DataDirect NETWORKS

DATASHEET

SFA10K-E™ EXAScaler™ Appliance

The Easy to Deploy, All-In-One High Performance Parallel File System

THE CHALLENGE

- Traditional Storage Area Network (SAN) and Network Attached Storage (NAS) technologies cannot provide the massive throughput required by High Performance Computing (HPC) Applications.
- These limitations create significant challenges for organizations as they push the boundaries of next generation HPC applications.
- The HPC industry needs a high throughput and capacity parallel file system storage appliance that makes scalability simple.

THE SOLUTION

- Leveraging 12 years of leadership in HPC storage, the SFA10K-E EXAScaler Appliance from DataDirect Networks (DDN) is designed to remove bottlenecks and accelerate applications.
- It brings appliance simplicity to HPC file system solutions with world leading energy and density efficiency

THE EXASCALER SFA10K-E MAKES SCALABILITY SIMPLE

- Open Source fully POSIX compliant parallel file system
- Reduces management overhead by eliminating complex storage gateways and networking
- Start small and scale non-disruptively by adding SFA10K-E systems as building blocks.
- High Availability and Reliability with no single point of failure.
- Scales to 10PB+ to meet any capacity requirements
- World leading performance – up to 200GB/sec of streaming and 100,000s of file operations per second
- Arrives at your door as a fully configured appliance – simplifies setup and deployment

Diagonal Scalability

High Throughput and High Capacity in easy to deploy Parallel Storage Appliances

EXAScaler Clients

Embedded parallel file system reduces latency and accelerates application performance

SFA10K-E ExaScaler Appliance
High Performance and Cluster Computing

File Storage Attributes

Client Access	Native Linux Clients
Client Connectivity	16 x 10GbE Host Ports or 16 x 40Gb IB Host Ports Support for InfiniBand RDMA I/O Client Side Load Balancing and Failover Many to one and one to many client to gateway access Up to 20,000 Native Clients
Scalability	Up to 400 TB usable capacity per SFA10K-E Appliance Aggregate multiple Appliances in one File System up to 10's of Petabytes
Performance	6GB/s per SFA10K-E System (read & write) Aggregated Performance up to 200GB/sec 100,000s of File Operations/sec
Scale-Out Configuration	Add additional SFA10K-E systems to the network for automatic storage and performance scaling
Data Protection	Fully Fault Tolerant, Highly Available system with zero single points of failure Data: RAID 6 (8+2) Metadata: Active/Passive Server ATAssure Data Integrity
Data Management	Online File System Growth Object-Based File Locking Monitoring and Event notification system

Learn more at ddn.com/products/sfa10000e

DataDirect NETWORKS

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