

# QuodCelior iStor™ iSCSI Target (RAID Storage) Model 4XP & 4XS



Model 4XS



## Introduction to iSCSI SAN

The Internet Small Computer System Interface, or iSCSI, is a widely adopted IP based protocol that provides all the benefits of block-based storage with SCSI compatibility. Combined with the distance, bandwidth, standardization and low cost of Ethernet, it also comes with a huge base of IT expertise from those already familiar with Ethernet and IP. The iSCSI protocol maps SCSI commands over a TCP/IP network and utilizes relatively inexpensive Gigabit Ethernet (GigE) network components to send blocks of data over an IP network. As a result, iSCSI provides IT staffs an alternative to existing solutions, such as Fibre Channel SANs, while combining the familiarity, bandwidth and low cost of Ethernet with the efficient, speedy, block-based data transfer performance of a SAN. IP for networked storage is inevitable. In fact, research firm International Data Corporation (IDC) predicts that iSCSI SAN switch ports will account for 17 percent of the total port shipments by 2005 as more and more organizations move away from expensive and complex Fibre Channel components. By implementing iSCSI, organizations have the opportunity to leverage existing network infrastructure investments while reaping the benefits of future proliferation of IP based network storage.

## Introducing StorageConnections.Net QuodCelior iStor

StorageConnections.Net is a storage provider leading the iSCSI SAN revolution. StorageConnections.Net offers an intelligent iSCSI SAN platform that radically reduces the complexity and cost of enterprise level, networked storage solutions. Leveraging the cost and performance advantages of Ethernet, StorageConnections.Net's architecture revolutionizes storage by enabling a new generation of open, high performance, easily scalable networked storage solutions. The StorageConnections.Net QuodCelior iStor iSCSI Storage Sub-System is a low-cost, flexible, reliable, block-level network storage solution that assimilates the fabric of Ethernet networks directly into the storage system platform, enabling unprecedented scalability, availability and manageability. StorageConnections.Net's QuodCelior iStor Storage Sub-System is the disk array, or iSCSI target, in the iSCSI SAN. Organizations utilizing StorageConnections.Net's iSCSI, network-based technology will migrate from Fibre Channel components to inexpensive, off-the-shelf, industry standard GigE network components. StorageConnections.Net is vendor-neutral and operates simply in any open, standards based network environment. Consequently, the interfaces between the host and the QuodCelior iStor Storage Sub-System can be from any standards-based vendor, since StorageConnections.Net can interoperate with a variety of GigE host Initiators and network-switches. In addition, since the QuodCelior iStor Storage Sub-System is an iSCSI, networked-based disk array, it is readily available across large networks and can be dynamically scaled in capacity and performance. Organizations can set up storage volumes/disks from 128Mbytes to as many terabytes of space that are available. There are no restrictions on the size of the volumes/disks. Moreover, any number of individual available hosts can initiate these volumes. IT administrators can easily assign volumes to a single host, they can be re-deployed, or they can be shared in a clustered environment.

Combining the strengths of networking and SCSI to build an affordable and reliable Storage Area Network (IP-SAN).

The QuodCelior iStor maps SCSI commands over a TCP/IP network and utilizes relatively inexpensive Gigabit Ethernet (GigE) network components to send blocks of data over an IP network. Supported by software and hardware heavyweights such as Microsoft, IBM, Cisco, and Intel, the QuodCelior iStor is poised to bring SAN technology to the next generation of simplicity, affordability and manageability.

## Product Highlights

- Supports Synchronous or Asynchronous Mirroring with automatic failover, Storage Virtualization/Pooling and Snapshots.
- Smart Teaming (Link Aggregation).
- Web based SAN Management Software (SiOS™ SAN Manager).
- Access Control List (ACL) for assigning host(s) read/write access with auto LUN Masking.
- Volume Manager for Virtual Target/iDisk creation and on-the-fly capacity resizing.
- RAID-0, 1 and or 5 creations by few mouse clicks. In Virtualization/Pooling mode RAID-10 and RAID-50 supported.
- Real-time e-mail alerts monitoring tools.
- iSCSI Console for (remote) Microsoft Initiators.
- Very low TCO (Total Cost of Ownership), builds on to the existing Ethernet infrastructure.
- Simplicity, because the QuodCelior iStor uses standard Ethernet, it doesn't suffer from some of the complexity and distance limitations that encumber other storage protocols.
- Up and running in minutes, the QuodCelior iStor is installed in less than 15 minutes.
- 3-year limited warranty.



Model 4XP

# StorageConnections.Net QuodCelor iStor™ iSCSI Target

## Technical Specifications

Protocols	iSCSI (RFC 3720)
	String Profile for iSCSI Names (RFC 3454)
	iSCSI Naming and Discovery (IETF draft version 10)
	iSNS (IETF draft version 19)
	IPSec (RFC 2401)
	IP (RFC 791)
	TCP (RFC 793)
	ICMP (RFC 792, 950)
	HTTP (RFC 1945)
	Other RFC's (iSCSI MIB/SNMP) 1191, 2018, 1323, 826, 1166, 1918, 768, 793,813, 821, 822, 823, 882, 883, 973, 974, 894, 826, 1062, 3168, 2616 and 1867)
SCSI-2, SCSI-3, SAM-2 and SAM-3	
Number of Host Initiators	Up to 192
Number iSCSI Targets	Up to 192
Multiple Sessions per iSCSI Target	Up to 192
Multiple Connections per Session	Up to 192
RAID Levels	0, 1, 10, 5, 50 and 5 + Hot-Spare (RAID-10 and RAID-50 only on model 4XS)
Data Transfer Rate	Up to 250Mbytes/sec in full-duplex mode
I/O connections	10/100Mbit (Model 4XP), 10/100/1000Mbit (Model 4XS) Ethernet Interface (SiOS SAN Manager/iSCSI) 10/100/1000Mbit Ethernet Interface (iSCSI)
Hot Swap Components	Four (4) PATA(Model 4XP)/SATA(Model 4XS) Hard Disk Drive bays, two (2) Power Supply Unit
Data Rebuild	Automatic Data Regeneration
Operating System Support	Microsoft, Novell, Linux, Mac OS X (contact SUN or IBM for Solaris or AIX)

## Chassis Specifications

Power Supply Capacity	2x 250W, redundant Hot Swap
Voltage	90 ~ 264VAC Full Range, auto-sensing
Frequency	47 ~ 63HZ
Input Current	6.0A ( RMS ) for 115VAC 3.0A ( RMS ) for 230VAC
Inrush Current	60.0A MAX. for 115VAC 80.0A MAX. for 230VAC
Operating Temperature	0 to 35°C (32 to 95°F)
Altitude	-492 to 3048 meters (-150 to 10,000 feet)
Relative Humidity	8% to 80% (non-condensing)
Weight	14.2 kg (31.75 lbs) (without drives)
Dimension	485mm (D) x 434.2mm (W) x 43.9mm (H)

## Regulatory Standards Compliance

Compliance	Products bear CE Marking indicating compliance with the (89/366/EEC, 73/23/EEC) directives, which includes the following safety and EMC standards.
Safety	UL 60950
EMC	FCC (CFR 47, part 15) Class A



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