

lomega[®] StorCenter™ px12-450r Network Storage Array

Description- The lomega[®] StorCenter™ px12-450r Network Storage Array is a powerful network storage solution offering the highest levels of performance and advanced data protection for small- to medium-sized businesses and the distributed enterprise. Powered by enterprise-class EMC[®] storage technology, the StorCenter px12-450r is ideal for production data stores, server virtualization, backup-to-disk target and video surveillance. The StorCenter px12-450r is available in diskless, partially populated or fully populated configurations from 4TB to 48TB in a single array. The px12-450r provides the superior performance and reliability that you need for your mission critical data and with built-in McAfee[®] VirusScan[®] Enterprise, your data is safe from viruses and other malicious threats. The StorCenter px12-450r includes many enterprise-class features, such as the EMC Atmos Cloud Connector, EMC Avamar data deduplication as well as device-to-device data replication to ensure data integrity at both the source and the replication target. Businesses will appreciate extremely high throughput with quad-Gigabit Ethernet connectivity and an Intel[®] Quad-Core Xeon[®] Processor plus link aggregation (port bonding), Server Class hard drives, and the option of solid state drives.

Features

High-Performance: Built around the Intel Xeon processor to support demanding workloads like virtualization, deduplication, database management and video surveillance.

- Intel Quad-Core 2.5GHz Ivy Bridge Xeon Processor for enhanced performance and energy efficiency
- 8GB DDR3 RAM
- Server Class Hard Drives with support for SSD drives
- Quad GbE NICs
- Support for 10GbE through optional 10GbE PCI card (sold separately)

Capacity: Starting at 4TB (4 x 1TB), with a maximum capacity of 48TB (12 x 4TB SATA HDDs)

- Server Class hard drives ensure higher reliability and performance. These drives are designed to better handle rotational vibration and continuous operation for mission critical applications.
- 4-drive disk packs enable expansion to 8- or 12-drive configurations
- 4-drive configurations are preconfigured RAID 5
- Fully-populated 12-drive configurations are preconfigured RAID 6

Expandability: Add storage capacity by simply adding drives in the unpopulated drive bays. Added drives can be brought into an existing Storage Pool or made into a new Storage Pool. Additionally, USB connected Hard Disk Drives can be attached and used as shares. The StorCenter px12 supports read and write on Fat32, NTFS, or ext2/ext3 formatted hard disks; read only of external HFS+ formatted drives.

RAID Support: RAID 1, 10, 5, 6, hot spare, automatic RAID rebuild and hot swap. RAID 0 and JBOD mode also available.



Scheduled Availability: September 2012

SSD Support: For I/O intensive applications, the px12-450r can be fitted with solid state drives to boost performance. SSD drives sold separately.

Redundant Power Supply: Ships with dual hot swappable power supplies for 1+1 redundancy

Storage Pools: Storage Pools group drives of like size and RAID protection together to simplify management. Optimize block storage performance with dedicated iSCSI storage pools.

Network File Protocols Supported: CIFS/SMB/Rally (Microsoft), NFS (Linux/UNIX), AFP/Bonjour (Apple), FTP, SFTP, TFTP, HTTP, HTTPS, WebDAV, Windows DFS, SNMP.

iSCSI Target provides block-level access for the most efficient storage utilization, especially for backup, database and email application performance. It can be used in parallel with file-level storage access via CIFS/NFS. Includes support for SCSI-3 persistent reservations.

Server-class Pedigree: Server class drives; compatible with VMware[®] vSphere 5.0, Citrix[®] XenServer™, Windows Server 2003, Windows Server 2008, and Windows Server 2008 R2.

Business-class Features: Windows Active Directory Trusted Domains, Microsoft Cluster Server and Hyper-V Live Migration support

Advanced Networking Capabilities:

- NIC bonding for failover and load balancing including 802.3ad link aggregation.
- Jumbo frame support for 4000 and 9000 byte payloads.
- VLAN Tagging capability to IEEE 802.1Q standard.
- iSCSI persistent reservations for clustered Microsoft environments.

Data Replication / Device to Device Data Copy Jobs:

- Easily copy files to and from attached USB drives or any network share – including lomega Personal Cloud locations – using the secure rsync or CIFS protocol.
- Define your Copy Job to copy/synchronize files to and from connected drives and/or any other shared storage on your network.
- Schedule jobs to run on a predetermined schedule.

Application Manager: Third party applications can be installed using the embedded application manager.

Data Organization and Access: Windows DFS organizes folders and files on a network, such that they appear to be all in one directory tree on a single lomega StorCenter system, even if the folders reside on many devices in many different



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locations. WebDAV (Web-based Distributed Authoring and Versioning) enables viewing, adding, or deleting files on a StorCenter from the web, via HTTP or HTTPS for added security.

Power Savings:

- Automatic hard drive spin-down assure the most efficient (minimal) power consumption.
- **Scheduled Power:** Automatically power on or turn off your Iomega StorCenter at a pre-selected time schedule.
- **Wake-On-LAN:** Powers on your Iomega StorCenter when a "magic-packet" wake-up signal is sent over the network. (Wake-On-LAN magic packet application not included)

Print Server: Intelligent print sharing capability for up to 3 USB printers connected to the StorCenter px12-450r.

Uninterruptible Power Supply (UPS) Support: Enables unattended system shutdown via the USB port without data loss in the case of power failure.

Simple Management: Fast, three step set up with an intuitive web-based interface. Web interface can be accessed locally or remotely.

Configuration Backup and Restore: allows you to back up and restore system configuration information. Backing up a configuration saves various system properties, including users, groups, device identification, and Share names and permissions.

System Status: Consolidated resource on space utilization, device information, and status. In addition, you can manage controls such as device restart from here.

SMART Hard Drive Monitor: Continually monitors and reports on the health of all drives in the Iomega StorCenter system.

Built-in McAfee VirusScan Enterprise: Iomega's StorCenter px Network Storage Family now includes virus scanning natively in the storage device. McAfee® VirusScan® Enterprise gives small businesses the ability to safely deploy network storage in places where previously there was the possibility of virus and/or malware vulnerability. McAfee VirusScan Enterprise for Linux permits on-access scanning of local file systems, mounted NFS and Samba/CIFS shares as well as a kernel-level scan cache to enhance performance. In addition, a secure browser interface with authentication and HTTPS (SSL) support is included to aid in administration. This delivers robust reporting features, including the ability to query the database by date range or individual field values, such as by virus name. Results of query can be exported to a CSV file and a diagnostic report can be generated for reporting a problem with the product.

Iomega® Personal Cloud: Iomega Personal Cloud is a web-based computing architecture that connects your Iomega StorCenter™ Network Storage Array devices to other individuals and/or devices via the Internet

Software Compatibility: Compatible with today's most common backup software, web browsers, media devices and computers.

Warranty: 3 year limited warranty (with product registration)

Solutions

Virtualization: Iomega StorCenter devices are compatible with Citrix® XenServer™ 5.6, Windows Server 2003, Windows Server 2008, and Windows Server 2008 R2, VMware® vSphere 5.0.

Video Surveillance: Protecting your business has never been easier than with StorCenter's built-in Video Surveillance Manager software.

- Featuring MindTree® SecureMind (1 camera license included) and SoleraTec™ Phoenix RSM VMS solutions
- Supports up to 48 Cameras per device
- Support for hundreds of camera models
- Record, store and manage surveillance video
- Secure access to the VMS applications through user ID/password control
- Simple installation and configuration via UPnP (Universal Plug and Play)
- Affordable expandability with 2TB minimum configuration and scalable up to 48TB in a single array
- Automatic email alerts and reporting

Powerful Backup Functionality

- **EMC Avamar** – With Avamar support on the px12-450r, users have the industry's first storage product that natively supports EMC's industry-leading Avamar sub-file deduplication.
- **Iomega Personal Cloud Backup:** Synchronize data between personal cloud member systems and the px12-450r.
- **Public Cloud Backup:** Use one of the integrated 3rd party cloud-based storage services such as Amazon S3 or MozyConnect™ to replicate data from your px12-450r to your public cloud account.
- **Cloud Disaster Recovery:** Utilize two px12-450r devices in different locations and the Iomega Personal Cloud function to create your own disaster recovery scheme.
- **EMC Atmos Cloud Connector:** The Atmos Connector software lets a user backup and share data using Iomega devices as the source and Atmos cloud technology as the target. Enabled by Iomega's integrated copyjob utility, customers can set up cloud folders and configure jobs to automatically copy data to any Atmos cloud.
- **Symantec Backup:** Iomega StorCenter network storage products are identified as compatible disk targets for Backup Exec software.
- **Apple® Time Machine™ Backup:** Compatible backup target

Total Data Protection:

- **Native Security Support** with robust username and password authorized access. Create additional users and secure their content with password protection.
- **Encrypted Volume:** Allows you to create an encrypted volume with an assigned password; thus securing the data on the encrypted volume.
- **User Quotas:** Easily manage capacity by setting maximum limits per user.
- **RSA® BSAFE®** technology protects installs and upgrades.
- **Data Protection Software:** Iomega's QuikProtect™ backup software is available for download.



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Specifications

- 2U form factor, supports up to twelve (12) 3.5 inch SATA Hard Disk Drives
- Quad Core 2.5GHz Intel Ivy Bridge Xeon
- 8GB DDR3 Memory
- Four (4) 10/100/1000 Mbps Ethernet ports (RJ 45 connector)
- Support for 10GbE through optional 10GbE PCI card (sold separately)
- 4-drive or 12-drive configurations include SATA-II Server Class hard disk drives

Reliability MTBF	1,200,000 hours
Latency/seek time	4.17 msec
Rotational Vibration Sensor	Yes
Spindle Speed	7200 rpm

- RAID 0, 1, 10, 5, 5, 6 and hot spare on a per-Storage Pool basis. (Note: all disks within a single RAID/storage pool should be the same capacity, speed, and manufacturer. Mixing different types of drives may result in unpredictable behavior)
- **Power Consumption**
 - Max: 200W
 - Min: 110W (drives spun down)
- **iSCSI:** Supports both file and block storage pools, 256 hosts maximum with the following parameters;
 - Block storage pools; 32 LUNS maximum per pool. 128 LUNs maximum per device.
 - File storage pools; 256 LUNs Maximum per pool. 256 LUNs maximum per device.
- Three USB 2.0 ports; One front, two rear
- LAN standards: IEEE 802.3, IEEE 802.3u
- AC Voltage 100-240 VAC, 50-60 Hz
- Acoustic noise – 56 dBA maximum
- Temperature, Humidity and Altitude

	Operating	Non-Operating
Ambient Temp	10° to 35° C	-40° to 60° C
Temp Gradient	12 ° C per hour	n/a
Humidity (non-condensing)	8% to 85% R.H.	5% to 95% R.H.
Max Wet Bulb	26.6°C	29.4 °C
Altitude	to 7500 ft.	to 40,000 ft.

- User interface localized for English, French, Italian, German, Spanish, Brazilian Portuguese, Russian, Traditional Chinese, Simplified Chinese, Korean, Japanese, Arabic, Hebrew, Turkish, Swedish, and Polish
- The iomega® StorCenter™ px12-450r Network Storage Array is compatible with the following:
 - VMware vSphere™ 5.0, iSCSI
 - Windows® Server 2003 and Windows Server 2008, and 2008 R2 including Microsoft® Cluster Server and Hyper-V Live Migration.
 - XenServer™, 5.6 (w/ MPIO), iSCSI & NFS

Weight and Dimensions

Unit Information	Master Carton Information
21.375 x 19.0 x 3.5 inches	36.46 x 25.43 x 13.19 inches
54.29 x 48.26 x 8.89 cm	92.61 x 64.59 x 33.5 cm
36.56lbs / 16.58kg (4 drives included)	60.81lbs / 27.58kg (4 drives included)
48.08lbs / 21.81kg (12 drives included)	72.33lbs / 32.81kg (12 drives included)

All dimensions LxWxH and are approximations

Contents

- iomega® StorCenter™ px12-450r Rackmount NAS Server
- Sliding rail kit for standard 19" rack
- Ethernet cable
- Power cables (support for worldwide distribution – cable for: USA, EU, UK, AUST, China, Switzerland)
- Printed Quick Start Guide

System Requirements

- Available 10/100/1000 Mbps network Ethernet port (required).
- Internet Explorer 7, Firefox® 3.x, Safari 3 or later browser.
- Personal cloud and remote access specific requirements:
 - Internet connection
 - Universal Plug and Play (UPnP™) compatible router, or administrative rights to port forward.
 - Recommended minimum sustained connection speeds for a good Personal Cloud experience.
 - Download: 2.5 Mbit/s
 - Upload: 500Kbit/s
 - Personal Cloud is not compatible with Active Directory
 - Personal Cloud is not compatible with XP 64 bit

PC Users:

- Microsoft® Windows® XP / Vista / 7 (all versions - exclusive of XP 64 bit for Personal Cloud)

Mac® Users:

- Mac OS X 10.5 – 10.7

Linux® Users

- Redhat Enterprise Linux 4/5 Desktop/Workstation, Ubuntu 7.10 – 10.10, Fedora 7/8, Fedora Core 5/6, OpenSUSE 10.3- 11.3, Debian 4

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Ordering Information

SKU	Model	UPC
36102	StorCenter px12-450r Network Storage, 4TB (4 x 1TB)	742709361029
36104	StorCenter px12-450r Network Storage, 8TB (4 x 2TB)	742709361043
36106	StorCenter px12-450r Network Storage, 12TB (4 x 3TB)	742709361067
36108	StorCenter px12-450r Network Storage, 16TB (4 x 4TB)	742709361081
36112	StorCenter px12-450r Network Storage, 24TB (12 x 2TB)	742709361128
36114	StorCenter px12-450r Network Storage, 36TB (12 x 3TB)	742709361142
36116	StorCenter px12-450r Network Storage, 48TB (12 x 4TB)	742709361166
Accessories		
SKU	Model	UPC
35957	NAS px12-400r/450r Server Class Expansion Pack 4TB (4 x 1TB)	742709359576
35958	NAS px12-400r/450r Server Class Expansion Pack 8TB (4 x 2TB)	742709359583
35959	NAS px12-400r/450r Server Class Expansion Pack 12TB (4 x 3TB)	742709359590
36101	NAS px12-400r/450r Server Class Expansion Pack 16TB (4 x 4TB)	742709361012
35950	NAS 1TB Bare Server Class Hard Drive for px Series	742709359507
35949	NAS 2TB Bare Server Class Hard Drive for px Series	742709359491
35948	NAS 3TB Bare Server Class Hard Drive for px Series	742709359484
36164	NAS 4TB Bare Server Class Hard Drive for px12-400r/450r	742709361647
36040	10GbE PCI Expansion Card 2 port for px12-400r/px12-450r	742709360404
36133	Spare/Accessory Fan, Hot-Swappable	742709361333
36134	Spare/Accessory Power Supply, Hot-Swappable	742709361340
36170	Empty Carrier For px12-400r/px12-450r	742709361708
36005	NAS Enhanced Service Plan 3 years for px12	742709360053
36006	NAS Enhanced Service Plan 5 years for px12	742709360060
36166	NAS Premium Service Plan for px12-400r/450r - 3 years	742709361661
36168	NAS Premium Service Plan for px12-400r/450r - 5 years	742709361685

Additional Images

