Maximum performance and reliability for mission critical servers and storage

With their very low latency and robust reliability, the AL series of Enterprise Performance 2.5-inch HDDs is designed for demanding mission critical / Tier 1 server systems and hybrid systems pairing SSD and HDD for performance-oriented workloads. In addition to capacity and sector length, you can also choose from the variety of products in this lineup based on access latency and performance.

Enterprise Performance
Hard Disk Drive

AL Series

Mission critical performance
The AL series is a good fit for servers and hybrid storage systems built to deliver high availability and 24/365 continuous operation. The line-up provides a choice of rotational speeds, both 15,000 rpm and 10,500 rpm.

A rich lineup
10,500rpm models offer a range of capacities from 600GB to 2400GB, including 512n models up to 1200GB for legacy applications. 15,000rpm models offer a range of capacities up to 900GB, including 512n models.

Toshiba's Persistent Write Cache technology
Helps to enhances write performance between the host and the drive, and also helps to prevents data loss in the event of a sudden loss of power (512e models).
Application

- Tier 1 Mission-Critical Servers and RAID Storage
- Servers hosting transaction-based applications
- Rack-Optimized Data Centers
- Tiered Mission-Critical storage and Hybrid Arrays
- High-performance computing
- Mission-Critical Server Boot and Logging

Specifications

<table>
<thead>
<tr>
<th>Formatted Capacity</th>
<th>2.4TB</th>
<th>1.8TB</th>
<th>1.2TB</th>
<th>900GB</th>
<th>600GB</th>
<th>300GB</th>
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<tbody>
<tr>
<td>Model Number</td>
<td></td>
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<td>-</td>
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<tr>
<td></td>
<td>512e</td>
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<td>512n</td>
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<td>AL14SX8B90EN</td>
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<tr>
<td>10,500 rpm</td>
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<td>AL1S5EB120N</td>
<td>AL1S5EB090N</td>
<td>AL1S5EB060N</td>
</tr>
</tbody>
</table>

Specification

- **Form Factor**: 2.5-inch (Height: 15.00 mm, Length: 100.45 mm, Width: 70.10 mm)
- **Maximum Weight**: 230 g
- **Interface**: SAS: 12.0 Gbit/s
- **Buffer Size**: 128 MiB
- **MTTF**: 2,000,000 hours

Environmental Requirements

- **Temperature**
  - Operating: 5 °C to 55 °C
- **Vibration**
  - Operating: 9.8 m/s² (1 G) (20 to 300 Hz) or less
  - Non-Operating: 49 m/s² (5 G) (20 to 300 Hz) or less
- **Shock**
  - Non-Operating: 3,920 m/s² (400 G) (2 ms duration)
- **Acoustic**
  - Idle: 15,000 rpm: 33 dB, 10,500 rpm: 31 dB

*Toshiba Electronic Devices & Storage Corporation*

https://toshiba.semicon-storage.com

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