Network Storage Array, Pro



DESCRIPTION - The LenovoEMC[™] px4-300r

Network Storage array Pro Series is a high performance rackmount array that is ideal for small-to medium-sized businesses and distributed enterprises for advanced data protection and local and remote content sharing. Powered by LenovoEMC™ storage technology, and with up to 16TB of storage capacity, including a diskless option, the px4-300r comes in a space-saving 1U form factor that is better, faster and more reliable for your mission critical data.



TOP FEATURES

- 1. Up to 150 users
- 2. Intel® Celeron Dual core CPU, 2 GbE NICs
- 3. Diskless & fully populated, Hot swap HDDs
- 4. Performance, Flexibility, IT Integration, Virtualization
- 5. Active Snapshot backup (.VSS & .VDS provider)
- Active Directory High-Availability (ADHA) & hybrid authentication
- Video Surveillance (Milestone Arcus and Mindtree SecureMind)
- 8. Built-in McAfee VirusScan Enterprise

COMPLETE FEATURES

Capacity: 0-16TB. $4 \times \text{SATA}$ HDD bays. Empty bays are fitted with a drive carrier. Carrier can accommodate 2.5" and 3.5" drives. .

Snapshots: Point-In-Time backup of a complete volume image including Active Snap capability. Also uses .VSS and .VDS for compatibility with Windows & VMware hosts. SSD Support: For I/O intensive applications, the px4-300r can be fitted with solid state drives to boost performance. SSD Cache Pools - Set up dedicated SSDs for fast reads & writes of frequently accessed data, providing improved performance for I/O intensive applications such as databases. SSD drives sold separately.

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

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

Dual Gigabit Ethernet connectivity with high performance embedded architecture.

Dual Power Supply Capable – Simply add a second accessory power supply for 1+1 redundancy. Ships with a single power supply.

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

High-Performance

- Solid state drives (optional)
- Dual Core Intel Celeron Processor
- 2GB memory
- Dual GbE NICs

Scheduled Availability: June 2013

Flexible Configurations

- · Diskless option, bring your own drives
- Storage pools with RAID expansion, migration and hot spares
- · Advanced RAID levels including Hot Spare

Data Replication / Device to Device Data Copy Jobs:

- Easily copy files to and from attached USB drives or any network share – including LenovoEMC 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 Lenovo storage system, even if the folders reside on many devices in many different locations. WebDAV (Web-based Distributed Authoring and Versioning) enables viewing, adding, or deleting files on a Lenovo storage device 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 Lenovo device at a pre-selected time schedule.
- Wake-On-LAN: Powers on your Lenovo device when a "magic-packet" wake-up signal is sent over the network.(Wake-On-LAN magic packet application not included)

Uninterruptible Power Supply (UPS) Support: Allows to receive unattended shutdown requests from UPS through USB port to prevent data loss in case of power failure

Simple Management:

- Simple set up with an intuitive web-based interface.
 Web interface can be accessed locally or remotely.
- Feature Selection gives admin ability to customize the viewable features.

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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 LenovoEMC storage system.

Built-in McAfee VirusScan Enterprise: LenovoEMC px Network Storage Family now includes virus scanning natively in the storage device. McAfee® VirusScan® Enterprise with px4-300r 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.

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

LenovoEMC™ Link iOS & Android application:

LenovoEMC[™] Link gives you a direct link to your px4-300r via your iOS or Android device. You have the ability to upload, download, browse and copy content on your network storage devices using LenovoEMC Link mobile app. (download app from iTunes or Google Play)

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

SOLUTIONS

Virtualization

Lenovo network storage devices are certified for Citrix® XenServer™ 5.6, Windows® Server 2008 R2, Windows Server 2012, and VMware® vSphere ESX 5.1 which makes them the most cost-effective solution for server virtualization.

Video Surveillance

To ensure higher reliability and performance in 24x7 and high I/O workload environments like video surveillance Lenovo recommends using LenovoEMC px network storage devices with server class hard disks or dedicated Network Video Recording (NVR) NAS:

- 70BJ9006WW LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY SERVER CLASS, 4TB (4HD X 1TB)
- 70BJ9007WW LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY SERVER CLASS, 8TB (4HD X 2TB)

- 70BJ9004WW LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY SERVER CLASS, 12TB (4HD X 3TB)
- 70BA9009EA LENOVOEMC™ PX2-300D SERVER CLASS NVR WITH MILESTONE® ARCUS™ 4TB (2HD X 2TB), 4 CAMERA LICENSES EMEA
- 70BC9016EA LENOVOEMC™ PX4-300D SERVER CLASS NVR WITH MILESTONE® ARCUS™ 4TB (2HD X 2TB), 8 CAMERA LICENSES EMEA
- 70BC9017EA LENOVOEMC™ PX4-300D SERVER CLASS NVR WITH MILESTONE® ARCUS™ 8TB (4HD X 2TB), 16 CAMERA LICENSES EMEA
- 70BA9008EA LENOVOEMC™ PX2-300D NVR SERVER CLASS (4 MINDTREE LICENSES) 4TB (2HD X 2TB) EMEA
- 70BC9014EA LENOVOEMC™ PX4-300D NVR SERVER CLASS (4 MINDTREE LICENSES) 6TB (2HD X 3TB) EMEA
- 70BC9013EA LENOVOEMC™ PX4-300D NVR SERVER CLASS (8 MINDTREE LICENSES) 12TB (4HD X 3TB) EMEA

Powerful Backup Functionality

- Symantec Backup: Lenovo network storage products are identified as compatible disk targets for Backup Exec software.
- LenovoEMC Personal Cloud Backup: Synchronize data between personal cloud member systems and the px4-300r.
- Public Cloud Backup: Use one of the integrated 3rd
 party cloud-based storage services such as Amazon S3
 or Mozy™ to replicate data from your px4-300r to your
 public cloud account.
- Active Snapshot (.VSS & .VDS provider)
- Cloud Disaster Recovery: Utilize two px4-300r devices in different locations and the LenovoEMC 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 Lenovo devices as the source and Atmos cloud technology as the target. Enabled by LenovoEMC's integrated copyjob utility, customers can set up cloud folders and configure jobs to automatically copy data to any Atmos cloud.
- Deduplicating Backup with EMC Avamar With Avamar support on the px4-300r, users have the industry's first storage product that natively supports EMC's industry-leading Avamar sub-file deduplication for remote office/branch office (RoBo) backup.
- PC Backup with True Image Lite 2013 by Acronis Powerful backup software from Acronis protects content, recovers data in case of any disasters (3 licenses included)
- 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.

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Warranty: 3 year limited warranty

SPECIFICATIONS

- 1U form factor. Less than 20" depth accommodates shallow racks
- Intel Celeron E1500 Dual Core @ 2.2GHz. 2GB RAM
- 4 x 3.5" Hot swap SATA-II hard disk drives
- Two (2) 10/100/1000 Mbps Ethernet ports (RJ 45 connector)
- Three USB 2.0 ports
- RAID Support: RAID 0, 1, 10, 5, hot spare (RAID/storage pool should be the same capacity, speed, and manufacturer. Mixing different types of drives may result in unpredictable behavior)
- 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.
- LAN standards: IEEE 802.3, IEEE 802.3u
- AC Voltage 100-240 VAC, 50-60 Hz

• Power Consumption

- o Max: 150W
- o Min: 55W (drives spun down)
- o Peak: 220W for 5s

NOTE: These values represent a fully loaded device with the highest capacity HDD. Values may vary with other configurations.

- Acoustic noise 39.6 dBA maximum
- Temperature, Humidity and Altitude

	Operating	Non-Operating	
Ambient Temp	10° to 40° 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, Dutch, and Polish

CERTIFICATIONS

The px4-300r Network Storage Array has received the following certifications:

- Windows® Server 2008 R2 and Windows Server 2012
- VMware VSphere ESX 5.1 iSCSI and NAS
- XenServer[™] 5.5, 5.6 (w/ MPIO), iSCSI & NFS

CONTENTS

- LenovoEMC px4-300r 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
- Software Download (with): LenovoEMC[™] Storage Manager software, User Help Documentation

SYSTEM REQUIREMENTS

- Available 10/100/1000 Mbps network Ethernet port (required).
- Internet Explorer 7, Firefox® 3.x, Chrome 9, Safari 4 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 / 8 (all versions exclusive of XP 64 bit for Personal Cloud)

Mac® Users:

Mac OS X 10.6 – 10.8

Linux® Users

 Redhat Enterprise 6, Ubuntu 11, OpenSUSE 11.4, Other compatible Linux versions

WEIGHT AND DIMENSIONS

<u>Unit Information</u> 20.0 x 16.93 x 1.72 inches 50.8 x 43.0 x 4.37 cm 17.2 lbs / 7.8 kg with 0 HDDs 22.96 lbs / 10.41 kg with 4 HDDs Single Package Information 28.0 x 23.5 x 6.625 inches 71.12 x 59.69 x 16.83 cm

27.3 lbs / 12.38 kg with 0 HDDs 33.7 lbs / 15.29 kg with 4 HDDs

Master Carton Information

28.0 x 23.5 x 6.625 inches 71.12 x 59.69 x 16.83 cm 28.3 lbs / 12.84 kg with 0 HDDs 34.7 lbs / 15.74 kg with 4 HDDs Pallet Information

48 x 28.35 x 58.0 inches 121.9 x 72.0 x 172.1 cm 477.8 lbs / 217.44 kg with 0 HDDs 580.2 lbs / 263.84 kg with 4 HDDs





1 unit per master carton 8 layers, 2 master cartons per lay 16 units per pallet	yer
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All dimensions LxWxH and are approximations

ADDITIONAL IMAGES



ORDERING INFORMATION

SKU	Model	EAN		
70BJ9003WW	LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY, 0TB DISKLESS	0887770964615		
70BB9000WW	LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY PRO SERIES, 4TB (4HD X 1TB)	0887942387907		
70BB9001WW	LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY PRO SERIES, 8TB (4HD X 2TB)	0887942387914		
70BB9002WW	LENOVOEMC™ PX4-300R NETWORK STORAGE ARRAY PRO SERIES, 12TB (4HD X 3TB)	0887942387921		
Accessorie	S			
4N40A33705	NAS DRIVE 1TB FOR PX PRO SERIES 7200RPM (SEAGATE ST1000DM003)	0887770965124		
4N40A33707	NAS DRIVE 2TB FOR PX PRO SERIES 7200RPM (SEAGATE ST2000DM001)	0887770965148		
4N40A33709	NAS DRIVE 3TB FOR PX PRO SERIES 7200RPM (SEAGATE ST3000DM001)	0887770965162		
4N60A33905	NAS POWER SUPPLY FOR PX4-300R, HOT-SWAPPABLE	887770965339		
4N80A34102	NAS RAIL KIT FOR PX4-300R (MIN 28.4 IN MAX 33.5 IN)	887770965353		
4N40A33715	NAS SSD 128GB FOR PX4-300D/PX6-300D/PX4-300R (MICRON MTFDDAC128MAM-1J1)	0887770965223		
4N40A33717	NAS SSD 256GB FOR PX4-300D/PX6-300D/PX4-300R (MICRON MTFDDAC256MAM-1K1)	0887770965247		
Service Plans **				
5WS0A37780	EXTENDED SERVICE PLAN PX4R- 5 YEARS, 24X7 PHONE SUPPORT	0887942292829		
5WS0A37770	ENHANCED SERVICE PLAN PX4R -3 YEARS, 24/7 PHONE SUPPORT, NBD ON-SITE	0887942292928		
5WS0A37772	ENHANCED SERVICE PLAN PX4R -5 YEARS, 24/7 PHONE SUPPORT, NBD ON-SITE	0887942292904		
5WS0A37776	PREMIUM SERVICE PLAN PX4-R - 3 YEARS, 24/7 PHONE SUPPORT, 4-HOUR ON-SITE WITH SPARES KIT (ALL CAPACITIES)	0887942292867		
5WS0A37778	PREMIUM SERVICE PLAN PX4-R - 5 YEARS, 24/7 PHONE SUPPORT, 4-HOUR ON-SITE WITH SPARES KIT (ALL CAPACITIES)	0887942292843		

^{**} Available in most geographies, some restrictions apply





















