SFA7990X

DDN Storage Fusion Architecture® appliances are purpose-built to deliver scalable performance and capacity to address your toughest data management challenges.

The SFA7990XTM Hybrid Flash Storage Platform is designed to grow with the needs of your accelerating business requirements and provides flexibility without compromise. Select the optimal blend of price, performance and capacity, and the SFA7990X delivers, meeting the broadest range of workloads. The SFA7990X addresses the most intensive Artificial Intelligence and Deep Learning application demands right through to supporting long-term retention of large volumes of infrequently accessed data.

▶ SCALE OUT FOR PERFORMANCE, SCALE UP FOR CAPACITY

SFA7990X is the ultimate platform for the consolidation of your storage needs. Designed in the flash era to fully exploit the performance of your SSDs with predictable low-latency performance, the SFA7990X delivers industry-leading innovation and data intensive capabilities for both block and file storage at scale. Start as small as a few terabytes and grow seamlessly to petabyte capacity to service the most demanding mixed-workload challenges.

▶ SIMPLE, EFFICIENT, INTEGRATED

The SFA7990XE appliance delivers high performance parallel file systems in an integrated package. DDN's SFA7990X EXAScaler® and GRIDScaler® provide a modular approach to building the most capable platforms for parallel file storage systems. Built, deployed and supported by the experts in data intensive workloads, these appliances are the gold standard for eliminating bottlenecks and maximizing application performance.

SCALE-UP, SCALE-OUT HYBRID FLASH STORAGE APPLIANCE

COMMON USE CASES

The flexibility and capabilities of the SFA7990 lends itself to a wide variety of applications:

- Artificial Intelligence
- Analytics
- Deep Learning
- Surveillance
- Genomic Research

▶ TECHNICAL SPECIFICATIONS

SYSTEM FEATURES

Active/Active Storage Controllers

DeClustered RAID (DCR) supports erasure coding schemas: RAID 6
8+2, 4+2; RAID 5 8+1, 4+1; RAID 1 1+1

Sequential read performance up to 24GB/s;
Sequential write performance up to 20GB/s

Up to 1.5M IOPs per appliance

CPUS PER APPLIANCE

2	4

CONTROLLER HOST PORTS PER APPLIANCE

4 x EDR/HDR100* InfiniBand or 40/100 GbE (Embedded Only)	8 x FC16

DRIVE SUPPORT

90 x 3.5" drive slots support Enterprise-grade SSDs and HDDs

SUPPORTED EXPANSION ENCLOSURES

SS9012 (one, two, or four enclosures)

Description: 4U, 90 drive enclosure Supported Drive Types: NL SAS or SSD

STANDARD SOFTWARE FEATURES

LUN mapping and masking, intelligent write striping, read QoS, port zoning detection, data integrity check/correction, interface options (SSH to CLI, web-based GUI, Python API), state change messages (via e-mail, SNMP trap and syslog).

PHYSICAL AND ENVIRONMENTAL ATTRIBUTES

Dimensions

Height: 4RU rack mount 6.90" (175.3 mm), Width: 17.64" rack (448 mm)
Depth: 45.25" (1150 mm) front vertical rack rail to back of CMA
Weights: 140 lbs/63 kg (empty); 295 lbs/134 kg (max)

Power

Power Supply: 1,300W (empty)
Input Voltage: 180 - 264 VAC
Input Frequency: 47 - 63 Hz
Maximum Input Current: 8.5 A RMS
Peak Inrush Current: 30A
AC Hold-Over Time: 8 msec

Temperature, Humidity, and Altitude

Temperature Range: 5°C to 35°C (operating); -40°C to 60°C (non-operating)
Relative Humidity: 8% to 85% (non-condensing); 8% to 95% (non-condensing)
Altitude: ASHRAE class A1 standard, 5 - 35°C to 3117 ft (950 m); 39,370 ft (12,000 m) non-operating

RELIABILITY

Battery-backed write-back cache
2 + 2 Redundant hot-swappable power modules
4 + 1 Redundant hot-swappable cooling modules
Dual-redundant controllers
Temperature monitoring
Uses SES (SCSI Enclosure Services) protocol to manage and monitor the head enclosure and all expansion enclosures

SAFETY

Agency Certifications Ul, cUl, CE, FCC

ABOUT DDN

DataDirect Networks (DDN) is the world's leading big data storage supplier to data-intensive, global organizations. DDN has designed, developed, deployed, and optimized systems, software, and solutions that enable enterprises, service providers, research facilities, and government agencies to generate more value and to accelerate time to insight from their data and information, on premise and in the cloud.