

TOSHIBA

Your Video Needs Covered.

Toshiba V300 Video Streaming Internal Hard Drive



Optimized for home surveillance systems, DVR, and Set-top box, the Toshiba V300 Video Streaming Internal Hard Drive meets your video needs with performance and reliability on demand. Enjoy smooth video performance in a quiet package thanks to Toshiba's Silent Seek technology and energy efficient low-spin design. So when you're ready to record and playback your videos – you can go full stream ahead.

Image does not represent actual product.

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Toshiba V300 Video Streaming Internal Hard Drive

Application

Home Surveillance Systems / Set-Top-Box (STB)
Digital Video Recorders (DVR) / Network Video Recorders (NVR)



Product image may represent a design model.



Quiet
Silent Sleek
Technology



Durable
Up to 72 TB/yr
workload rating⁶



Reliable
Designed for 24/7 video
recording and playback



Efficient
Up to 25% reduced
energy consumption*



Protection
Built-in shock sensors



Scalable
Support up to 4 HD cameras⁴

*Comparison is based on 2TB models of P300 and V300

Toshiba V300 Video Streaming Internal Hard Drive

Capacity ¹	<u>3TB</u>	<u>2TB</u>	<u>1TB</u>	<u>500GB</u>
Model Number (Retail Packaging)	N/A	N/A	N/A	N/A
Model Number (Bulk)	HDWU130UZSVA	HDWU120UZSVA	HDWU110UZSVA	HDWU105UZSVA
Basic Specifications				
Interface	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s
Form Factor²	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes
RoHS Compatible³	Yes	Yes	Yes	Yes
Features				
Number of Camera Supported⁴	4	4	4	4
Driver Bays Supported⁵	Up to 8	Up to 8	Up to 8	Up to 8
Shock Sensor	Yes	Yes	Yes	Yes
Silent Seek Technology	Yes	Yes	Yes	Yes
Ramp Loading Technology	Yes	Yes	Yes	Yes
Performance				
Rotational Speed [RPM]	5,940	5,700	5,700	5,700
Cache Size [MB]	64	64	64	64
Reliability				
24x7 Operation	Yes	Yes	Yes	Yes
Workloads [TB/Year]⁶	72	72	72	72
Unrecoverable Error Rate	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Load/Unload Cycles	300,000	300,000	300,000	300,000
Limited Warranty⁷ [Years]	2	2	2	2
Power Management				
Supply Voltage	5 V DC ±5 % 12 V DC ±10 %	5 V DC ±5 % 12 V DC ±10 %	5 V DC ±5 % 12 V DC ±10 %	5 V DC ±5 % 12 V DC ±10 %
Power Consumption (Operating) [W]	5.4	4.7	5.7	5.7
Power Consumption (Idle) [W]	4.2	3.3	3.0	3.0
Environmental				
Temperature (Operating) [°C]	0 to 65 (surface)	0 to 65 (surface)	0 to 65 (surface)	0 to 65 (surface)
Temperature (Non-operating) [°C]	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Vibration (Operating)	6.57 m/s ² {0.67G} (5 to 500Hz)	6.57 m/s ² {0.67G} (5 to 500Hz)	6.57 m/s ² {0.67G} (5 to 500Hz)	6.57 m/s ² {0.67G} (5 to 500Hz)
Vibration (Non-Operating)	10.2 m/s ² {1.04G} (2 to 200Hz)	10.2 m/s ² {1.04G} (2 to 200Hz)	10.2 m/s ² {1.04G} (2 to 200Hz)	10.2 m/s ² {1.04G} (2 to 200Hz)
Shock (Operating)	686 m/s ² {70G} (2 ms duration)	686 m/s ² {70G} (2 ms duration)	686 m/s ² {70G} (2 ms duration)	686 m/s ² {70G} (2 ms duration)
Shock (Non-operating)	2,940 m/s ² {300G} (2 ms half sine)	2,940 m/s ² {300G} (2 ms half sine)	3,432 m/s ² {350G} (2 ms half sine)	3,432 m/s ² {350G} (2 ms half sine)
Acoustics (Idle Model) [dB]	24	22	19	19
Physical				
Height [mm Max.]	26.1	26.1	26.1	26.1
Length [mm Max.]	147	147	147	147
Width [mm Max.]	101.85	101.85	101.85	101.85
Weight [g Max.]	680	680	450	450
Bottom Holes Type⁸	TYPE2	TYPE2	TYPE2	TYPE2



¹ One Gigabyte (1GB) means $10^9 = 1,000,000,000$ bytes and One Terabyte (1TB) means $10^{12} = 1,000,000,000,000$ bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of $1GB = 2^{30} = 1,073,741,824$ bytes and $1TB = 2^{40} = 1,099,511,627,776$ bytes, and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system and other factors.

² 2.5-inch and 3.5-inch mean the form factor of HDDs. They do not indicate drive's physical size.

³ Toshiba Storage & Electronic Devices Solutions Company defines "RoHS-Compatible" products as products that either (i) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) and of 0.01% by weight in Homogeneous Materials for cadmium; or (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive (Directive 2011/65/EC of the European Parliament and of the Council of 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment). "Homogeneous Material" means a material of uniform composition that cannot be mechanically disjointed (meaning separated, in principle, by mechanical actions such as unscrewing, cutting, crushing, grinding and/or abrasive processes) into different materials. Examples of "Homogeneous Materials" would be individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.

⁴ Number of surveillance cameras support capability is defined by performance simulation with High Definition cameras at 10Mbit/s rate. Actual results may vary based on various factors, including the types of cameras installed, the system's hardware and software capabilities, and the video compression technology used, as well as system variables such as resolution, frames per second, and other settings. Compatibility may vary depending on user's hardware configuration and operating system. "High Definition" is calculated assuming Full HD 1080p, 30fps, transfer rate of 10Mbps/stream.

⁵ As for "Drive Bays Supported", please contact your Solutions Provider because the compatibility with the host device will vary based on the system.

⁶ Annual Workload Rating: HDDs keep track of various drive usage such as power on hours, lifetime writes and lifetime reads from the host computer. With this data we calculate an Annualized Workload Rate, under 40 deg. C ambient environments, $\text{Annualized Workload Rate} = (\text{Lifetime Writes} + \text{Lifetime Reads}) * (8760 / \text{Lifetime Power On Hours})$ in case Power On time is 8760h or longer. Otherwise (i.e. Power On time is shorter than 8760h), $\text{Annualized Workload Rate} = (\text{Lifetime Writes} + \text{Lifetime Reads})$ Each drive is designed to perform up to the Annualized Workload Rate stated, after which the drive may be expected to decline. The Annualized Workload Rate in no way alters the warranty policy for such drive. Workload is defined as the amount of data written, read or verified by commands from host system.

⁷ Standard limited warranty applies. The warranty brochure can be viewed online at <http://storage.toshiba.com/consumer-hdd/warranty-info>.

⁸ Location of bottom mounting hole is different from product. For more information, please see the following page. <https://toshiba.semicon-storage.com/us/design-support/faq/storage-holes.html>

Product prices, specifications, configurations, colors, components, features, and availability are subject to change without notice.

Compatibility may vary depending on user's hardware configuration and operating system.

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