Mixed Media Scalability – Performance and Capacity Expansion Choice

The Tintri IntelliFlash N-Series intelligent infrastructure is a fourth-generation storage solution that delivers an exceptional user experience through automation, analytic insights, and a variety of time-saving management features to drive your most valuable workloads in today’s data centers.

As your business needs grow, Tintri provides choice in scaling your N-Series NVMe™ capacity. You can select from high-performance NVMe SSDs or cost-efficient SAS SSDs expansion shelves, or both, to deliver the optimum capacity that meets your needs while maintaining your desired performance level.

Each expansion shelf delivers the same proven innovation in flash management, data persistence, and data management as the N-Series controller so you will maintain unprecedented levels of consolidation, simplicity, and economics. Exceptional performance at low latency, flexibility at scale, and comprehensive data services make IntelliFlash N-Series expansion the choice for growing enterprise workloads. Experience Different!

Features

- Synchronous Replication - Provides continuous business continuity and seamless data mobility between any IntelliFlash all-flash or hybrid systems located in different data centers
- Flexibility in Capacity Expansion – NVMe- and SAS-based flash expansion to optimize performance and value.
- Cloud-Based Intelligent Analytics – Visibility across all IntelliFlash systems, with insights that keep infrastructure operating at peak efficiency and availability
- Unified Storage - Concurrent native block (FC, iSCSI) and file (NFSv3.x/v4.x, SMB1/2/3) access
- Comprehensive Data Services – Inline deduplication and compression, snapshots, read/write clones, and thin provisioning
- Live Dataset Migration – Seamless live migration of iSCSI/FC LUNs across IntelliFlash systems
- IntelliFlash S3 Cloud Connector – Hybrid cloud capabilities, enabling connectivity to public cloud or any S3-compatible object storage
- VMware® Support – vCenter® plug-in and integration with VMware SRM and VAAI NAS
- Microsoft Hyper-V Support – PowerShell Toolkit plus SMB3 Enhancements for Hyper-V

Benefits

- Maximizes returns on investments by providing continuous availability to business-critical workloads
- Full Featured File Services – Enterprise grade NAS functionality for both virtualized and non-virtualized environments
- Simplified Management and Analytics – Common GUI management for all IntelliFlash systems
- High Capacity and Scalability – Over 5PB‡ of effective expansion capacity in a compact 14RU footprint
- Affordable Disaster Recovery – Replicate between NVMe-flash, all-flash, and hybrid systems
- Multiple Mixed Workloads – Support bare metal applications along with certified configurations for Oracle, Microsoft, VMware and many other environments.
- Hybrid Cloud – Back up local snapshots to the cloud or quickly migrate volumes for bring-up on any S3-compliant object storage.
- Reduced OPEX – With a platform that is energy efficient, offers inline data reduction, and is easy to maintain, so you can save on power, cooling, and labor.
## Tintri IntelliFlash Expansion Shelves

<table>
<thead>
<tr>
<th>Models</th>
<th>HE-50</th>
<th>FE-25</th>
<th>FE-50</th>
<th>FE-100</th>
<th>FE-200</th>
<th>FE-400</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shelf Type</strong></td>
<td>Hybrid Flash</td>
<td></td>
<td>All-Flash</td>
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<tr>
<td><strong>Storage Capacity</strong></td>
<td></td>
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</tr>
<tr>
<td>All-Flash Raw Capacity (TB)(^1)</td>
<td>5.6</td>
<td>23</td>
<td>46</td>
<td>46 - 92</td>
<td>92 - 184</td>
<td>184 - 368</td>
</tr>
<tr>
<td>HDD Raw Capacity (TB)(^1)</td>
<td>52</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>All-Flash Effective Capacity (TB)(^2)</td>
<td>N/A</td>
<td>544</td>
<td>1090</td>
<td>Up to 2180</td>
<td>Up to 4360</td>
<td>Up to 8718</td>
</tr>
</tbody>
</table>

### Physical Specifications

<table>
<thead>
<tr>
<th>Expansion Shelf Form Factor (EIA Rack Units)</th>
<th>3RU</th>
<th>2RU</th>
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<tbody>
<tr>
<td><strong>Physical Dimensions</strong> (HxWxD)</td>
<td>5.25” x 17.2” x 25.25” (134mm x 437mm x 642mm)</td>
<td>3.5” x 17.2” x 25.25” (89mm x 437mm x 642mm)</td>
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<tr>
<td>Typical Power Usage (Watt)</td>
<td>196W (668BTU/hr)</td>
<td>218W (744BTU/hr)</td>
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<tr>
<td>Weight</td>
<td>105lbs (47.6kg)</td>
<td>80lbs (36.3kg) (with 24 drives)</td>
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### Environmental Specifications

- Operating temperature: 10°C to 35°C (50°F to 95°F)
- Non-operating temperature: -40°C to 70°C (-40°F to 158°F)
- Operating relative humidity: 20% to 90% (non-condensing)
- Non-operating relative humidity: 5% to 95% (non-condensing)

\(^1\)Values indicated are RAW capacity. One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drives, the operating system and other factors.

\(^2\)Effective capacity assumes capacity after dual-parity, data protection, and metadata overhead, and includes the benefit of data reduction with inline deduplication and compression. Data Reduction is calculated based on 80% efficiency. This efficiency can differ based on workload and or expansion shelf configuration. Where a range is present, the values are Min - Max.

Min All Flash RAW capacity based on half populated expansion shelf: FE-100, FE-200, FE-400.