#### LENOVOEMC™ PX4-400D **PRO SERIES**



#### **DESCRIPTION**

Perfect for small-to medium-sized businesses and distributed enterprises, the LenovoEMC™ px4-400d Network Storage 4-bay tower is a high performance desktop NAS that combines advanced data protection plus local and remote content sharing with the simplicity and power of the LenovoEMC™ Lifeline operating system. Available in capacities ranging from diskless up to 16TB, the px4-400d's compact tower desktop form factor fits into any business environment.

#### **TOP FEATURES**

- Up to 75 users
- 4-bay tower NAS with up to 16TB of storage capacity 2.
- Up to 25% higher data read & write performance with 4th generation tower NAS
- 2.13GHz dual-core Intel® Atom D2701 Processor
- Leading software application options included

#### **SPECIFICATIONS**

- · Desktop (tower) form factor
- 2.13GHz dual-core Intel® Atom D2701 processor
- 2GB of 1600MHz DDR3 Memory
- · 4 x 3.5" hot swap SATA-III hard disk drives
- RAID Level Support: RAID 0, 1, 10, 5
- · Power Consumption
  - o Max: 55W
  - o Min: 35W (drives spun down)
  - o Peak: 100W for 6s
- iSCSI: Supports both file and block storage pools, 256 hosts maximum with the following parameters
  - o 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.
- 1 x USB 3.0 port (front) and 4 x USB 2.0 ports (rear), to connect external HDD, UPS
- 1x eSATA port to connect external eSATA hard drive
- 1x HDMI video port
- 2x RJ45 1GbE Ethernet networking ports
- LAN standards: IEEE 802.3, IEEE 802.3u
- AC Voltage 100-240 VAC, 50-60 Hz
- Acoustic noise 35.0 dBA typical
- · 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

- Windows® Server 2008 R2 and Windows Server 2012 R2
- VMware vSphere ESX 5.5 iSCSI and NAS
- XenServer<sup>™</sup> 6.1, 6.2 (w/ MPIO), iSCSI & NFS



#### CONTENTS

- LenovoEMC px4-400d Network Storage
- Ethernet cable
- · Power supply

Printed Quick Start Guide
 NOTE: LenovoEMC<sup>™</sup> Storage Manager software and user help documentation is available via download.

#### 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
- · Personal Cloud is not compatible with XP 64 bit

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

Warranty: 3 year limited warranty

Scheduled Availability: January 2014

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#### **FEATURE DESCRIPTIONS**

#### Hardware

Capacity: 0 - 16TB.

4 x SATA III HDD bays. Empty bays are fitted with a drive carrier. Carrier can accommodate 2.5" or 3.5" drives.

#### Flexible Configurations

- · Diskless option, bring your own drives
- Storage pools with RAID expansion, migration and hot spares
- Advanced RAID levels including RAID 5 and RAID 10

**SSD Support:** For I/O intensive applications, the px4-400d can be fitted with solid state drives to boost performance. (SSDs not included)

#### **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.

#### **Power Savings:**

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

#### FILE MANAGEMENT & SECURITY

#### 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.

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

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 LenovoEMC storage system, even if the folders reside on many devices in many different locations. WebDAV (Webbased Distributed Authoring and Versioning) enables viewing, adding, or deleting files on a LenovoEMC storage device from the web, via HTTP or HTTPS for added security.

**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

**Business-class features with** Windows Active Directory High Availability (ADHA), Hybrid Authentication, MSCS and Hyper-V Live Migration support **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. (SSDs not included)

#### **Built-in Cloud Technology**

- LenovoEMC™ Personal Cloud
- Amazon® S3™ Client connector

**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. (256-bit AES)

**User Quotas:** Easily manage capacity by setting maximum limits per user.

Configuration Backup and Restore: Allows backup and restore of system configuration information. Backing up a configuration saves various system properties, including users, groups, device identification, and Share names and permissions.

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

**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.

#### **BACKUP & REPLICATION**

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.

**Symantec® Backup:** LenovoEMC 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 px4-400d.

**Public Cloud Backup:** Use integrated Amazon S3 to copy data from your px4-400d to your public cloud account. Additional charges apply.

**Active Snapshot** (.VSS & .VDS provider): Point in time backup of a complete volume image including Active Snap capability. Also uses .VSS and .VDS for compatibility with Windows & VMware hosts.

**Cloud Disaster Recovery:** Utilize two px4-400d devices in different locations and the LenovoEMC Personal Cloud function to create your own disaster recovery scheme.

PC-to-NAS 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).

#### NAS-to-NAS Backup with Acronis ABR for NAS:

Powerful backup software from Acronis enables backup from the NAS to another network target. (Acronis license sold separately)

#### SERVER-to-NAS Backup with Acronis ABR 11.5 OEM:

Powerful backup software from Acronis enables backup from a Windows or Linux server to the px4-400d. (Acronis license sold separately)

**Apple® Time Machine™ Backup:** Compatible backup target

#### **VIRTUALIZATION**

LenovoEMC network storage devices are certified for Citrix® XenServer™ 6.1, 6.2, Windows® Server 2008 R2, Windows Server 2012 R2, and VMware® vSphere ESX 5.5 which makes them the most cost-effective solution for server virtualization.

#### **VIDEO SURVEILLANCE STORAGE**

Lenovo recommends using LenovoEMC<sup>™</sup> px4-400d Server Class Network Storage for Video Surveillance solutions or dedicated Network Video Recording (NVR) NAS

#### THIRD-PARTY APPLICATIONS

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

**Upgradeable Software Applications:** Applications from leading software vendors will automatically appear as an icon in LifeLine system management interface as they are released. Planned software applications include:

#### • McAfee® VirusScan® Enterprise

Built-in, real-time on-access and automatic anti-virus scanning and cleaning using the embedded VirusScan engine. Including McAfee ePO Support. Free license is valid for 3 years from activation.

#### Acronis® Backup & Recovery (ABR) for LenovoEMC NAS

Optional software provides complete image backup of your LenovoEMC NAS to a secondary network target (sold separately).

#### • EMC® Avamar™ Client

Existing Avamar 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.

#### **ADDITIONAL FEATURES**

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

LenovoEMC<sup>™</sup> Link iOS & Android application: LenovoEMC<sup>™</sup> Link gives you a direct link to your px4-400d 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™)

Management without a PC: Fully manage your NAS device without the need of a dedicated computer. Attach a display to the HDMI port and connect a USB keyboard and mouse to access and manage your device. (Supports most HDMI displays)

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### WEIGHT AND DIMENSIONS (EU/IMPERIAL)

<u>Unit Information</u>	Single Package Information	Master Carton Information	Pallet Information
9.25 x 7.25 x 8.5 inches	12.75 x 11.5 x 12.5 inches	13.18 x 11.93 x 13.18 inches	48 x 40 x 83 inches
9.09 lbs with 0 HDDs	14.51 lbs with 0 HDDs	15.51 lbs with 0 HDDs	1141.72 lbs with 0 HDDs
15.29 lbs with 4 HDDs	20.71lbs with 4 HDDs		1588.12 lbs with 4 HDDs
		21.71 lbs with 4 HDDs	6 layers, 12 master cartons per layer
		1 unit per master carton	72 units per pallet

### WEIGHT AND DIMENSIONS (EU/METRIC)

Unit Information	Single Package Information	Master Carton Information	Pallet Information
23.50 x 18.42 x 21.59 cm	32.39 x 29.21 x 31.75 cm	33.48 x 30.3 x 33.48 cm	121.92 x 101.6 x 210.82 cm
4.12 kg with 0 HDDs	6.58 kg with 0 HDDs	7.04 kg with 0 HDDs	518.88 kg with 0 HDDs
6.94 kg with 4 HDDs	9.39 kg with 4 HDDs	9.85 kg with 4 HDDs	721.2 kg with 4 HDDs
_	_	1 unit per master carton	6 layers, 12 master cartons per layer
			72 units per pallet

All dimensions LxWxH and are approximations

#### **ORDERING INFORMATION:**

#### Systems

SKU	DESCRIPTION*	EAN
70CM9000EA	LenovoEMC™ px4-400d Network Storage, 0TB Diskless EMEA	0888228582580
70CJ9000EA	LenovoEMC <sup>™</sup> px4-400d Network Storage Pro Series, 4TB (4HD X 1TB) EMEA	0888228582542
70CJ9001EA	LenovoEMC™ px4-400d Network Storage Pro Series, 8TB (4HD X 2TB) EMEA	0888228582559
70CJ9002EA	LenovoEMC™ px4-400d Network Storage Pro Series, 12TB (4HD X 3TB) EMEA	0888228582566
70CJ9003EA	LenovoEMC™ px4-400d Network Storage Pro Series, 16TB (4HD X 4TB) EMEA	0888440003924

#### Accessories

sku	DESCRIPTION	EAN
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
7N40E65075	NAS Drive 4TB for PX Pro Series 5900RPM (Seagate ST4000DM000)	0888440004037
7N40E65076	NAS Power Supply for px4-400d	0888440004044

#### Service Plans

SKU	DESCRIPTION**	EAN
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

<sup>\* 3&</sup>lt;sup>rd</sup> party software application icons will automatically appear in Lifeline console upon release. Internet connection required. \*\* Available in most geographies, some restrictions apply.

## LENOVOEMC<sup>™</sup> PX4-400D PRO SERIES



#### **ADDITIONAL IMAGES**





















