

WD Ultrastar DC HC520 HUH721212ALE604 - hard drive - 12 TB - SATA 6Gb/s(0F30146)

WD Ultrastar DC HC520 HUH721212ALE604 - Hard drive - 12 TB - internal - 3.5" - SATA 6Gb/s - 7200 rpm - buffer: 256 MB



Laying the foundation for a worry-free data center, Western Digital delivers the capacity to conquer the data explosion with the Ultrastar DC HC500 series of hard drives. The DC HC500 series is designed for public and private cloud environments.

Key Selling Points

- Reliable, field-proven design
- Ready for capacity-optimized workloads
- Lower power consumption

Product Features

HelioSeal Technology helps solve challenges facing next generation data centers

Data centers are facing growing pressures. Data volume is expanding, operating costs are rising, yet budgets remain flat. Datacenter ready features like a second generation dual-stage actuator - the Western Digital Micro Actuator - enhance head-positioning accuracy to deliver better performance, data integrity and overall drive reliability, especially in multi-drive environments where operational vibration is present.

Data durability and data security to support compliance and privacy requirements

As drive capacity grows beyond single-digit TBs, object storage systems with erasure coding provide better data durability compared to RAID systems, given its tolerance for simultaneous error conditions. Compliance and privacy requirements drive the need for increased data security. The Ultrastar DC HC520 offers security and encryption options to help protect data from unauthorized use, including TCG SAS models.

Main Specifications

Product Description	WD Ultrastar DC HC520 HUH721212ALE604 - hard drive - 12 TB - SATA 6Gb/s
Type	Hard drive - internal
Capacity	12 TB
Form Factor	3.5"
Interface	SATA 6Gb/s
Data Transfer Rate	600 MBps
Buffer Size	256 MB
Spindle Speed	7200 rpm
Features	Dual Stage Actuator (DSA), Secure Erase function, HelioSeal, 24x7 continuous operation, Enhanced Rotational Vibration Safeguard (RVS), advanced format 512e, Dynamic fly height technology
Dimensions (WxDxH)	101.6 mm x 147 mm x 26.1 mm
Weight	660 g
Manufacturer Warranty	5-year warranty

Extended Specification

General

Device Type	Hard drive - internal
Capacity	12 TB
Form Factor	3.5"
Interface	SATA 6Gb/s
Buffer Size	256 MB
Bytes per Sector	512
Features	Dual Stage Actuator (DSA), Secure Erase function, HelioSeal, 24x7 continuous operation, Enhanced Rotational Vibration Safeguard (RVS), advanced format 512e, Dynamic fly height technology
Width	101.6 mm
Depth	147 mm
Height	26.1 mm
Weight	660 g

Manufacturer Warranty

Service & Support	Limited warranty - 5 years
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Miscellaneous

Compliant Standards	RoHS 2011/65/EU
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Power

Power Consumption	6.9 Watt (active) 5 Watt (idle)
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Environmental Parameters

Min Operating Temperature	5 °C
Max Operating Temperature	60 °C
Min Storage Temperature	-40 °C
Max Storage Temperature	70 °C
Shock Tolerance (operating)	70 g @ 2 ms half-sine wave
Shock Tolerance (non-operating)	300 g @ 2 ms half-sine wave
Vibration Tolerance (operating)	0.67 g @ 5-500 Hz
Vibration Tolerance (non-operating)	1.04 g @ 2-200 Hz

Performance

Drive Transfer Rate	600 MBps (external)
Internal Data Rate	255 MBps
Seek Time	8 ms (average) / 8.6 ms (max)
Average Latency	4.16 ms
Spindle Speed	7200 rpm

Reliability

MTBF	2,500,000 hours
24x7 Operation	Yes
Non-Recoverable Errors	1 per 10^15
Load / Unload Cycles	600,000

Expansion & Connectivity

Interfaces	1 x SATA 6 Gb/s
Compatible Bay	3.5"

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