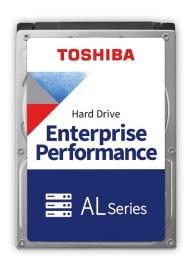
## **TOSHIBA**



## **Enterprise Hard Drives**

## **AL Series**

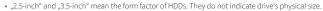
Enterprise Performance HDD

## 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 PERFORMAN	ICE HDD (1	.5K RPM) FOR	SERVERS – E	BUSINESS DAT	ABASE, ONLINE TE	RANSACTION, F	HIGH PERFORMA	NCE COMPUTIN	G						
AL14SXB30EN	2.5"	Air CMR	300		15,000	128	SAS 12 Gbit/s	SIE/SED	272	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL14SXB60EN			600	5xxn											
AL14SXB90EN			900												
AL14SXB30EE			300		15,000	128	SAS 12 Gbit/s	SIE/SED	304	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL14SXB60EE			600	5xxe											
AL14SXB90EE			900				·								
AL14SXB30EA			300		15,000	128	SAS 12 Gbit/s	SIE/SED	304	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL14SXB60EA			600	4Kn											
AL14SXB90EA			900												
PERFORMANCE HDD (	10K RPM) I	FOR SERVERS		GE – MISSION	CRITICAL BUSINES	SS DATABASE A	ND HIGH PERFO	RMANCE STORA							
AL15SEB030N	2.5"	Air	300		10,500	128	SAS 12 Gbit/s	SIE/SED	236	6.5	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL15SEB060N			600	512n					245	7.0					
AL15SEB090N			900							7.0					
AL15SEB120N			1,200							8.1					
AL15SEB06EQ			600		10,500	128	SAS 12 Gbit/s	SIE/SED	273	6.5	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL15SEB09EQ			900							7.0					
AL15SEB12EQ			1,200	512e						7.0					
AL15SEB18EQ			1,800							8.1					
AL15SEB24EQ			2,400							8.7					
AL15SEB06EP			600		10,500	128	SAS 12 Gbit/s	SIE/SED	273	6.5	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
AL15SEB09EP AL15SEB12EP			900	4Kn						7.0					
AL15SEB1ZEP AL15SEB18EP			1,200	480						7.0					
ALIDSEBISEP			1,000							8.7					



<sup>•</sup> IOPS: Input Output Per Second (or the number of I/O operations per second)

<sup>•</sup> 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.

<sup>•</sup> SIE = Sanitize Instant Erase, SED = Self Encrypting Drives, FIPS = Federal Information Processing Standard

<sup>•</sup> 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.