

600 GB 10,000 rpm 6Gbps SAS 2.5-inch Hybrid Hard Disk Drives

Hybrid drives accelerate hard disk performance through integrated NAND flash



As enterprise computing evolves, data center managers must provide faster data storage while juggling tight IT budgets and managing highly complex system environments. Today's servers utilize advanced microprocessors capable of many millions of complex computations every second, but they can only go as fast as their storage allows. The faster you can deliver digital data to your server's microprocessor, the faster your system will perform.

Solid-state technology has been the solution to many performance issues. The 600 GB 10,000 rpm 6Gbps SAS 2.5-inch Hybrid integrates non-volatile cache memory into the core architecture of a high-performance, high-capacity 10,000 rpm HDD. By utilizing NAND flash for the caching of data with high locality, the hybrid drive can achieve as much as a 100 percent performance improvement over a comparable conventional HDD while leveraging the capacity of spinning media.

Embedded intelligent algorithms power this new platform—keeping track of frequently used data and storing it in the fast, solid-state portion of the device. The results are impressive, delivering overall system responsiveness that's more than double that of a traditional 10,000 rpm hard drive.

We recognize that innovative solutions can help optimize technology investments. The 600 GB 10,000 rpm 6Gbps SAS 2.5-inch Hybrid is the latest advancement in hard disk drive technology—producing the best combination of performance, capacity and affordability to meet the demanding needs of today's complex enterprise server environment.

Why System x

System x is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. System x also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle.



Specifications

Part number and description	00AD102 - IBM 600 GB 10,000 rpm 6Gbps SAS 2.5-inch G2HS Hybrid 00AD107 - IBM 600 GB 10,000 rpm 6Gbps SAS 2.5-inch G2SS Hybrid
Form factor/height	2.5-inch/0.583 inch or 14.8 mm
Storage type	Hybrid
Interface	6Gbps Serial Attached SCSI (SAS)
Tray type	G2HS and G2SS
NAND flash type	eMLC
Spindle speed	10,000 rpm
HDD capacity	600 GB
Bytes per sector	512, 520, 524, 528
SAS transfer rates supported	6.0/3.0/1.5
NAND size – Hybrid read cache	16 GB
DRAM cache data buffer	128 MB
Hybrid NVC backed write cache	8 MB
Average latency	2.9 ms
Sustained transfer rate, outer to inner diameter	204 to 125 MBps
I/O data transfer rate, max	600 MBps
Limited warranty	1 year CRU & On-site 9x5 Next Business Day (NBD)

For more information

To learn more about the 600 GB 10,000 rpm 6Gbps SAS 2.5-inch Hybrid, please contact your Lenovo representative or Lenovo Business Partner, or visit the following website:

ibm.com/systems/x/options/storage/hddstorage/

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IBM x86 products are now products of Lenovo in the U.S. and other countries. Learn more at ibm.com/lenovo-acquisition

