

# Synology DiskStation DS3612xs

Ultra-High performance NAS Server Scales up to 100TB for Large Scale Business



**Synology® DiskStation DS3612xs offers ultra-high performance, scalable and full-featured network attached storage solution for large scale businesses that require an efficient way to centralize data protection, simplify data management, deploy virtualization solutions, and rapidly expand storage capacity with minimal time spent on setup and management. Synology DS3612xs is backed with Synology's 3-year limited warranty.**

## Highlights

- Ultra-high performance of 1000+ MB/sec throughput and 100,000+ IOPS<sup>1</sup>
- Scale up to 100TB with Synology DX1211<sup>2</sup>
- Dual 10GbE ports support (with PCI-E add-on card)
- VMware®, Citrix®, Microsoft® Hyper-V® compliance
- CPU Passive Cooling Technology
- Expandable ECC RAM module (up to 6GB)
- Running on Synology DiskStation Manager (DSM)

## Ultra-High Performance

With Link Aggregation, Synology DS3612xs delivers the high performance of over 1000 MB/sec throughput and 100,000 IOPS under RAID 5 configuration<sup>1</sup>. In addition to the default 4 Gigabit ports, dual 10GbE are supported with the add-on PCI Express x8 Gen2 Network Interface Card to maximize the system bandwidth. DS3612xs is able to bring you the ultra-high performance that your data-intensive application demands on the storage system.

## High Reliability & Availability

Reliable functioning of commercial systems is of paramount concern to business users that depending on these servers everyday. Synology DS3612xs is now introduced with the fanless CPU heatsink to prevent the single point of failure, with the CPU passive cooling technology DS3612xs achieves the high reliability system design.

The network ports with failover support combining with hot-swappable drives will ensure continual service uptime during drives replacement or unexpected LAN failure. The ECC RAM module on DS3612xs will detect and correct errors that occur during data transmission. Supporting up to 6GB ECC RAM, DS3612xs provides secure data protection and performance to meet the need of large scale businesses for a strong foundation to face mission-critical tasks.

## Robust Scalability Up to 100 TB

Synology DS3612xs is also designed to grow with your business and provides the ability to seamlessly expand a single volume up to 100TB on the fly. When the storage capacity of DS3612xs is nearing its limits, it can easily be expanded with Synology DX1211<sup>2</sup>. It is connected to DS3612xs via an Infiniband cable that carries 12 Gb/s SATA signal to ensure maximum throughput.

Management of the large storage space on DS3612xs is simple and flexible. Multiple Volumes on RAID allows users to create more than one volume on a RAID structure, providing a flexible and efficient way to manage the storage across all hard drives. When the need for more space arises, the volume could be easily expanded without any service disruption.



DS3612xs



DX1211

## Unified Storage and Virtualization Ready

Synology DS3612xs runs on the novel operating system, Synology DiskStation Manager (DSM), which integrates file-level and block-level storage in one unified storage system platform providing management simplicity to reduce your total cost of ownership.

Comprehensive network protocol support (CIFS/SMB, AFP and NFS) assures seamless file sharing across Windows®, Mac®, and Linux platforms. iSCSI is also supported as the ideal alternative to SAN solution for business.

Affordable and cost-effective iSCSI allows large scale business to consolidate storage into data center storage arrays while providing hosts with the illusion of locally-attached disks. With the iSCSI support, RS3412xs/RS3412RPxs provides a seamless storage solution for virtualization servers, such as VMware, Citrix, and Hyper-V. RS3412xs/RS3412RPxs is also certified with the latest VMware vSphere® 5, supporting VMFS-5 and extended storage migration capability with better flexibility and higher performance in VMware virtualization platform.

Thin Provisioning is available for file-level iSCSI, enabling administrators to oversubscribe provision and then grow storage space as needed in safety. With Thin Provisioning, users are able to maximize the storage utilization to reduce the total cost of ownership for the storage system.

## Full-featured Business Applications

The Synology DS3612xs offers applications and features designed specifically for large scale business. Windows ADS and LDAP integration allows DS3612xs to quickly and easily fit in an existing business network environment without recreating user accounts. Windows ACL support on DS3612xs provides much finer-grained access control and efficient privilege settings, allowing IT staffs to set up privileges to files and folders on DS3612xs through their familiar Windows user interface.

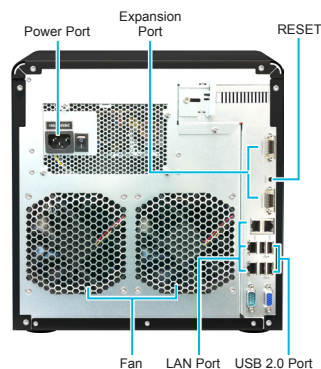
The built-in backup application is provided for backing up data in the DS3612xs to another Synology NAS, expansion unit, any rsync server via an encrypted transmission. It is even possible to back up from DS3612xs to the cloud with the Amazon® S3 support. Shared Folder Sync is also available in DSM for implementing disaster recovery plans. With Shared Folder Sync, DS3612xs is able to replicate data to another DiskStation within the Intranet or across the Internet, helping to reduce the risk of business interruption.

## Energy Efficient Design

Synology DS3612xs is designed and developed with energy efficiency in mind. Compared with the average storage server counterparts, DS3612xs consumes a relatively low amount of power and have the hard drives hibernate when not in use.

All Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology acknowledges the responsibility as a global citizen to continually work to reduce the environmental impact of every product produced.

## CONNECTIONS &amp; BUTTONS



## Technical Specifications

## Hardware

- CPU: Dual Core 3.1GHz, with floating point
- RAM Size: ECC RAM 2GB
- Internal HDD: 12X 3.5" SATA (II) or 12X 2.5" SATA/SSD
- External HDD Interface: 4X USB ports
- Expansion Interface: 2X Expansion port
- Size (H X W X D): 310 mm X 300 mm X 340mm
- Weight: 10.53 kg
- LAN: 4X Gigabit (10 GbE X2 add-on card is supported)
- Fan: 120mm X 120mm X2

## Applications

## File Browser

- Virtual Drive
- Remote Folder

## File Station

- Bandwidth Control
- Custom FTP Passive Port Range
- Anonymous FTP
- Transfer Log

## Mail Server

- Supported Mail Server Protocol: POP3, SMTP, IMAP

## Web Station

- Virtual Host (up to 30 websites)
- PHP/MySQL\*
- Alternative HTTP Error Page
- 3rd-Party Applications Support

## Surveillance Station

- Default IP cam #: 1
- MAX IP cam # (licenses required): 50 (1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.)

## Photo Station

- Facebook Integration
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mirw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Video Format\*: 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3

## General Specifications

## Networking Protocols

- CIFS, AFP, FTP, iSCSI, Telnet, SSH, NFS, SNMP, WebDAV, CalDAV

## File System

- EXT4
- EXT3 (External Disk Only)
- FAT (External Disk Only)
- NTFS (External Disk Read Only)

## Volume Management

- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+ Spare, RAID 6, RAID 10
- RAID Migration: from Basic to RAID 1, Basic to RAID 5, Basic to RAID 5+ Spare, RAID 1 to RAID 5, RAID 1 to RAID 5+ Spare, RAID 5 to RAID 5+ Spare, RAID 5 to RAID 6
- Expand RAID 1, RAID 5, RAID 5+ Spare or RAID 6 with Larger Hard Drives
- Expand RAID 5, RAID 5+ Spare or RAID 6 by Adding a Hard Drive On The Fly
- Volume Expansion with DX1211

## File Sharing Capability

- Max User Account: 4096
- Max Group: 512
- Max Shared Folder: 512
- Max Concurrent Connections (CIFS, FTP, AFP): 1024

## Environment and Packaging

## Environment

- RoHS Compliant

## Package Content

- DS3612xs Main Unit

- Wireless Support (wireless dongles not included)
- Wake on LAN
- Noise Level: 29.4 dB(A)
- Hot Swappable HDD
- Power Recovery
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Max Internal Capacity: 36TB (12X 3TB hard drives)\*
- Operating Temperature: 5°C to 35°C (40°F to 95°F)

- Storage Temperature: -10°C to 70°C (15°F to 155°F)
- Relative Humidity: 5% to 95% RH
- Max Operating Altitude: 10,000 feet
- Power Consumption\*: 132 W (Access); 57.2 W (HDD Hibernation)
- Certification: FCC Class B, CE Class B, BSMI Class B
- 3-year Limited Warranty

- M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3

## Download Station

- Supported Download Protocols: BT/HTTP/FTP/NZB/eMule
- Custom BT Port Range
- BT / eMule Bandwidth Control

## Audio Station

- Supported Audio Format: (USB Mode) AAC, FLAC, M4A, MP3, Ogg Vorbis, WMA, WMA VBR; (Streaming Mode) MP3, M4A, M4B
- Supported Playlist Format: M3U, WPL
- Internet Radio: SHOUTcast\*, Radioio\*

## DLNA/UPnP Media Server

- DLNA Certified
- PS3/Xbox 360\* Support
- Supported Audio Format: AAC, FLAC, M4A, MP3, Ogg, Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Supported Video Format: 3GP, 3G2, ASF, AVI, DAT, DivX, DVR-MS, ISO, M2T, M2TS, M4V, MKV, MP4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIFF (tiff), UFO, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mirw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Subtitles Format: srt, psb, smi, ass, ssa, sub, idx,ifo

## iTunes® Server

- Supported Audio Format\*: MP3, M4A, M4P, WAV, AIF
- Supported Video Format: M4V, MOV, MP4

## Windows Access Control List (ACL) Support

## Windows ADS Domain Integration

- Domain Users login via Samba/AFP/FTP/File Station

## Backup Solutions

- Network Backup
- Shared Folder Sync
- Local Backup
- Time Backup
- Desktop Backup (using Synology Data Replicator 3 or Apple® Time Machine® backup application)
- 3rd-Party Backup Support

## Security

- FTP over SSL/TLS
- IP Auto-Block
- Firewall
- Encrypted Network Backup over Rsync
- HTTPS Connection

## Management

- DSM Upgrade
- Email Notification
- SMS Notification
- Customized User Quota
- DDNS Support
- PPPoE
- Resource Monitor
- UPS Management

- Supported Playlist Format: M3U, WPL

## Printer Server

- Max Printer #: 2
- LPR, CIFS, AppleTalk®, Apple AirPrint™, Google Cloud Print™ (For Mac users, DS3612xs supports PostScript USB printers only.)
- Multi Functional Print Server

## Synology Packages

- Mail Station 2
- Squeezbox Server™
- Webalizer
- phpMyAdmin
- Time Backup
- VPN Server
- WordPress®
- Syslog Server
- Directory Server
- HiDrive® Backup
- OpenERP
- HASP

## iPhone/Android Applications

- DS photo+
- DS audio
- DS cam
- DS file
- DS finder

- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports

## HDD Management

- Deep Sleep for Expansion Unit
- HDD Hibernation
- S.M.A.R.T.
- Dynamic Bad Sector Mapping

## Utilities

- Synology Assistant
- Synology Data Replicator

## Support Browsers

- Chrome™
- Internet Explorer® 7, 8, and 9
- Firefox®
- Safari® 4 and 5 (Mac)

## Supported Clients

- Windows XP onward
- Mac OS X 10.5 onward
- Ubuntu 9.04 onward

## Language

- English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, 日本語, 한국어, 繁體中文, 简体中文

## Optional Accessories

- Remote
- Camera License Pack
- Expansion Unit (DX1211)

## SYNOLOGY INC.

Founded in 2000, Synology is a young and energetic company dedicated to developing high-performance, reliable, versatile, and environmentally-friendly Network Attached Storage (NAS) products. Our goal is to deliver user-friendly solutions and solid customer service to satisfy the needs of businesses, home offices, individual users and families.

Copyright © 2012, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.  
Printed in Taiwan.  
DS3612xs-2011-ENU-REV001

<http://www.synology.com>

## Headquarters

Synology Inc.  
3F-3, No. 106, Chang An W. Rd., Taipei, Taiwan  
Tel: +886 2 2552 1814 Fax: +886 2 2552 1824

## North &amp; South America

Synology America Corp.  
2899 152nd Ave NE, Redmond, WA 98052, USA  
Tel: +1 425 818 1587

## UK

Synology UK Ltd.  
Davy Avenue, Knowlhill,  
Milton Keynes, Bucks,  
MK5 8PB, UK  
Tel: +44 01908 673 709

1. Tested with dual 10GbE connection with Link Aggregation. The performance figures could vary on different environments.
2. DS3612xs supports up to two Synology DX1211s, purchased separately.
3. Hard drive not included.

4. The actual capacity will differ according to volume types.
5. Measured with 12 Western Digital 2TB WD2002FVPS hard drive. The figures could vary on different environments.
6. User can click and download the following video formats: RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3, but not able to play it

7. In Photo Station as compressed Flash® video.
7. The music in WAV and AIF format can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.

## Networking

