



Data Sheet

TrueNAS Appliances

Enterprise Performance Storage Appliances



Mini Series
Branch Office/Quiet



R-Series
Cost Optimized



R60
AI & HPC Optimized



H-Series
Power Optimized



M-Series
Capacity Optimized



F-Series
Performance Optimized

	Mini Series Branch Office/Quiet	R-Series Cost Optimized	R60 AI & HPC Optimized	H-Series Power Optimized	M-Series Capacity Optimized	F-Series Performance Optimized
High Availability	No	No	No	Optional	Optional	Optional
Target Use Case	Small Business, Edge, Home	Multi Purpose	Business Analytics, AI/ML, HPC	Edge, Small and Medium Enterprise	Mission Critical Enterprise	Media Production, Analytics, Virtualization
Form Factor	Mini Tower or 2U Rackmount	1U - 12U Rackmount	1U - 9U Rackmount	2U - 6U Rackmount	4U - 52U Rackmount	2U - 14U Rackmount
Chassis Depth	Mini R: 21", 531 mm	26-39", 660-990 mm	27", 710mm	27", 686 mm	27", 686 mm	27", 686 mm
Storage Architecture	Hybrid HDD / SSD or All-Flash	Hybrid HDD / SSD or All-Flash	All-NVMe Flash	Hybrid HDD / SSD or All-NVMe Flash	Hybrid HDD / SSD or All-Flash	All-NVMe Flash
Storage	SATA	SATA / SAS	NVMe, Optional SAS	SAS, NVMe	SAS	NVMe, Optional SAS
Write Cache	SATA SSD	SATA SSD, NVMe Option	Distributed Write Log	NVMe	SAS, NVMe, NVDIMM	Distributed Write Log
Read Cache Size	480 GB	12.8 TB NVMe	192 - 384 GB DDR5	Up to 12.8 TB NVMe	Up to 12.8 TB NVMe	512 GB DRAM
Cores per Controller	4 - 8	6 - 16	16 - 32	4 - 20	8 - 32	32 - 48
vCPU per Controller	4 - 8	12 - 32	32 - 64	8 - 40	8 - 64	64 - 96
RAM per Controller	16 - 64 GB	32 - 192 GB	192 - 384 GB	64 - 256 GB	96 GB - 768 GB	512 GB
Expansion Shelves	0	2	Up to 4	1	Up to 12	Up to 6
Max Capacity	264 TB	Up to 5 PB	Up 7 PB	Up to 2.5 PB	Up to 30 PB	Up to 10 PB
Max Effective Capacity*	528 TB	Up to 10 PB	Up to 14 PB	Up to 5 PB	Up to 50 PB	Up to 20 PB
Bandwidth	1 to 20 Gbit/s	1 to 200 Gbit/s	100 - 800 Gbit/s	1 to 200 Gbit/s	1 to 200 Gbit/s	200 - 400 Gbit/s
Fibre Channel (option)	Not Available	4 × 16 Gbps	Not Available	2 × 32 Gbps	Up to 4 × 32 Gbps	Up to 4 × 32 Gbps
Enterprise File System	OpenZFS - File, Block, and Object Services - Open Source					
Data Management	Unlimited Snapshots, Pool checkpoints, Space-efficient Clones, Replication: Remote, Local, Auto-Resume to Linux ZFS					
Data Reduction	Thin/Thick Provisioning, In-line Adaptive Compression, Clones, Deduplication**, Trim					
Access Protocols	SMB 2/3, NFSv3/v4, rsync, SMB Multi-channel, NFSv4, iSCSI, Fibre Channel, VAAI, S3, Distributed Minio, Cloud Sync, HTTP / WebDAV, FTP					
Administration	IPMI, WebUI, REST API, SSH, SNMP, Syslog, LDAP, Kerberos, Active Directory, WebSockets API					

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

**Deduplication available on select hardware configurations.