Highlights

High-Availability & Scalability

- Enterprise Data Protection and Storage Scalability with software-defined Storage
- SAN on each node and/or Scale-Out NAS with more nodes as business growth demands more storage without sacrificing data protection

Enterprise & Storage Features

- SAN (iSCSI) & Scale-Out NAS (CIFS/SMB, NFS protocol)
- Single Namespace Distributed File System over multi-nodes
- Patented Advanced Storage Virtualization
- Volume Access Control & Dynamic Volume Management
- Advanced Reporting Management
- Snapshots (Delta-based and Mountable NAS - Read-Only, SAN – Read/Write)
- Quota (Volume and Directory)
- Asynchronous Replication (One-to-Many & Many-to-One)
- Multi-Site/Multi-Appliance Replication
- Real-Time Synchronous Mirroring of Volumes and Nodes (Campus Mirroring)
- Hardware-Enabled Block Level Encryption (AES 256) In-Transit or At-Rest
- Tiered Storage Support
- Data Deduplication with High Performance Index Engine (SAN)
- Thin Provisioning with Space Reclamation (SAN)
- SSD Caching (SAN)

Power & Cooling

- Redundant Hot-Swappable
- 80 PLUS Platinum
- 94% Efficiency

SAN & Scale-Out NAS Appliance

Enterprise-Class businesses have been using and relying on SAN (Storage Area Network) due to its performance and flexibility for sharing storage among many clients. Unified with Scale-Out NAS capability in storage infrastructure, SAN and Scale-Out NAS combination creates unprecedented scalability, flexibility, dependability, reliability and protection needed to endure business continuity and growth.

Unmatched Business Continuity

Data availability is paramount for Business Continuity. The localized node in RAID SAN and cluster of nodes in Scale- Out NAS both deliver the certainty that data are protected, with guaranteed availability, and assure that storage capacity can grow with ease to serve any critical applications.

Software-defined Enterprise Storage

Storage-defined software is the key element to providing advanced storage functionality such as storage provisioning, storage network (SAN and/or Scale-Out NAS), Data protection, Encryption, Disaster Recovery, Management and other capabilities that are designed and built for Enterprise level deployment.

Unified Storage Solution

Cost and time needed to maintain the network of storage becomes overwhelming as Enterprise storage requirements increase. A unified storage infrastructure of SAN and Scale-Out NAS allows painless scalability, high availability and enhanced storage utilization.

Storage Simplified

Single Namespace Distributed File System does not require users to be cognizant of the data location. Coupled with storage virtualization, this makes a seamless extension to applications. Graphical management software with Advanced Report management, Dynamic Volume management, Performance and Utilization Reporting simplifies storage management for its optimal potential.

CITRIX ready   openstack   Microsoft Hyper-V   vmware READY STORAGE

DATA SHEET · Unified Storage Appliance

Models & Scaling

Platform & Base Models	2U12	3U16	4U24
	SSO-1204P (12 HDD) SSO-1024P (10 HDD + 2 SSD)	SSO-1604P (16 HDD) SSO-1424P (14 HDD + 2 SSD)	SSO-2404P (24 HDD) SSO-2224P (22 HDD+ 2 SSD)

Drives Selection	**HDD:** 2TB, 4TB, 6TB, 8TB, 10TB 7200RPM 12G SAS **SSD:** 960GB 12Gb SAS (SSO-1024P / 1424P / 2224P Models Only)
Expansion	Scale-Out: Expand Across an Unlimited of Nodes (NAS) Scale-Up per Node: Promise VTrak J5000 Series Expansion Storage subsystem

Operational/Data Services

Enterprise Features	• SAN with RAID support • Scale-Out NAS – Single Namespace • Port Teaming and Failover • Metadata-less to scale capacity and performance • Active Directory integration ready • SNMP Traps/UPS/Nagios/Call Home • Advanced Reporting Management • Data Encryption – In-transit or At-Rest • Data Deduplication (SAN) (optional memory and license) • SSD Caching (SAN)
Advanced Storage Features	• Advanced Storage Virtualization • Volume/Storage Expansion • Snapshots (delta-based) • Mountable Read-Only Snapshot Volumes • Dynamic Volume Management • Asynchronous Replication (One-to-Many & Many-to-One) • Thin Provisioning (SAN) • Tiered Storage (SAN) • Real-Time Synchronous Mirroring (Campus Mirroring)

Host Connectivity

Protocol	SAN: iSCSI NAS: CIFS/SMB and NFS
Connectivity	2 ports 10G Ethernet RJ45 or 2 ports 10G Ethernet SFP+
Management Ports	1 port RJ45 1Gb Dedicated for IPMI

Processing Engine

Processor	Dual Sockets 8-Cores Skylake SP-4110 2.0GHz Silver Xeon Processor (Default)
Memory	32GB per Node (Default) - Optional 64GB, 128GB, 256GB or 512GB (specify when ordering) Optional Data Deduplication feature requires 1GB additional memory per 1TB storage capacity

Data Protection & Layout

Protection	SAN: RAID levels 0,1, 5, 6, 10, 50, 60 with Cache Battery backup NAS: Erasure Coding or Replica		
NAS Layout Options	• Distributed • Striped	• Distributed Mirrored • Distributed Striped	• Mirrored • Dispersed Volumes

Ecosystem

Compatibility	VMware, Hyper-V, Xen & OpenStack

Power/Environmental

Power Supply	920W Redundant Hot-Swappable Voltage:1 00-240 Vac 50-60Hz Current: +12V 75A Max	1000W Redundant Hot-Swappable Voltage: 100-240 Vac 50-60Hz Current: +12V 83A Max	1200W Redundant Hot-Swappable Voltage: 100-240 Vac 50-60Hz Current: +12V 100A Max
Power Efficiency	80-Plus Platinum - 94% efficiency (920W), 96% efficiency (1000W/1200W)		
Temperature Range	Operational: 5° to 35°C, Non-Operational: -40° to 70°C		
Relative Humidity	Operational: 8% to 90% (Non-Condensing), Non-Operational: 5% to 95% (Non-Condensing)		
Regulatory/Safety	**EMC Class A**: CE, FCC, VCCI, BSMI, RCM **Safety**: CB, UL/cUL **Environmental**: RoHS2		

Warranty & Support

Warranty	1-year full system limited warranty including Advanced Parts Replacement Optional Extended Warranty available up to 5-Years with Depot, NBD On-Site, & 4-Hour On-Site
Support	24/7 e-mail and phone support