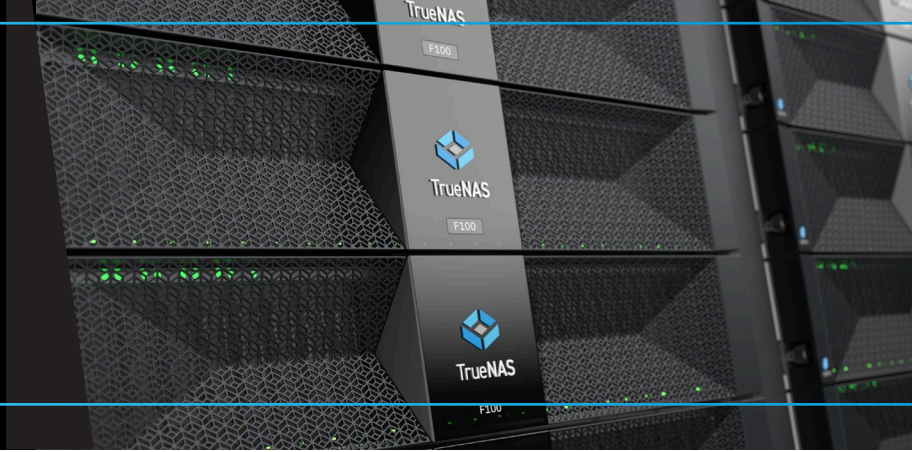


# TrueNAS F-Series

## High Performance NVMe Storage

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## Features



### Extreme Performance & High Availability

Utilizes NVMe flash technology, ZFS, and up to six 100 Gb/s network ports per controller for ultra-fast data movement. Dual Node High Availability (HA) ensures uninterrupted operations with automatic failover.



### Advanced Data Protection

Self-healing ZFS detects and repairs in-flight data corruption, prevents bit rot, and safeguards data integrity at all times.



### Intelligent Storage Efficiency

Offers built-in compression, snapshots, clones, and thin provisioning. TrueNAS Adaptive Compression (TAC) optimizes performance while maximizing capacity without wasting system resources.



### Built-in Snapshots & Replication

Includes configurable retention, restoration, and replication without extra licensing fees, protecting data from ransomware, accidental deletion, and ensuring efficient disaster recovery.

## Unmatched Performance

The TrueNAS F-Series is engineered for maximum productivity, combining industry-leading speed, density, reliability, and scalability. Designed for high-performance deployments, it seamlessly integrates open-source economics with enterprise-grade hardware and support. Whether handling media workflows, containerized applications, or other demanding workloads, the F-Series delivers the power and flexibility needed for modern IT environments.

With NVMe flash performance, a compact 2U form factor, and a unified storage approach, the TrueNAS F-Series offers high-speed data access and simplified management through an intuitive web-based interface. These systems ensure seamless scalability and enterprise-grade reliability with award winning support, making them an ideal solution for organizations that require both performance and ease of use.

## Benefits



### Unmatched Reliability

Enterprise-grade hardware and redundancy features minimize downtime, making it ideal for mission-critical workloads.



### Cost-Effective Scalability

Delivers enterprise-level storage optimization, including snapshots and replication, without additional licensing fees.



### Flexible Backup & Disaster Recovery

Data can be securely replicated across local, remote, or cloud environments for seamless business continuity.

The TrueNAS F60 and F100 models deliver all-flash, dual-controller storage with up to 10 PB capacity and support for multiple high-speed network interfaces—up to 6× 100 GbE. Built with energy efficient, high-performance NVMe Flash, the F-Series supports demanding workloads like media production, virtualization, and high-speed file sharing. Intelligent Storage Optimization enhances efficiency with data reduction ratios exceeding 2.5x, while High Availability (HA) architecture ensures uninterrupted storage services.



# F-Series Platform

## Available Storage Media

- Enterprise Class NVMe Gen4 SSD (Dual Port)
  - Capacities from 7.6 TB to 60 TB
  - SED, FIPS 140-3 options

## Power Management

- Dual redundant, hot-swappable, high-efficiency (80+ Platinum) power supplies
- High-line 200-240V 50/60Hz input power
- IPMI Remote power on/off

## Disk Management

- Global hot spares
- Hot-swappable drives
- Corrupted block scan
- Drive activity/alert LEDs
- Local and remote (KMIP) key management
- Enclosure monitoring and alerts

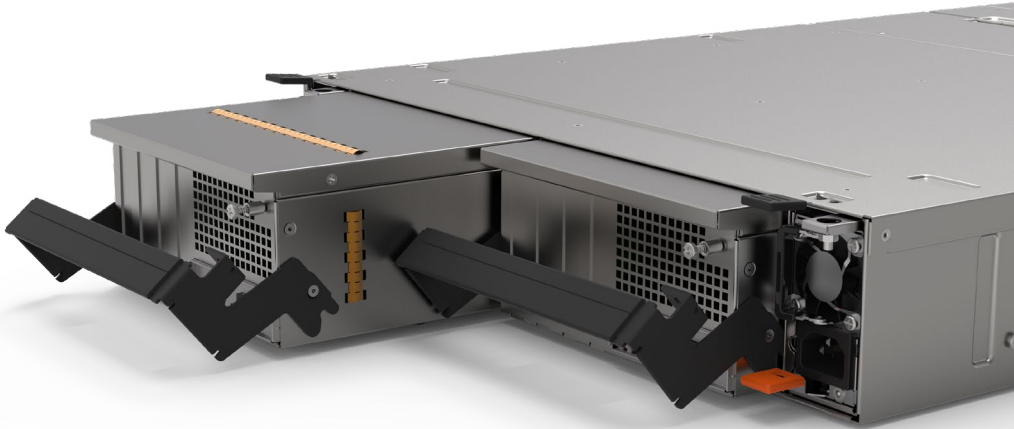
## Physical Parameters

- 2U: 24× 2.5" NVMe SSD drive bays (front-loading, hot swap)
- Dimensions (l x w x h):
  - 27" x 19" x 3.5" | 686 × 483 × 89 mm
- Rackmount rails 27" - 37"
- Operating temperature: 5°C to 35°C
- Non-operating temperature: 5°C to -35°C
- Humidity: 5% to 80% non-condensing
- Empty weight: 43 lbs | 19.5 kg
- Fully-Loaded weight: 56.2 lbs | 25.4kg
- RoHS 6/6 compliant, CE, FCC Class A, UL, TÜV, BSMI, KC, VCC

# TrueNAS F-Series Models

	TrueNAS F60	TrueNAS F100
All-Flash Storage	Yes	
Dual Controller (HA)	Optional	
Controller	32 Cores / 64 Threads	48 Cores / 96 Threads
Read Cache (Max)	512 GB DRAM read cache	
Write Cache	Distributed Write Log	
Networking	Up to 4× 10/25/40/100 GbE (optical)	Up to 4× 10/25/40/100 GbE (optical) or Up to 8× 100GbE (optical)
Management IO	1x IPMI Out-of-Band Management Port, 1x WebUI Port	1x IPMI Out-of-Band Management Port, 1x WebUI Port
Max Capacity	4 PB	10 PB
Max Effective Capacity*	8 PB	20 PB
Max NVMe Expansion Shelves	2	6
Max Power Draw (HA)	996 Watts	1152 Watts
Typical Power Draw (HA)	600 Watts	800 Watts
Max Heat Output	3398 BTU/h	3931 BTU/h

\*Maximum effective capacity assumes typical data reduction through compression and deduplication.



# TrueNAS Enterprise Specifications

File-Based Protocols	Block-Based Protocols	Object Protocols	Directory Services	
<ul style="list-style-type: none"><li>• SMB v1/2/3</li><li>• NFSv3, v4</li></ul>	<ul style="list-style-type: none"><li>• AFP, FTP, WebDAV</li></ul>	<ul style="list-style-type: none"><li>• iSCSI</li><li>• OpenStack Cinder</li></ul>	<ul style="list-style-type: none"><li>• S3-compliant using MinIO</li></ul>	<ul style="list-style-type: none"><li>• Active Directory (AD)</li><li>• FreeIPA</li><li>• Kerberos</li><li>• LDAP, NIS</li></ul>
Networking	Virtualization	File System	High Availability	Data Mobility
<ul style="list-style-type: none"><li>• Port Trunking/NIC Teaming</li><li>• IEEE 802.3ad link aggregation</li><li>• IEEE 802.1q VLAN support</li></ul>	<ul style="list-style-type: none"><li>• Supports VMware and VAAI, ESXi snapshot integration, VM Warn/Stun, vCenter</li><li>• Supports KVM, Citrix XenServer, Microsoft Hyper-V, and other common hypervisors</li><li>• Microsoft VSS, ODX, and CSV</li><li>• Integrated Apps</li></ul>	<ul style="list-style-type: none"><li>• OpenZFS Self-healing file system</li><li>• Immutable Snapshots and clones</li><li>• Thin and thick provisioning</li><li>• Online capacity expansion</li><li>• Virtual block devices</li><li>• In-line compression and deduplication</li><li>• ZFS Stripe, Mirror, RAID-Z1/Z2/Z3, dRAID</li></ul>	<ul style="list-style-type: none"><li>• Available dual controller support</li><li>• Automated rapid failover without data loss</li><li>• Virtual IP address migration</li><li>• Online software updates</li></ul>	<ul style="list-style-type: none"><li>• Asynchronous file replication using SyncThing</li><li>• Data ingest and export to and from any SMB/NFS server</li></ul>
Backup	Supported Public Cloud Providers	TrueSecure Security	Remote Administration	
<ul style="list-style-type: none"><li>• Snapshot-based OpenZFS local/remote replication</li><li>• Rsync and cloudsync</li><li>• Truecloud backup to Storj</li><li>• Supports Asigra, Acronis, Veeam, Nakivo, NetBackup, and more</li></ul>	<ul style="list-style-type: none"><li>• iX-Storj</li><li>• Amazon S3</li><li>• BackBlaze B2 Cloud</li><li>• Google Cloud</li><li>• Microsoft Azure</li></ul>	<ul style="list-style-type: none"><li>• FIPS 140 for Data-at-rest and data-in-flight</li><li>• Restricted Admins (Security, Storage, Monitor)</li><li>• Auditing of SMB &amp; Admin events (e.g. logins)</li><li>• Encrypted Drives and Datasets, KMIP</li><li>• NIST 800-209, GPOS STIG</li></ul>	<ul style="list-style-type: none"><li>• Alert notifications via email, AWS-SNS, Hipchat, InfluxDB, Slack, Mattermost, OpsGenie, PagerDuty, and VictorOps</li><li>• SSH, Syslog, Netdata</li><li>• REST APIs and SNMP</li><li>• Automated backup of system configuration and state</li><li>• Graphical reporting, enclosure management</li><li>• Signed updates with the ability to rollback</li><li>• Out-of-Band Management</li><li>• TrueCommand Management</li></ul>	

