

# RTS 1000 Storage Appliance



## Features

**High data throughput:** Over 2 GB/sec with InfiniBand or 10GB Ethernet networks and over 575 MB/sec with Gigabit Ethernet in a single, 8U high enclosure.

**High capacity:** Supports up to 40 TB per enclosure, and up to 192 TB in a standard rack.

**Superior usable capacity:** Up to 85% of raw capacity available for user data.

**Advanced power efficiency:** Leveraging 92% efficient custom power supplies lowers power and cooling requirements.

**Price / performance leadership:** Delivers excellent price / performance compared to other solutions in a fully configured, simplified, and tuned appliance.

**Expandable:** Easily add throughput or capacity by adding additional nodes without impacting the existing environment.

**Reliable:** Incorporates an integrated RAID controller with hot-swappable disk drives and redundant power supplies.

**Ease of use:** Fully configured and ready to go minimizes setup and deployment time. Includes complete lights out management and monitoring that easily integrates with SNMP-based tools.

## High throughput, high capacity, in an easy-to-deploy Lustre-based appliance

Terascale's RTS 1000 Storage Appliance is revolutionizing performance driven computing environments. The RTS 1000 is the world's first storage solution to deliver both high throughput and high capacity over either Ethernet or InfiniBand networks so applications are not limited by their ability to read, write and store data rapidly during job run time. Leveraging Lustre™, the leading open source clustered file system, the RTS 1000 delivers excellent price performance versus competitive storage solutions in a fully configured and tuned appliance.

Designed to deliver maximum throughput, the RTS 1000 enables applications to run at peak efficiency. It can deliver over 2GB/sec from a single enclosure and up to 10 GB/sec from a full rack. Designed to plug directly into the compute client network environment, the RTS 1000 has an optimized data path from the client network through to the disks within the storage device.

Optimized to provide the maximum storage available, the RTS 1000 delivers over 85% of its raw storage capacity as usable capacity for end user data. Combined with its 92% efficient power supplies, the RTS 1000 provides extraordinary levels of efficiency and effectiveness for a storage appliance.

Simplification of deployment and ongoing management is a key aspect of the RTS 1000. It is delivered as an appliance with all software installed and tuned to deliver performance. With its built-in management system, it is easy to add capacity and throughput or to fine tune key aspects of the environment. The RTS 1000 is designed to be operated and managed by system administrators without extensive storage experience.

Terascale leverages Lustre because it is open source, high performance clustered storage software developed for applications needing very high throughput, scalability, and capacity. It offers high levels of reliability, scalability, and performance, having been deployed in the largest compute installations in the world. At Terascale, we have optimized our architecture and tuned Lustre for the specific capabilities of the RTS 1000, so the appliance delivers a simple, easy to use and expand solution that can grow as your needs grow.



## Terascale RTS 1000 Storage Appliance Specifications

**Operating System** Lustre version 1.6 based

**Networking Options** 1 Gigabit Ethernet standard  
10 Gigabit Ethernet available  
InfiniBand available

### Metadata Server:

**Capacity** Up to 6 TB of data on 6 spindles  
SAS drives or other capacities available

**RAID** Hardware controller configured as RAID 10

### Object Store Servers:

**Capacity** Eight 1 TB SATA drives standard  
Other capacities available

**RAID** Hardware controller configured as RAID 5

### Environmental:

**Power Supplies** 92% efficient, zero crossing, 400W @ 208-240V  
per server unit. Available as either single or redundant.

**Operating** 50° F to 95° F (10° C to 35° C),  
5% to 95% relative humidity, non-condensing

**Non-Operating** -40° F to 149° F (-40° C to 65° C),  
5% to 95% relative humidity, non-condensing

**Dimensions** D:30.25" (76.8 cm), W:Standard 19"  
(48.3 cm), H:8U 14" (35.6 cm)

**Weight** 275 to 375 lbs (125 to 136.5 kg)  
depending on configuration

### Service and Support:

One year service and support included with access  
to all software updates.



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