

Osmium Drive™ 3.5" SAS SSD vs. Nearline HDDs

Direct Savings

- Space savings
- Power reduction
- Higher utilization rates
- Refresh postponement
- Cooling savings
- Inline deduplication and compression enablement

Indirect Benefits

- Increased scalability
- Performance gains
- Reduced CPU costs
- Superior reliability
- Reduced administration costs
- Chassis standardization



Space Savings

At 50 TB, it enables 5:1 space reduction versus 10 TB nearline HDDs, reducing overall rack needs by 80%.

Power Reduction

At 15 watts typical for 50 TB, it offers 70% lower power draw per TB than nearline HDDs.

Higher Utilization Rates

Faster IO means utilization rates can be improved to 90%+ versus typical 60% with HDDs, an increase of 50%.

Refresh Postponement

With 2 million hour MTBF, it offers 50% longer endurance than typical nearline HDDs.

Cooling Savings

The 50 TB SSD requires 65% fewer BTUs of cooling per TB than nearline HDDs, reducing HVAC costs.

Inline Deduplication and Compression Enablement

At a 3:1 data reduction ratio, it multiplies the benefits above by another 3x. HDDs cannot do the same.

Increased Scalability

With 100x+ more I/Os, it dramatically increases the revenue-generating potential of your IT infrastructure.

Performance Gains

With 98% lower latency than nearline HDDs, time-to-data is slashed, improving the user experience.

Reduced CPU Costs

The improvement in storage performance reduces IO wait cycles, improving CPU efficiency by 50% or more.

Superior Reliability

No moving parts means fewer drive swaps and fewer RAID rebuilds that negatively impact your infrastructure.

Reduced Administration Costs

SSD performance simplifies array configuration and accelerates setup, reducing costly administration time.

Chassis Standardization

Conforming to the 3.5" standard, it helps customers avoid having to buy a 2.5" chassis that other SSDs require.

Contact information

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