# Tintri IntelliFlash™
*T-Series Storage Systems*

**IntelliFlash**

## All-Flash and Hybrid Flash in One Storage System

Flash storage has the power to fundamentally transform how you do business. But most solutions force you to compromise on performance, price, or features. The Tintri IntelliFlash T-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.

Combining the performance of flash with the economics of disk and multi-protocol flexibility at scale, IntelliFlash T-Series systems offer a wide product portfolio – all built on a common operating environment. Analytics for IntelliFlash enables you to quickly and easily monitor the health, performance, and usage of all your IntelliFlash systems while comprehensive data services and management capabilities deliver new levels of efficiency, simplicity, and cost savings.

With IntelliFlash T-Series you can hyper-consolidate multiple mixed workloads onto a single all-flash or hybrid storage systems. These systems easily fit into any data center - whether you require the high performance of flash, the high capacity of disk or a combination of both. You get simple, intelligent infrastructure that delivers an exceptional user experience. 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
- Cloud-Based Intelligent Analytics – Visibility across all IntelliFlash systems, with insights that keep infrastructure operating at peak efficiency and availability
- 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
- Sustained Performance – High throughput at low latency for mixed workloads
- Comprehensive Data Services – Inline deduplication and compression, snapshots, read/write clones, and thin provisioning
- Affordable Disaster Recovery – Replicate between NVMe-flash, SAS-flash, and hybrid systems
- 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
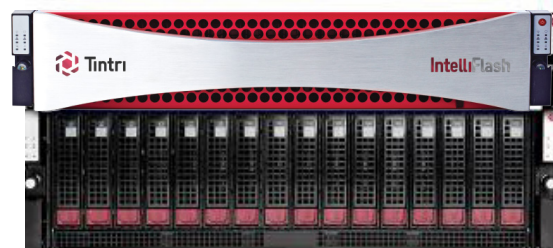
## Benefits

- 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 across all IntelliFlash systems
- High Capacity and Scalability – Over 5PB‡ of effective all-flash or hybrid expansion capacity in a compact 10RU footprint
- Unified Storage – Native concurrent block (FC, iSCSI) and file (NFS, SMB3) access
- 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 the public cloud or any S3-compliant object storage.
- Performance You Want – IntelliFlash T-Series confidently handles critical workloads.
- Capacity You Need – Without compromising on performance
- 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

## T-Series All-Flash: The Workhorse for Your Applications



- Delivers consistent sub-millisecond latency for any workload and I/O block size with SAS-based flash
- Application-aware, simple, and flexible storage management bolstered by analytics and environmentwide insight
- Multi-parity RAID protection options for maximum resilience

## T-Series Hybrid Flash: Bringing Performance to More Workloads



- Favor flash for more performance in your optimized flash-to-disk ratio
- Application-aware and easy-to-manage with the shared IntelliFlash Operating Environment
- Native data reduction boosts economics for secondary workloads

**Tintri**
*Intelligent Infrastructure*

# Tintri IntelliFlash Hybrid and All-Flash T-Series Storage Systems

| Model | Hybrid Storage System | All-Flash Storage System | |
|---|---|---|---|
| | T4200 | T4700 | T4800 |
| **Storage Capacity** | | | |
| All-Flash RAW Capacity (TB)† | N/A | 23 | 46 |
| All-Flash Effective Capacity (TB)‡ | N/A | 83 | 166 |
| Flash as % of Total Usable Capacity | 20% | 100% | |
| Hybrid Flash RAW Capacity (TB)† | 5.8 to 40.4 | N/A | |
| HDD RAW Capacity (TB)† | 52 to 364 | N/A | |
| Hybrid Effective Capacity (TB)‡ | 156 to 1387 | N/A | |
| **Storage Controllers** | Dual Controller (active/active), fully redundant architecture | | |
| Ethernet Data I/O Ports | 24x 10GbE or 12x 40GbE | | |
| Fibre Channel Data I/O Ports | 12x 8G or 16x 16G FC | | |
| Network Admin Ports | 2x 1GbE, 1x 1GbE (IPMI) | | |
| **Physical Specifications** | | | |
| Controller Form Factor | 8RU | 2RU | |
| Physical Dimensions (HxWxD) | 14" x 17.2" x 25.25" (357mm x 437mm x 642mm) | 3.5" x 17.2" x 25.25" (89mm x 437mm x 642mm) | |
| Weight | 292lbs (132kg) | 80lbs (36.29kg) | |
| Typical Power Usage (Watt) | 887W (3026BTU/hr) | 495W (1690BTU/hr) | |
| Environmental Specifications | Operating temperature: 10°C to 25°C (50°F to 77°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) | | |
| **Software Services** | | | |
| Block and File Protocols | SAN Protocols (iSCSI, Fibre Channel), NAS Protocols (NFS, SMB) | | |
| Capabilities | IntelliFlash Operating Environment: Real-time deduplication and compression, snapshots and clones, space efficient thin provisioning, synchronous replication, full featured file services, S3 Cloud Connector, Live Dataset Migration, data-at-rest and data-in-flight encryption | | |
| Management | IntelliFlash web UI, configuration wizard, Analytics for IntelliFlash, VMware plug-in for vCenter and support for vCenter Linked Mode, RBAC, SRA and VAAI NAS; Microsoft SCVMM/SMI-S, IP-KVM, SNMP, PowerShell Toolkit | | |
| Hardware Availability | Redundant storage controllers, fans, power supplies, and network ports; removable SSDs and HDDs, SAS expansion | | |
| **Warranty** | | | |
| Basic | 24×7 support via email and phone, next business day hardware replacement for defective parts and software updates for the first 90 days. | | |
| Optional | Standard and Premier Service. Visit tintri.com/intelliflash | | |

† 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

‡ 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.

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