Synology®

Unified Controller

UC3200



Active-Active iSCSI Server for Mission-Critical Services

Designed for high-availability IP SAN requirements, Synology Unified Controller UC3200 offers active-active architecture for non-disruptive iSCSI services. It provides resilient data protection solutions with a simplified management interface while maximizing service uptime for critical services. UC3200 is backed by Synology's 5-year limited warranty.

Highlights

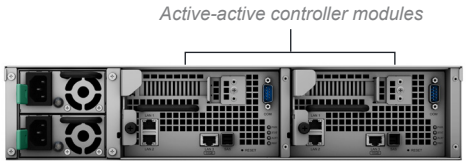
- High performance, active-active storage solution to provide non-disruptive iSCSI services
- Over 143,000 4K Random Write IOPS[1], enterprise-class performance with low latency
- Flexible capacity able to scale up to 36 drives with RXD1219sas expansion units[2]
- Virtualization-ready with VMware vSphere®, Citrix® XenServer and OpenStack® Cinder compatibility
- Resilient cache protection mechanism to prevent data loss
- Instant data protection with built-in snapshot and replication technologies
- Simple and unified user interface to effortlessly manage data and storage tasks
- Backed by Synology's 5-year limited warranty[3]

Powerful and Flexible Scalability

UC3200 is an affordable yet reliable IP SAN solution for mission-critical environments. Within the 2U chassis are **active-active controller nodes**, each powered by an **Intel® Xeon® D-1521 4-core** processor and **8 GB DDR4 ECC UDIMM**, expandable up to **64 GB**. It delivers outstanding performance of over **143,000 4K Random Write** IOPS.

UC3200 allows you to start small and grow in the future. It holds **12** x 3.5"/2.5" **SAS interface** drive slots by default, and can be further scaled up to **36** SAS drives when connected with two RXD1219sas expansion units. It comes with **single 10GbE** and **dual 1GbE** RJ-45 ports per controller and supports 10GbE / 25GbE network interface card expansion with **PCIe 3.0**, boosting network bandwidth with Link Aggregation.

Uncompromising Reliability

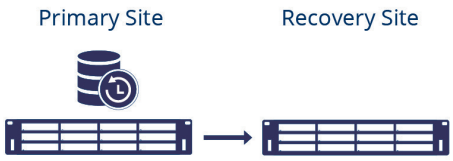


Active-Active Design

UC3200 offers non-disruptive iSCSI services through its active-active design, meeting enterprise's demand for mission-critical environments.

The **active-active** controller design maximizes the system uptime for your important applications. The inter-connectivity through **high-speed NTB (Non-Transparent Bridge)** between the two controllers allows one of them to seamlessly take over the service when the other breaks down. In addition, UC3200 syncs all cached data between the two controllers, avoiding data loss in case of controller failure before data is written into the drives. The **built-in SATA-DOM** on each controller is solely used for running the operating system, allowing system partition to be separated from data to optimize system stability.

Rock-solid Data Protection



Snapshot Replication

Snapshot Replication provides schedulable and near-instantaneous data protection. It can replicate snapshots to a remote site to ensure data integrity in case of disaster.

UC3200 supports **Synology Snapshot Replication**, which provides schedulable, near-instantaneous data protection for mission-critical services. It supports up to 4,096 system-wide replications to offsite servers and local volumes, allowing for application-aware snapshot protection and instant recovery of virtual machines in iSCSI LUNs in the event of a disaster.



Virtualization Ready

UC3200 is an optimized and certified storage solution for various virtualization environments.

Non-disruptive iSCSI Service for Virtualization

UC3200 enhances work efficiency with a simple management interface. **VMware vSphere® 6.5 and VAAI integration** helps offload storage operations and optimizes computational efficiency. **Windows Offloaded Data Transfer (ODX)** speeds up data transfer and migration rates, while support for **OpenStack Cinder** transforms your UC3200 into a block-based storage component.

UC3200 also complies with the iSCSI industrial standard **ALUA**, allowing hosts to identify optimized paths to increase transfer performance and efficiency.

Simple and Intuitive Management

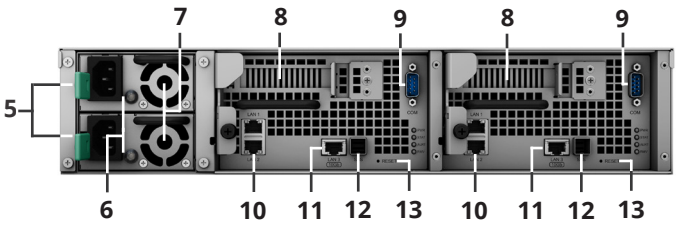
Powered by **DSM UC** operating system, UC3200 offers comprehensive functionalities while keeping the intuitive DSM experience to ease the learning curve. The **simplified management interface** allows you to manage the two controllers from a single management portal. The **built-in monitor function** gives the most updated status in real time and provides prompt notifications when important events occur, allowing IT administrators to respond accordingly.

Hardware Overview

Front



Rear



1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	Power port	6	PSU indicator and beep off button	7	PSU fan	8	PCIe expansion slot
9	Console port	10	1GbE RJ-45 port	11	10GbE RJ-45 (10GBase-T) port	12	Expansion port
13	Reset button						

Technical Specifications

Hardware

CPU (per controller)	Intel Xeon D-1521 4-core 2.4 GHz, Turbo Boost up to 2.7 GHz
Hardware encryption engine	Yes (AES-NI)
Memory (per controller)	8 GB DDR4 ECC UDIMM (expandable up to 64 GB)
Compatible drive type	12 x 3.5"/2.5" SAS SSD/HDD (drives not included)
Hot swappable drive	Yes
External port (per controller)	1 x expansion port
Size (HxWxD)	• 88 x 430.5 x 692 mm • 88 x 482 x 724 mm (with server ears)
Weight	19.7 kg
LAN (per controller)	• 2 x 1GbE RJ-45 • 1 x 10GbE RJ-45 (10GBASE-T)
PCIe 3.0 slot (per controller)	• 1 x 8-lane x8 slot • 10GbE/25GbE network interface card support
System fan	4 (60 x 60 x 51 mm)
AC input power voltage	100 V to 240 V AC
Power frequency	50/60 Hz, single phase
Operating temperature	0°C to 35°C (32°F to 95°F)
Storage temperature	-20°C to 60°C (-5°F to 140°F)
Relative humidity	5% to 95% RH
Maximum operating altitude	5,000 m (16,400 ft)

General OS specification

Networking protocol	iSCSI, Telnet, SSH, SNMP
File system	Btrfs (internal only)
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1
Storage management	• Maximum single volume size: 108 TB (at least 32 GB RAM required, for RAID 5 or RAID 6 groups only) • Maximum system snapshots: 4,096[4] • Maximum internal volume: 32
SSD cache	Read-write cache support
Virtualization	VMware vSphere® 6.5, Microsoft Hyper-V®, Citrix®, OpenStack®
Supported client	Windows Server® 2008 onwards, VMware® 5 onward, Oracle® Solaris 10 onward, Citrix® XenServer 7.2 onward, SUSE® Linux ES 11 onward, Red Hat® ES 6.10 onward
Supported browser	Chrome®, Firefox®, Edge®,Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets
Interface Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

Packages and Applications

iSCSI Storage	
iSCSI Manager	• Maximum iSCSI target: 128 • Maximum iSCSI LUN: 128 • iSCSI LUN clone/snapshot support
Data Protection	
Snapshot Replication	Maximum of Replication: 32

Environment and Packaging

Environment safety	RoHS compliant
Package content	• UC3200 main unit x 1 • Quick Installation Guide x 1 • Accessory pack x 1 • AC power cord x 2
Optional accessories	• 8 GB DDR4-2666 ECC UDIMM (D4EC-2666-8G)/16 GB DDR4-2666 ECC UDIMM (D4EC-2666-16G) • Synology E10G17-F2/E10G18-T1/E10G18-T2 10Gbps Ethernet adapters • Synology RKS1317 - Rail Kit Sliding • Synology Expansion Unit RXD1219sas
Warranty	5 years[3]

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

1. Performance figures may vary depending on environment, usage, and configuration.
2. UC3200 can scale up to 36 drives with 2 x RXD1219sas, sold separately.
3. The warranty period starts from the purchase date as stated on your purchase receipt. Visit https://www.synology.com/company/legal/warranty for more information.
4. System snapshot includes snapshots taken by iSCSI Manager and Snapshot Replication.

SYNOLOGY INC.

Synology creates network-attached storage, IP surveillance solutions, and network equipment that transform the way users manage data, conduct surveillance, and manage networks in the cloud era. By taking full advantage of the latest technologies, Synology aims to help users centralize data storage and backup, share files on-the-go, implement professional surveillance solutions, and manage networks in reliable and affordable ways. Synology is committed to delivering products with forward-thinking features and the best in class customer services.

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UC3200-2019-ENU-REV001

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