# LENOVOEMC<sup>TM</sup> PX4-300D Network Storage, Pro

**DESCRIPTION**- The LenovoEMC<sup>TM</sup> px4-300d Network Storage Pro Series is a high performance desktop NAS 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<sup>™</sup> storage technology, and with up to 16TB of storage capacity, including a diskless option, the px4-300d comes in small desktop form factor that is ideal for small-to-medium businesses.

# TOP FEATURES

- 1. Up to 75 users
- 2. Intel® Atom Dual Core CPU, 2 GbE NICs
- 3. Diskless & fully populated, Hot swap HDDs
- Active Snapshot backup (.VSS & .VDS provider)
   Active Directory High-Availability (ADHA) & hybrid
- authentication 6. Video Surveillance (Milestone Arcus and Mindtree
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- 7. Built-in McAfee VirusScan Enterprise
- 8. PC Backup & Restore with True Image Lite 2013 by Acronis

## **COMPLETE FEATURES**

**Capacity:** 0 - 16TB. 4 x 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 px4-300d 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.

**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)
- Intel Atom Dual Core Processor
- 2GB memory
- Dual GbE NICs

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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

## Business-class features

- Windows Active Directory High-Availability (ADHA), Hybrid Authentication, MSCS and Hyper-V Live Migration support
- Built-in, real-time on-access and automatic anti-Virus scanning and cleaning using the embedded McAfee® VirusScan® Enterprise

## Built-in Cloud Technology

- EMC Atmos Cloud Connector
- EMC Avamar data deduplication
- LenovoEMC<sup>™</sup> Personal Cloud
- Mozy™
- Amazon S3

### 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 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.





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## 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.

**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 px4-300d 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<sup>™</sup> Personal Cloud: LenovoEMC Personal Cloud is a web-based computing architecture that connects your Lenovo Network Storage devices to other individuals and/or devices via the Internet.

#### LenovoEMC<sup>™</sup> Link iOS & Android application:

LenovoEMC Link gives you a direct link to your px2-300d 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.

# SOLUTION

## 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:

- 70BC9008EA LENOVOEMC<sup>™</sup> PX4-300D NETWORK STORAGE SERVER CLASS, 4TB (4HD X 1TB) EMEA
- 70BC9009EA LENOVOEMC<sup>™</sup> PX4-300D NETWORK STORAGE, SERVER CLASS, 8TB (4HD X 2TB) EMEA
- 70BC9006EA LENOVOEMC<sup>™</sup> PX4-300D NETWORK STORAGE SERVER CLASS, 12TB (4HD X 3TB) EMEA
- 70BC9016EA LENOVOEMC<sup>™</sup> PX4-300D SERVER CLASS NVR WITH MILESTONE® ARCUS<sup>™</sup> 4TB (2HD X 2TB), 8 CAMERA LICENSES EMEA
- 70BC9017EA LENOVOEMC<sup>™</sup> PX4-300D SERVER CLASS NVR WITH MILESTONE® ARCUS<sup>™</sup> 8TB (4HD X 2TB), 16 CAMERA LICENSES EMEA
- 70BC9014EA LENOVOEMC<sup>™</sup> PX4-300D NVR SERVER CLASS (4 MINDTREE LICENSES) 6TB (2HD X 3TB) EMEA
   70BC9013EA
- TOBCSOTSEA LENOVOEMC<sup>™</sup> 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 px4-300d.
- Public Cloud Backup: Use one of the integrated 3<sup>rd</sup> party cloud-based storage services such as Amazon S3 or MozyConnect<sup>™</sup> to replicate data from your px4-300d to your public cloud account.
- Active Snapshot (.VSS & .VDS provider)
- Cloud Disaster Recovery: Utilize two px4-300d 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 LenovoEMC 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 px4-300d, 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



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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.

Warranty: 3 year limited warranty

## SPECIFICATIONS

- Desktop form factor
- Intel Atom Dual Core D525 CPU @1.8GHz, 2GB RAM
- 4 x 3.5" Hot swap SATA-II hard disk drives
- Two (2) 10/100/1000 Mbps Ethernet ports (RJ 45
- connector)
  1 x USB 3.0 ports and 2 x USB 2.0 ports (to connect external HDD, UPS, Bluetooth dongle)
- RAID Support: RAID 0, 1, 10, 5, (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: 55W
  - o Min: 35W (drives spun down)
  - Peak: 100W for 6s

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

- Acoustic noise 30.6 dBA maximum
- Temperature, Humidity and Altitude

	Operating	Non-Operating	
Ambient Temp	10º to 40º C	-40° to 60° C	
Temp Gradient	12 ° C per hour	n/a	
Humidity (non-	8% to 85% R.H.	5% to 95% R.H.	
condensing)			
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 px4-300d Network Storage has received the following certifications:

- Windows® Server 2008 R2 and Windows Server 2012
- VMware vSphere ESX 5.1 iSCSI and NAS
- XenServer<sup>™</sup> 5.5, 5.6 (w/ MPIO), iSCSI & NFS

## CONTENTS

- LenovoEMC px4-300d Network Storage
- Ethernet cable
- Power supply
- Printed Quick Start Guide Software Download (with): LenovoEMC<sup>™</sup> 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<sup>™</sup>) 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<sup>®</sup> Users:

Mac OS X 10.6 – 10.8

### Linux<sup>®</sup> Users

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







# WEIGHT AND DIMENSIONS (EU/UK)

Unit Information	Single Package Information	Master Carton Information	Pallet Information
25.72 x 17.63 x 22.23 cm	34.29 x 26.67 x 40.64 cm	34.29 x 26.67 x 40.64 cm	121.92 x 101.6 x 219 cm
3.95 kg with 0 HDDs	6.35 kg with 0 HDDs	6.81 kg with 0 HDDs	386.55 kg with 0 HDDs
5.26 kg with 2 HDDs	7.66 kg with 2 HDDs	8.11 kg with 2 HDDs	458.05 kg with 2 HDDs
6.56 kg with 4 HDDs	8.97 kg with 4 HDDs	9.42 kg with 4 HDDs	530.1 kg with 4 HDDs
C C	5	1 unit per master carton	5 layers, 11 master cartons per layer
			55 units per pallet

All dimensions  $\ensuremath{\mathsf{LxWxH}}$  and are approximations

# ORDERING INFORMATION

SKU	Model	EAN		
70BC9000EA	LENOVOEMC™ PX4-300D NETWORK STORAGE, 0TB DISKLESS EMEA	0887770963816		
70A79004EA	LENOVOEMC™ PX4-300D NETWORK STORAGE PRO SERIES, 4TB (4HD X 1TB) EMEA	0887770963953		
70A79001EA	LENOVOEMC™ PX4-300D NETWORK STORAGE PRO SERIES, 8TB (4HD X 2TB) EMEA	0887942154295		
70A79002EA	LENOVOEMC <sup>™</sup> PX4-300D NETWORK STORAGE PRO SERIES, 12TB (4HD X 3TB) EMEA	0887942154318		
Accessori	es			
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		
4N60A33904	NAS POWER SUPPLY FOR PX4-300D	0887770965322		
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 **				
5WS0A37768	EXTENDED SERVICE PLAN PX DESKTOP SERIES - 5 YEARS, 24X7 PHONE SUPPORT	0887942292942		
5WS0A37773	ENHANCED SERVICE PLAN PX DESKTOP SERIES - 3 YEARS, 24/7 PHONE SUPPORT, NBD ON-SITE	0887942292898		
5WS0A37774	ENHANCED SERVICE PLAN PX DESKTOP SERIES - 5 YEARS, 24/7 PHONE SUPPORT, NBD ON-SITE	0887942292881		

\*\* Available in most geographies, some restrictions apply

# ADDITIONAL IMAGES

