Synology®



THE COMPREHENSIVE STORAGE SOLUTION

2013 Product Guide



Synology is the leading NAS vendor in the global market. As a dedicated NAS server provider, we aim to leverage the latest technologies to deliver innovative products that make a difference to individuals and businesses. Between individual activities and technology, Synology bridges the gap and offers a human-centric approach to storing the data of tomorrow.

.....

"Where the next big thing takes shape"

It's what we believe in.

PRODUCT INNOVATION

Synology's ambition to reach out to the unexplored is rooted deep in its culture. Our research & development team consists of outstanding engineers and creative thinkers. We bring together new ideas, technology, and customer feedback all under one roof.

A Hybrid Cloud with a Web-based Platform

Synology makes a NAS more than a file server. We bring together the accessibility of public cloud and the security which private cloud possesses to form a hybrid cloud solution with a web-based platform. The web-based platform transforms NAS from being a pure file server to a multi-functional device suitable for different purposes. It's the first time that anyone in the industry has done so.

Hardware Innovation

Much attention is invested in building a reliable NAS server. Synology focuses to deliver servers that offer continuou service uptime, large storage, and efficient energy usage.

Extending system continuity: CPU passive cooling & system fan failover design extend system uptime.

Airflow enhancement: Airflow efficiency is enhanced to reduce power consumption, increase server stability, and reduce noise level caused by fan spin.

Scalability: Scale-up design delivers efficient management in a unified system structure.

Smart energy management: Saving over 90% of power consumption in system hibernation and quickly resume in full operation when required.

Software Innovation

Believing the true value of a NAS server lies in its software, Synology is dedicated to offer businesses and individual strong support to solve issues that they value most. Some of the most significant features include:

Multitasking web-desktop: Facilitate administration efficiency with multitasking and a suite of desktop tools.

Web installation: Fast, hassle-free, and disk-free installation that can be performed on computer and mobile devices.

Synology Hybrid RAID (SHR): Instant and straightforward storage optimization tool.

Synology High Availability (SHA): Construct failover cluster to maintain mission critical tasks function normally without disrupting business operation.

Virtualization Support

Synology dual-LAN NAS servers come with full support on VMware, Citrix, and Microsoft Hyper-V. In addition, Synology is among the leading NAS providers to offer support on VMware vSphere[®] 5 and full VAAI support, which includes Hardware Assisted Locking (ATS), Block Zero, Full Copy, and Thin Provisioning. When deploying VAAI-compatible NAS servers, businesses are entitled for:

- Smoother access and management efficiency with load balancing automation in Storage vMotion.
- Faster operation performance by offloading cycles from ESX/ESXi to storage array with VAAI integration
- More effective utilization of storage arrays by virtual machines with VAAI support



Large Scale Business

Synology's XS+ and XS storage solutions give enterprises an unparalleled combination of uncompromising performance, intelligent management, system reliability, and affordable scalability to address complex business challenges.

Being reliable and secure is always the key to business longevity

RS10613xs+

- Quad Core 3.3GHz CPU
- 2294.17 reading & 1892.16 writing (MB/s) with Link Aggregation
- 424TB maximum capacity with expansion unit RX1213sas; support SAS, SATA, SSD hard drives



DS3612xs

- Dual Core 3.1GHz CPU
- 1958.76 reading & 1086.37 writing (MB/s) with Link Aggregation
- 144TB maximum capacity with DX1211 using 12Gb/s SATA cable





RS3413xs+

- Quad Core 3.3GHz CPU
- 2165.30 reading & 1490.08 writing (MB/s) with Link Aggregation
- 136TB maximum capacity with expansion unit RX1211



RS3412xs / RS3412RPxs

- Dual Core 3.1GHz CPU
- 1676.70 reading & 1077.46 writing (MB/s) with Link Aggregation
- 136TB maximum capacity with expansion unit RX1211

▶ High Availability

Synology High Availability Manager (SHA) harness dual storage servers into high-availability cluster. In the event of physical server malfunction, the other working server will take over to minimize downtime and enhance overall protection.

SSD Cache

Using SSD as additional cache not only increases cache capacity, the design also leverages SSD performance to boost the system's read performance.

SRS

Businesses that adopt XS+ and XS series are entitled to receive Synology Replacement Service within the next business day after application.

> Virtualization

Synology has extensive support for virtualization solutions. In addition to Citrix®, Synology NAS servers are now also ready for VMware vSphere® 5 and VAAI, as well as Windows Server® 2012.

RAID Group

RAID group merges multiple RAID arrays to allow large volumes created on top. The design strengthens system fault-tolerance level while keeping storage utilization efficient for enterprise

▶ Global Hot Spare

Proactive global hot sparing combining with hot-swappable drives ensure continual service uptime during drives replacement.



Small and Medium Business

Synology's small and medium business storage solutions provide the foundation you need to increase performance, lower costs, simplify storage management and reach the ultimate goal of staying competitive in the long term.

Fits in perfectly today and grows with you tomorrow



DS2413+

Unparalleled Reliability & Scalability

- Dual Core 2.13GHz CPU
- 201.03 reading & 196.87 writing (MB/s) with Link Aggregation
- 96TB maximum capacity with expansion unit DX1211



DS1513+

Versatile & Reliable Task Achiever

- Dual Core 2.13GHz CPU
- Over 300 MB/s reading speed
- 60TB maximum capacity with expansion unit DX513

DS1813+

Balanced Capability & Storage Density

- Dual Core 2.13GHz CPU
- Over 300 MB/s reading speed
- 72TB maximum capacity with DX513

RS812+/RS812RP+

Smart Data Center Starts Here

- Dual Core 2.13GHz CPU
- 202.31 reading & 175.11 writing (MB/s) with Link Aggregation
- 72TB maximum capacity with expansion unit RX410

RS2212+/RS2212RP+

Pushing IT Agility & Performance to the Top

- Dual Core 2.13GHz CPU
- 200.73 reading & 194.32 writing (MB/s) with Link Aggregation
- 88TB maximum capacity with expansion unit RX1211





DS412+

Geared for Virtual Environment

- Dual Core 2.13GHz CPU
- 205.68 reading & 182.66 writing (MB/s) with Link Aggregation
- 16TB maximum capacity



DS112+

The SMB-essential Power House

- 2.0GHz CPU
- 107.92 reading & 76.66 writing (MB/s)
- 4TB maximum capacity



DS213+

Driving Performance & Energy Efficiency

- Dual Core 1.067GHz CPU
- 110.36 reading & 84.31 writing (MB/s)
- 8TB maximum capacity



DS713+

Virtualization-ready With Optimal Footprint

- Dual Core 2.13GHz CPU
- 202.3 reading & 135.84 writing (MB/s) with Link Aggregation
- 28TB maximum capacity with expansion unit DX513



Office Workgroup

SOHO workgroups can take advantage of Synology's versatile range of features and find a balance between demands of performance, storage space, energy efficiency and price.



Home and Personal

Synology's entry-level NAS server is perfect for anyone who is looking to create an environment to store and share videos, music, documents and files that matter the most.

Discover more possibilities and less complexity in your task



DS413

Power Storage with Energy Efficiency

- Performance (Read/Write): 111.12 / 80.86 (MB/s)
- CPU Frequency: Dual Core 1.067GHz
- Max. Storage Capacity: 16TB



Outstanding Performance and Value

- CPU Frequency: 2.0 GHz
- Max. Storage Capacity: 8TB



The personal cloud is right in your home

i Series 09

DS213air

Compelling Value for Work and Play

- Performance (Read/Write): 108.97 / 59.49 (MB/s)
- CPU Frequency: 1.6 GHz
- Max. Storage Capacity: 8TB



- Performance (Read/Write): 108.41 / 65.36 (MB/s)



Greater Space, Better Utilization

- Performance (Read/Write): 108.19 / 53.29 (MB/s)
- CPU Frequency: 1.6 GHz
- Max. Storage Capacity: 16TB





DS411slim

Compact Design and Capable Strengths

- Performance (Read/Write): 103.39 / 53.99 (MB/s)
- CPU Frequency: 1.6 GHz
- Max. Storage Capacity: 4TB



DS213j

Experience a Powerful Multimedia Hub

- CPU Frequency: 1.2 GHz
- Max. Storage Capacity: 8TB



DS112j

Keep it Light on Budget and Power

- Performance (Read/Write): 80.9 / 50.74 (MB/s)
- CPU Frequency: 1.0 GHz
- Max. Storage Capacity: 4TB



RS212

Tailored for Industrial Use

- CPU Frequency: 1.6 GHz
- Max. Storage Capacity: 8TB
- Withstands operating temperature up to 45°C



RS812

Scale Up the Productivity

- Performance (Read/Write): 108.07 / 61.05 (MB/s)
 Performance (Read/Write): 107.74 / 54.27 (MB/s)
 - CPU Frequency: 1.6 GHz
 - Max. Storage Capacity: 32TB (with expansion unit RX410)



DS112

- Sleek Look, Superb Value
- Performance (Read/Write): 110.19 / 71.84 (MB/s) • CPU Frequency: 1.6 GHz
- Max. Storage Capacity: 4TB

Synology Storage Expansion Solution

Managing the ever-increasing amount of data shouldn't take your time away from running your business. Synology makes upgrading storage capacity simple and easy to help you reduce IT complexity and reserve valuable resources.





RX1213sas

RX1211/RX1211RP

NAS Server	RS10613xs+	RS3413xs+	RX3412xs/RS3412RPxs	RS2212+/RS2212RP+
No. of Applicable Expansion Unit(s)	X8 unit	X2 unit	X2 unit	X1 unit
Max. No. of HDDs	106 pcs	34 pcs	34 pcs	22 pcs





DX1211

DX513

NAS Server	DS3612xs	DS2413+	DS1813+	DS1513+	DS713+
No. of Applicable Expansion Unit(s)	X2 unit	X1 unit	X2 unit	X2 unit	X1 unit
Max. No. of HDDs	36 pcs	24 pcs	18 pcs	15 pcs	7 pcs





RX410

DX213

NAS Server	RS812+/RS812RP+	RS812	DS1813+	DS1513+	DS713+
No. of Applicable Expansion Unit(s)	X1 unit	X1 unit	X2 unit	X2 unit	X1 unit
Max. No. of HDDs	8 pcs	8 pcs	12 pcs	9 pcs	4 pcs



	RX1213sas	RX1211/RX1211RP	DX1211	DX513	RX410	DX213
Expansion unit®				100		Buss)
Internal HDD	12X SATA(II)	12X SATA(II)	12X SATA(II)	5X SATA(II)	4X SATA(II)	2X SATA(II)
MAX HDD Support ⁽¹⁾	4TB	4TB	4TB	4TB	4TB	4TB
Size (mm) (HxWxD)	88X 445 X 570	88X 445 X 570	270 X 300 X 340	157 X 248 X 233	44 X 430.5 X 457.5	165 X 100 X 225.5
Volume Type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 6, RAID 10, SHR					Basic, JBOD, RAID 0/1, SHR

VisualStation	8,000
External Device Interface	4X USB 2.0
LAN	1X Gigabit LAN
Video Output	HDMI X2
Audio Output	1X 3.5mm Stereo Audio Jack
Max. Video Resolution	1080p
Max. Channel Number	24 (240FPS@720p)
Video Compression Format	MJPEG, MPEG-4, H.264
Audio Codec	PCM, ADPCM, G711, G726, AMR, AAC
Size (mm) (HxWxD)	166 X 71 X 224



Read: 205.68 MB/sec(5)

Write: 182.66 MB/sec

Dual Core 2.13 GHz

Yes

Nο

4X SATA(II)

2X USB 3.0 , 1X USB 2.0,

1X eSATA

4 Y 4TR

Access: 44W

HDD Hibernation : 15W

2,048

256

512

DS112j

Read: 80.90 MB/sec

Write: 50.74 MB/sec

1.0 GHz

No

Yes

128MB DDR2

1X SATA(II)

2X USB 2.0

1X 4TR

Access: 12.1W

Basic

Yes

512

128

64

166 X 71 X 224

Yes

128

64

165 X 203 X 233.2

1GB DDR3



⁽¹⁾ HDD not included. Check www.synology.com for compatible HDD models. (2) The power consumption value is for reference only and will vary with hard drive models and capacity. (3) 1 free license to install 11 Pc amera. Additional licenses can be purchased to expand the license quota



detailed testing numbers please visit www.synology.com (5) The performance figures were tested under Link Aggregation.

⁽⁷⁾ Expansion port carries 12Gb/s SATA signal.
(8) For more information on applied, please visit www.synology.com



System Requirements

To learn more about system requirements and limitation for each feature, please visit www.synology.com

For More Information

To learn more about Synology DiskStation & RackStation and how it can help support your data storage efforts, please visit www.synology.com

The customer is responsible for ensuring compliance with legal requirements. It is the customer's sole responsibility to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. Synology does not provide legal advice or represent or warrant that its services and products will ensure that the customer is in compliance with any law or regulation.

© Copyright Synology Incorporated

Synology Incorporated 3F-3, No.106, Chang An W. Rd., Taipei 10351, Taiwan

Produced in Taiwan March 2013 All Rights Reserved

Synology® and other Synology marks, logos and any other product or service name or slogan contained in this document are trademarks of Synology and its suppliers or licensors, and may not be copied, imitated or used, in whole or in part, without the prior written permission of Synology or the applicable trademark holder. All other trademarks, registered trademarks, product names and company names or logos mentioned in the document are the property of their respective owners.

No part of this document may be reproduced or transmitted in any form without written permission from Synology Incorporated.

Product data has been reviewed for accuracy as of the date of initial publication. Data and product information are subject to change without notice. Any statements regarding Synology's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.





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

13343 NE Bel-Red Road, Bellevue, WA 98005, USA

Synology France

9 rue Benoît Malon, 92150 Suresnes, France Tel: +33 1 46 14 87 73

Synology GmbH

Grafenberger Allee 125 40237 Düsseldorf Deutschland Tel: +49 0211 9666 9666

Synology UK Ltd.

Etheridge Avenue, Brinklow, Milton Keynes, MK10 0BP, UK Tel: +44 1908 587422