 0.62% AFR
- Seagate SoftSonic™ motor and optimized seek profiles enable years of quiet, worry-free operation.
- Available Seagate Secure™ technology improves content security as part of a system digital rights management strategy.



Best-Fit Applications

- Designed and tested for DVRs and media centers
 - Windows Vista certified
- External storage
- Home theater PC
- IPTV
- Multimedia hard drive recorders
- Karaoke and audio jukeboxes

*Compatible with UDMA-2, -3 and -4



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Boasting capacities starting at 1 TB, Seagate® Pipeline HD™ Pro drives deliver unprecedented levels of acoustic, power and vibration performance for high-definition DVRs. With the ability to support up to 12 simultaneous high-definition streams and operate at base plate temperatures up to 75°C, they provide reliable storage that enables consumers to take full advantage of premium services like video on demand. Featuring Windows Vista certification that makes them an ideal solution for media centers, Pipeline HD Pro drives are the gold standard for high-definition recording.

Seagate Customer Experience Engineering

- Offer the expertise of Seagate hard drive integration engineers to overcome the challenges of building new system chassis and hard drive mounting designs
- Speed time to market by solving CE design issues quickly and efficiently
- Improve system reliability and performance
- Offer field engineering and business support teams in person, worldwide
- Provide advanced application design services through Seagate design centers in the U.S. and Singapore

Seagate Global Customer Support

- Get presales and technical support at support.seagate.com.
- Visit our knowledge base for answers to common support questions.
- Find documentation for current and legacy drives.
- Utilize our online troubleshooting and diagnostic tools.
- Download DiscWizard™ to help migrate data from an older drive.
- Seagate also offers multi-lingual phone, email and chat support.

www.seagate.com

1-800-SEAGATE (1-800-732-4283)

Specifications	1 TB
Model Number	ST31000533CS
Interface Options	SATA 3Gb/s
Performance	
Cache, Multisegmented (MB)	32
SATA Data Transfer Modes Supported (Gb/s)	3.0/1.5
Simultaneous SDTV Streams Supported (Assumes 256K host buffer per stream)	12
Simultaneous HDTV Streams Supported (Assumes 2MB host buffer per stream)	12
Power-On to Ready (typical, sec)	20
Standby to Ready (typical, sec)	15
Maximum External Transfer Rate (MB/s)	300
Voltage	
Voltage Tolerance (including noise)	5V ± 5% 12V ± 10%
Environmental	
Ambient Temperature (°C)	
Operating (ambient min)	0
Operating (drive case max)	60
Nonoperating (ambient min)	-40
Nonoperating (ambient max)	70
Temperature Gradient, Operating/Nonoperating (°C per hour max)	20/30
Relative Humidity, Operating/Nonoperating (non-condensing, %)	5 to 95/5 to 95
Web Bulb Temperature, Operating/Nonoperating (°C max)	37.7
Shock	
Operating: 2 ms (max, Gs)	70
Nonoperating: 1 ms (max, Gs)	300
Vibration, operating	
5-22 Hz (limited displacement) (Gs)	0.25
22-350 Hz (Gs)	0.50
350-500 Hz (Gs)	0.25
Vibration, Nonoperating	
5-22 Hz (limited displacement) (Gs)	2.00
22-350 Hz (Gs)	5.00
350-500 Hz (Gs)	2.00
Power Management	
Startup Current (12 V typical, amps)	2.0
Consumer Storage Profile (W)	8.7
Idle Average (W)	7.0
Standby/Sleep Mode (typical, W)	.99
Acoustics	
PVR Profile (typical/max, bels)	2.9/3.1
Reliability	
Nonrecoverable Read Errors per Bits Read	1 sector per 10E14
Annualized Failure Rate (AFR)	0.62%
Contact Start-Stop Cycles (25°C, 50% relative humidity)	50,000
Dimensions	
Height (mm/in, max)	26.1/1.028
Width (mm/in, max)	101.6/4.000
Depth (mm/in, max)	146.99/5.787
Weight (g/lb, max)	630/1.389

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