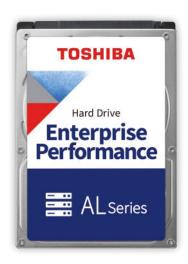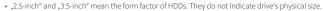# TOSHIBA

Enterprise Hard Drives
AL Series
Enterprise Performance HDD

Use for:
Mission Critical Enterprise Server and Storage Systems | Business Database Server with High Workloads | Big Data Analytics | Virtualized Storage Systems

- Low Latency
- Unlimited workload
- 24/7 operation
- Flexibility in block size
- Persistent Write Cache Technology
- 5-year warranty
- Optional: Self-Encryption, Instant Erase

Model Number	Basic Specifications								Performance		Reliability				
	Form-factor	Fill Gas & Recording	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options	Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
HIGHEST PERFORMANCE HDD (15K RPM) FOR SERVERS – BUSINESS DATABASE, ONLINE TRANSACTION, HIGH PERFORMANCE COMPUTING															
AL14SXB30EN			300												
AL14SXB60EN			600	5xxn	15,000	128	SAS 12 Gbit/s	SIE/SED	272	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EN			900												
AL14SXB30EE			300												
AL14SXB60EE	2.5"	Air CMR	600	5xxe	15,000	128	SAS 12 Gbit/s	SIE/SED	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EE			900												
AL14SXB30EA			300												
AL14SXB60EA			600	4Kn	15,000	128	SAS 12 Gbit/s	SIE/SED	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EA			900												
PERFORMANCE HDD (10K RPM) FOR SERVERS AND STORAGE – MISSION CRITICAL BUSINESS DATABASE AND HIGH PERFORMANCE STORAGES															
AL15SEB030N			300						236	6.5					
AL15SEB060N			600	512n	10,500	128	SAS 12 Gbit/s	SIE/SED		7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB090N			900						245	7.0					
AL15SEB120N			1,200							8.1					
AL15SEB06EQ			600							6.5					
AL15SEB09EQ			900							7.0					
AL15SEB12EQ	2.5"	Air	1,200	512e	10,500	128	SAS 12 Gbit/s	SIE/SED	273	7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB18EQ			1,800							8.1					
AL15SEB24EQ			2,400							8.7					
AL15SEB06EP			600							6.5					
AL15SEB09EP			900							7.0					
AL15SEB12EP			1,200	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED	273	7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB18EP			1,800							8.1					
AL15SEB24EP			2,400							8.7					

- „2.5-inch" and „3.5-inch" mean the form factor of HDDs. They do not indicate drive's physical size.
- IOPS: Input Output Per Second (or the number of I/O operations per second)
- A = Advanced Format Sector (4k), E = 512byte Sector Emulated, N = 512byte Sector Native, P = 4Kn Q=512e
- MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF. Read and write speed may vary depending on the host device, read and write conditions and file size.
- SIE = Sanitize Instant Erase, SED = Self Encrypting Drives, FIPS = Federal Information Processing Standard
- Images displayed of the Internal Hard Drives are for illustration purposes only and do not show the actual products. The images are merely intended to help illustrate the function of the products.

Further information
toshiba-storage.com