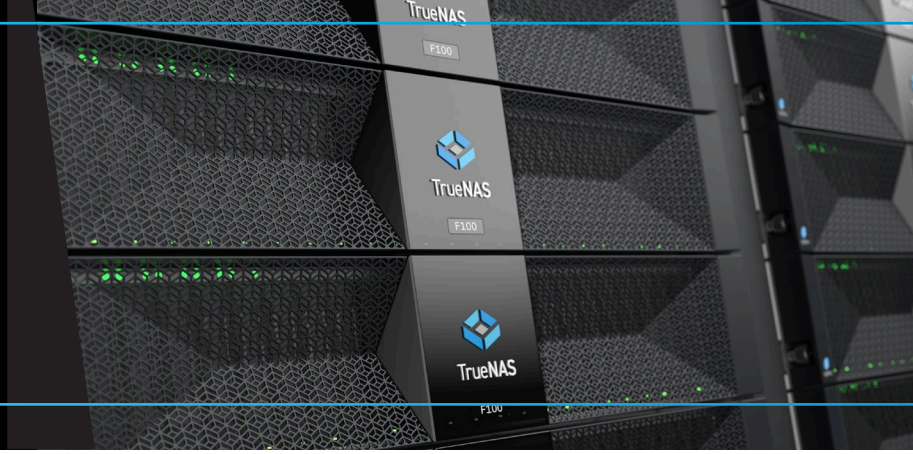
TrueNAS F-Series

High Performance NVMe Storage

www.truenas.com



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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.

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.

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.

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.

TrueNAS
OPEN ENTERPRISE STORAGE

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

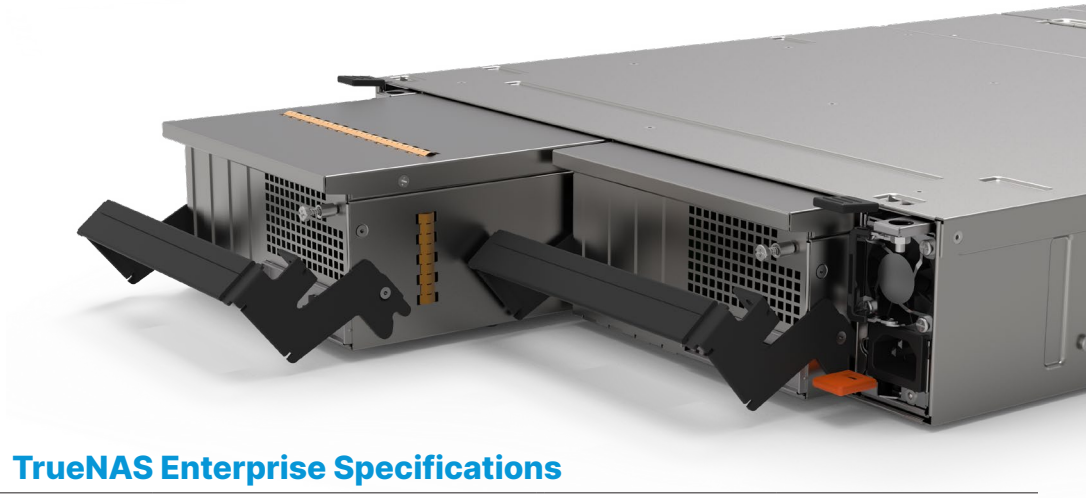
Physical Parameters

- 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 45°C
- Humidity: 20% 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
Fiber Channel	4 × 32 Gb	4 × 32 Gb
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

- SMB v1/2/3
- NFSv3, v4
- AFP, FTP, WebDAV

Block-Based Protocols

- iSCSI
- OpenStack Cinder

Object Protocols

- S3-compliant using MinIO

Directory Services

- Active Directory (AD)
- FreeIPA
- Kerberos
- LDAP, NIS

Networking

- Port Trunking/NIC Teaming
- IEEE 802.3ad link aggregation
- IEEE 802.1q VLAN support

Virtualization

- Supports VMware and VAAI, ESXi snapshot integration, VM Warn/Stun, vCenter
- Supports KVM, Citrix XenServer, Microsoft Hyper-V, and other common hypervisors
- Microsoft VSS, ODX, and CSV
- Integrated Apps

File System

- OpenZFS Self-healing file system
- Immutable Snapshots and clones
- Thin and thick provisioning
- Online capacity expansion
- Virtual block devices
- In-line compression and deduplication
- ZFS Stripe, Mirror, RAID-Z1/Z2/Z3, dRAID

High Availability

- Available dual controller support
- Automated rapid failover without data loss
- Virtual IP address migration
- Online software updates

Data Mobility

- Asynchronous file replication using Syncthing
- Data ingest and export to and from any SMB/NFS server

Backup

- Snapshot-based OpenZFS local/remote replication
- Rsync and cloudsync
- Truecloud backup to Storj
- Supports Asigra, Acronis, Veeam, Nakivo, NetBackup, and more

Supported Public Cloud Providers

- iX-Storj
- Amazon S3
- BackBlaze B2 Cloud
- Google Cloud
- Microsoft Azure

TrueSecure Security

- FIPS 140 for Data-at-rest and data-in-flight
- Restricted Admins (Security, Storage, Monitor)
- Auditing of SMB & Admin events (e.g. logins)
- Encrypted Drives and Datasets, KMIP
- NIST 800-209, GPOS STIG

Remote Administration

- Alert notifications via email, AWS-SNS, Hipchat, InfluxDB, Slack, Mattermost, OpsGenie, PagerDuty, and VictorOps
- SSH, Syslog, Netdata
- REST APIs and SNMP
- Automated backup of system configuration and state
- Graphical reporting, enclosure management
- Signed updates with the ability to rollback
- Out-of-Band Management
- TrueCommand Management