

# AegisSAN LX Series

**Great Performance & Efficiency for Enterprise** 









# **Highlights**

- Two Interface Options: 10GbE/1GbE iSCSI & 16Gb/8Gb Fibre Channel
- Outstanding Performance of IOPS & Throughput
- Dual Active Controllers for High Availability
- Fully Redundant & Hot-swappable Designs
- Great Scalability of Up To 256 Disk Drives
- Hardware RAID for Enhanced Reliability
- Multiple Virtualization Technologies Supported
- QiSOE Qsan Hardware iSCSI Offload Engine
- QThin to Enable Dynamic Capacity Allocation
- 80 Plus Gold PSU for Better Energy Efficiency

## **High Availability**

AegisSAN LX series is the cutting-edge SAN series comprising 10GbE/1GbE iSCSI SAN and 16Gb/8Gb Fibre Channel SAN. The storage system of this family features dual active controllers and fully redundant and hot-swappable designs to eliminate any single point of failure to highly ensure the availability for non-stop services. The high availability system offers multiple paths and load balancing features such as MPIO, MC/S, Trunking, and LACP to better ensure the reliability. AegisSAN LX series provides top-notch hardware RAID to offer a robust storage environment for the running services.

### **Outstanding Performance**

AegisSAN LX has great expansion potential supporting up to 256 hard drives. With Qsan hardware iSCSI offload engine (QiSOE), superior hardware configurations and more proprietary designs, AegisSAN LX provides much higher IOPS and throughput than other storage systems in the same segment and delivers a leading price-performance ratio to allow enterprises and SMBs worldwide to enhance their IT infrastructure efficiency.

#### **Advanced Data Protection & Value Add-ons**

The series of disk array features comprehensive state-of-the-art data protection functions such as volume cloning, writeable snapshot (QSnap), remote replication (QReplica), n-way mirror, online disk roaming, instant volume restoration, etc, to further secure the stored data. AegisSAN LX series supports multiple virtualization technologies including VMware, Citrix and Hyper-V and. In addition, it has thin provisioning (QThin) function enabling more physical resources than actually available capacity to avoid allocated but unused capacity.

|   | Aegist P600Q P400Q  | SAN LX F600Q F630Q  |  |
|---|---|---|--|
| Hardware  | F000Q F400Q   | 100000 103000   |  |
| RAID Controller   | Dual-active or Single-upgradable controller   |   |  |
| Host Channels   | 2x 10GbE ports -  | 4x 8Gb Fibre Channel ports 2x 16Gb Fibre Channel ports  |  |
| (Per controller) Processor                              | 2x 1GbE ports 6x 1GbE ports   | 2x 1GbE ports 2x 1GbE ports Xeon  |  |
| Memory  | P600Q / P400Q / F600Q 2U 12-Bay / 3U-16Bay / 4U 24-Bay: 4GB, up to 16GB   |   |  |
| (Per Controller)  | P600Q / P400Q / F600Q 4U 60-Bay & F630Q: 8GB, up to 16GB  |   |  |
| Hard Drive Interface                                    | 6Gb/s SAS/SATA  |   |  |
| Expansion Enclosure                                     | J300Q 6Gb/s SAS series 2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 256   |   |  |
| Max. Number of Hard Drive                               | 4U 60-Bay: 240  |   |  |
| Form Factor   | 2U 12-Bay, 3U 16-Bay, 4U 24-Bay, 4U-60Bay   |   |  |
| Dimension   | 19" Rackmount   |   |  |
|   | 2U 12-Bay: 446.0mm x 499.6mm x 88.0mm (W x D x H)<br>3U 16-Bay: 446.0mm x 499.5mm x 130.0mm (W x D x H)                             |   |  |
|   | 4U 24-Bay: 446.0mm x 499.5mm x 176.0mm (W x D x H)  |   |  |
|   | 4U 60-Bay: 482.5mm x 923.0mm x 177.0mm (W x D x H)  |   |  |
| Weight  | 2U 12-Bay: 25Kg (Diskless)  |   |  |
|   | 3U 16-Bay: 33Kg (Diskless)  |   |  |
|   | 4U 24-Bay: 37Kg (Diskless) 4U 60-Bay: 45Kg (Diskless)   |   |  |
|   | 2U 12-Bay / 3U 16-Bay: 550W x 2   |   |  |
| Power Supply  | 4U 24-Bay: 550W x 3   |   |  |
|   | 4U 60-Bay: 700W x 3   |   |  |
| Number of Fans  | 2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 4<br>4U 60-Bay: 11   |   |  |
| Features Highlights                                     | 40 60   | -вау: 11  |  |
| reactives ringringries                                  | 0:505 (0 :505)   (0   1 : )   | fcQiSOE (Qsan FC hardware offload engine)   |  |
|   | QiSOE (Qsan iSCSI hardware offload engine)  Jumbo frame, Header/Data Digest, CHAP authentication, Virtual LAN,                      | Jumbo frame, Header/Data Digest,  |  |
| iscsi   | Up to 128 multiple nodes support,   | CHAP authentication, Virtual LAN,   |  |
|   | Up to 128 hosts support,  | Up to 32 multiple nodes support,  |  |
|   | Up to 1024 sessions per controller  | Up to 32 hosts support, Up to 128 sessions per controller   |  |
| FC  |   | FCP-2 & FCP-3 support   |  |
|   |   | Up to 126 multiple nodes support  |  |
|   |   | Up to 128 hosts support   |  |
|   | Up to 1024 sessions per controller  |   |  |
|   | RAID level 0,1,0+1,3,5,6,10,30,50, 60, JBOD, N-way mirror  Up to 4096 logical volumes   |   |  |
| RAID & Volume   | Up to 64 hard drives per RAID group   |   |  |
|   | One logic volume can be shared by as many as 16 hosts   |   |  |
|   | Global and dedicated hot spare  |   |  |
|   | Write-through or write-back cache policy Online volume expansion  |   |  |
|   | · ·   | Instant RAID volume availability  |  |
|   | Auto volume rebuilding  |   |  |
|   | On-line volume migration without system down time   |   |  |
| High Availability                                       | Dual-Active RAID controller  Cache mirroring through high bandwidth channels  |   |  |
|   | Flexible RAID group ownership management  |   |  |
|   | Management port seamless take-over  |   |  |
|   | Online firmware upgrade, no system down time (dual-controller mode only)  |   |  |
|   | Multi-path & load-balancing support (Microsoft MPIO, MC/S, Trunking, LACP)  |   |  |
| Advanced Data Protection                                | QReplica remote replication QSnap writable snapshot   |   |  |
|   | Volume cloning  |   |  |
|   | Microsoft Windows Volume Shadow Copy Services (VSS)   |   |  |
| Auvanceu Data Protection                                | Configurable N-way mirror   |   |  |
|   | Online disk roaming Instant volume restoration  |   |  |
|   |   | Hot pluggable battery backup module (BBM)   |  |
| Data Efficiency   | QThin   |   |  |
| Management  | QCentral Java-based centralized management software, LCM, Serial console, UPS console,  |   |  |
|   | HTTP Web UI, Secured Web (HTTPS), SSH telnet, LED indicators, iSNS, S.E.S.  |   |  |
| Networking<br>Notification                              | DHCP, Static IP, NTP, Trunking, LACP, VLAN, Jumbo frame  Email; SNMP trap; Browser pop-up windows; Syslog; Windows Messenger        |   |  |
|   | Windows Server 2003; Windows Server 2003 R2; Windows Server 2008; Windows Server 2008 R2; Windows Server 2012;                      |   |  |
| OS Support  | Red Hat Enterprise Linux 5/6; Solaris 10/11; Mac OS X   |   |  |
| Virtualization  | Vmware (VAAI); Citrix; Hyper-V  |   |  |
| Green   | 80 Plus Gold PSU for 2U 12-Bay/3U 16-Bay/4U 24-Bay & 80 Plus PSU for 4U 60-Bay Auto disk spin down                                  |   |  |
| Compliance & Warranty                                   | ן הענט עוטא טאווו עטשוו   |   |  |
| Safety & EMI  | RoHS, CE, FCC, BSMI, UL, cUL  |   |  |
| Warranty System: 3 years; Battery backup module: 1 year |   |   |  |
| Requirements  | 21142 Pay / 21146 Pay / 41124 Pay 00 26414 404 F4 F5011 11 270  | (Auto Suitsbing) FO/SOU   |  |
| AC Input  | 2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 90-264V ~ 10A-5A 550W with PFC 4U 24-Bay 60-Bay: 90-264V ~ 12A-6A 700W with PFC (Auto Switching) | U 24-Bay: 90-264V ~ 10A-5A 550W with PFC (Auto Switching), 50/60Hz<br>V ~ 12A-6A 700W with PFC (Auto Switching) |  |
| DC Outsuit  | 2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 3.3V-25A; 5V-32A; 12V-40A  |   |  |
| DC Output   | 4U 24-Bay 60-Bay: 5V-25A, 12V-45A   |   |  |
| Operating Temperature                                   | 2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 0 to 40°C  |   |  |
| . 5   | 4U 24-Bay 60-Bay: 10 to 40°C<br>2U 12-Bay / 3U 16-Bay / 4U 24-Bay: 5% to 95% non-condensing   |   |  |
| Relative Humidity                                       | Relative Humidity  4U 24-Bay 60-Bay: 10% to 85% non-condensing  |   |  |
|   | . 5 24 bay 66 bay. 10/8 to 65/8 flori condensing  |   |  |

