

Unified Controller UC3200



Active-Active SAN Storage for Mission-Critical Services

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

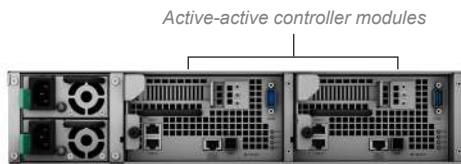
Highlights

- High performance, active-active SAN storage solution supporting Fibre Channel (FC)³/iSCSI protocols to provide uninterrupted services
- Over 140,000 4K Random Write IOPS,¹ enterprise-class performance with low latency
- Flexible capacity can be scaled up to 36 drives with RXD1219sas expansion units²
- Easily manage LUN provisioning and backups, with snapshot and replication capabilities
- Maintain data integrity with built-in memory cache protection across both controller nodes
- Virtualization-ready with VMware vSphere®, Microsoft Hyper-V®, Citrix® XenServer and OpenStack® Cinder compatibility
- Backed by Synology's 5-year limited warranty⁴

Powerful and Flexible Scalability

UC3200 is a cost-efficient and reliable SAN solution supporting Fibre Channel (FC)³/iSCSI protocols for mission-critical environments. Within the 2U chassis are **active-active controller nodes**, each powered by an **Intel® Xeon® D-1521 quad-core** processor. It delivers over **140,000 4K Random Write IOPS** to support a wide range of workloads.

UC3200 lets you to start small and scale whenever needed. The host chassis holds **12 x 3.5"/2.5" SAS interface** drives, and can be further scaled up to **36 SAS** drives when connected with two 12-bay RXD1219sas expansion units. Networking can be expanded from the default **10GbE** and dual 1GbE RJ-45 ports with additional 10GbE / 25GbE NIC cards or with 16Gb FC host bus adapters on each controller.

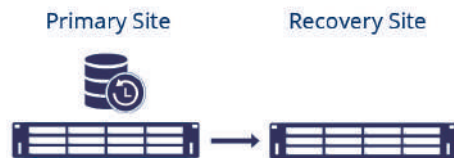


Active-Active Design

UC3200 offers uninterrupted services through its active-active design, meeting enterprise demand for mission-critical environments.

Uncompromising Reliability

The **active-active** controller design maximizes system uptime for any mission-critical applications. The inter-connectivity through **high-speed NTB (Non-Transparent Bridge)** between the two controllers allows for seamless transitions between nodes should one module become unavailable. Data in flight is better protected with a synchronized memory cache architecture between the two controllers.



Snapshot Replication

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

Built-in Data Protection

UC3200 supports **Synology Snapshot Replication**, which provides schedulable, near-instantaneous data protection for LUNs. It supports up to 4,096 system-wide snapshots and the ability to easily replicate data to a backup system. Application-aware snapshots and fast recovery options enable IT teams to quickly roll back any unintended changes.

Fibre Channel Ready

UC3200 fully supports **Fibre Channel** environments. Compared to Ethernet, Fibre Channel has less overhead, enabling even higher performance and lower latency.

Managing the UC3200 in a FC environment is simple and done through the same management interface, Synology SAN Manager. Existing Synology tools for virtualization, such as Storage Console for VMware and Windows Servers work seamlessly regardless of protocol.



Virtualization Ready

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

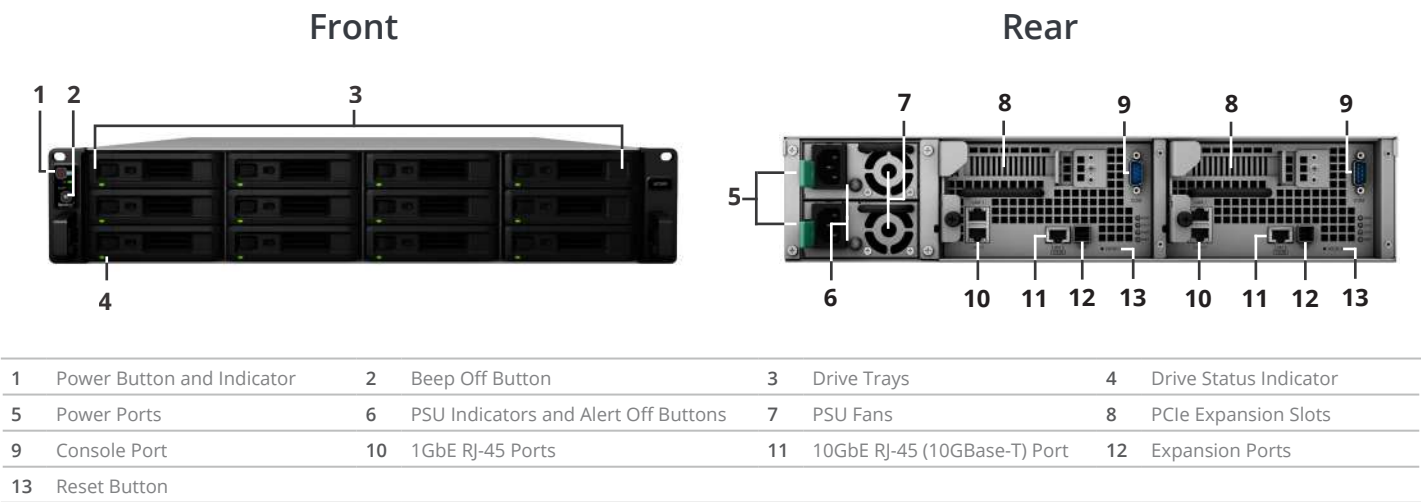
Uninterrupted iSCSI Service for Virtualization

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 location.

Simple and Intuitive Management

Powered by the **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



| | | | | | | | |
|----|----------------------------|----|--------------------------------------|----|------------------------------|----|------------------------|
| 1 | Power Button and Indicator | 2 | Beep Off Button | 3 | Drive Trays | 4 | Drive Status Indicator |
| 5 | Power Ports | 6 | PSU Indicators and Alert Off Buttons | 7 | PSU Fans | 8 | PCIe Expansion Slots |
| 9 | Console Port | 10 | 1GbE RJ-45 Ports | 11 | 10GbE RJ-45 (10GBase-T) Port | 12 | Expansion Ports |
| 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 types | 12 x 3.5"/2.5" SAS SSD/HDD (drives not included) |
| Hot swappable drive | Yes |
| External ports (per controller) | 1 x expansion port |
| Size (HxWxD) | <ul style="list-style-type: none">88 x 430.5 x 692 mm88 x 482 x 724 mm (with server handles) |
| Weight | 19.7 kg |
| LAN ports (per controller) | <ul style="list-style-type: none">2 x 1GbE RJ-451 x 10GbE RJ-45 (10GBASE-T) |
| PCIe 3.0 slots (per controller) | <ul style="list-style-type: none">1 x 8-lane x8 slot10GbE/25GbE network interface card support16GFC host bus adapter card support |
| System fans | 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

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|----------------------|--|
| Networking protocols | Fibre Channel, iSCSI, Telnet, SSH, SNMP |
| File systems | Btrfs (internal only) |
| Supported RAID types | Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1 |
| Storage management | <ul style="list-style-type: none">Maximum single volume size: 108 TBMaximum system snapshots: 4,096⁵Maximum internal volume: 32 |
| SSD cache | Read-write cache support |
| Virtualization | VMware vSphere® 6.5, Microsoft Hyper-V®, Citrix®, OpenStack® |
| Supported clients | 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 browsers | Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets |
| Interface Languages | English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ไทย, 日本語, 한국어, 繁體中文, 简体中文 |

Packages and Applications

| | |
|----------------------|---|
| SAN Storage | |
| SAN Manager | <ul style="list-style-type: none">Maximum iSCSI target: 128Maximum LUN: 128LUN clone/snapshot support |
| Data Protection | |
| Snapshot Replication | Maximum of Replication: 32 |

Environment and Packaging

| | |
|----------------------|--|
| Environment safety | RoHS compliant |
| Package contents | <ul style="list-style-type: none">UC3200 main unit x 1Quick Installation Guide x 1Accessory pack x 1AC power cord x 2 |
| Optional accessories | <ul style="list-style-type: none">DDR4 ECC UDIMM: D4EC-2666-8G/D4EC-2666-16GExpansion Units: RXD1219sas10GbE Network Interface Card: E10G18-T2/E10G18-T1/E10G17-F225GbE Network Interface Card: E25G21-F2Rail Kit Sliding: RKS1317 |
| Warranty | 5 years ⁴ |

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

- Performance figures may vary depending on environment, usage, and configuration.
- UC3200 can scale up to 36 drives with 2 x RXD1219sas, sold separately.
- Synology SAN Manager and Fibre Channel support are available from DSM UC 3.1. Requires a compatible FC host bus adapter, sold separately.
- 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.
- System snapshot includes snapshots taken by SAN Manager and Snapshot Replication.

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