

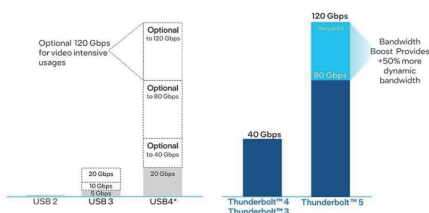
# ARC-8050T5U Rackmount

Thunderbolt™ 5 Technology



## Highlights

- High performance 80 and 120 Gbps Thunderbolt 5 interface
- Support simultaneous Dual 6K in/output workflow
- Support a USB-C computer port
- Fully support Apple silicon on Macs
- Configuration by the Thunderbolt / LAN port / LCD
- Support RAID level 0, 1, 10(1E), 3, 5, 6, 30, 50, 60, Single Disk or JBOD
- 1m Thunderbolt™ 5 (USB-C) cable included
- Advanced configuration for video optimized performance settings
- Delivers enterprise-class data protection and security
- Controller-level hardware encryption
- SED (self-encrypting drives) function support
- Intelligent power On/Off function for data integrity
- Hard drive firmware update all at once



## Thunderbolt ARC-8050T5U Rackmount

### Unleash Your Creativity Faster Than Ever

Thunderbolt™ 5 brings USB-C speeds up to 80 and 120 Gbps, offering an ultra-fast, versatile connection for docks, displays, and storage devices. The ARC-8050T5U Rackmount features dual Thunderbolt 5 ports for seamless connectivity with Thunderbolt 5-enabled hosts and an additional USB-C port for expanded compatibility. Supporting simultaneous Dual 6K in/output workflows, it's built for professionals working with ultra-high-resolution media and data-heavy tasks. Thunderbolt daisy-chaining allows the connection of up to six devices, expanding storage while maintaining a single high-speed link to the host. The ARC-8050T5U Rackmount provides advanced video-optimized configuration, enterprise-class data protection, and controller-level hardware encryption, including self-encrypting drive (SED) support. It also features intelligent power On/Off for data integrity and supports simultaneous hard drive firmware updates. A 1m 80/120 Gbps Thunderbolt™ 5 (USB-C) cable is included for optimal performance from the start.

### Unparalleled Performance for Dual 6K Workflow

ARC-8050T5U Rackmount is a high-performance 12/16/24-bay Thunderbolt 5 SAS/SATA RAID storage solution designed for both PC and Mac. Equipped with dual Thunderbolt 5 ports, it delivers up to 120 Gbps bandwidth, ensuring seamless data transfers for demanding high-resolution workflows. Its hardware RAID controller, enterprise-class data protection, and controller-level encryption provide both speed and security, making it ideal for video professionals. Optimized for real-time multi-stream editing, ARC-8050T5U Rackmount maintains smooth playback and file transfers without performance drops. Supporting simultaneous Dual 6K in/output, it allows editors to work with ultra-high-resolution media while connecting additional peripherals via Thunderbolt daisy-chaining. With intelligent power management and streamlined firmware updates, it ensures efficiency and reliability for modern video production.

### Enterprise-class Data Availability and Security

Designed for professionals, the ARC-8050T5U Rackmount delivers enterprise-class data availability and security. It features redundant, hot-swappable cooling fans, disks, and power supply units to ensure continuous operation. The controller-level RAID engine, supporting RAID 6, protects against dual drive failures without compromising data integrity or performance. The intelligent power On/Off function synchronizes with the host computer, automatically powering down when the system shuts off for enhanced data protection. ARC-8050T5U Rackmount supports self-encrypting drives (SED) and board-level hardware encryption, securing all attached storage without performance loss. With advanced configuration for video-optimized performance and seamless firmware updates, it provides a reliable, secure storage solution for critical workloads.

### Enabling an Easy-to-Manage Storage

Configuration and monitoring are easily managed via the LCD control panel, Thunderbolt, or LAN port. The ArcSAP quick manager, a multi-language management software, simplifies setup and control of the ARC-8050T5U Rackmount. Its intelligent cooling system adapts to environmental conditions, automatically adjusting fan speeds to meet the demands of video editing. Drives can also be configured to spin down during inactivity, reducing noise and conserving energy.

## Controller Architecture

- Dual Core ARM A15 1.6GHz ROC
- 8GB DDR4-2666 SDRAM with ECC protection
- Redundant flash image for adapter availability
- System status monitoring via LCD panel, LED indicators, and alarm buzzer
- Flash-based cache backup support (optional)
- High-performance 80 and 120 Gbps Thunderbolt 5 interface

## RAID Features

- RAID level 0, 1, 1E, 3, 5, 6, 10, 30, 50, 60, Single Disk or JBOD
- Multiple RAID selection
- Support up to 1MB stripe size
- Online array roaming
- Online RAID level/stripe size migration
- Support global hot spare and local hot spare
- Instant availability and background initialization
- Advanced configuration for smooth data streaming
- Disk scrubbing/ array verify scheduling support
- Multiple pairs SSD/HDD disk clone function
- SSD automatic monitor clone (AMC) support
- SED support for hardware encryption capable drives
- Support HDD firmware update
- Support controller-based hardware encryption for security
- Complete configuration management suite
  - McRAID manager – browser-based management tool (LAN or Thunderbolt)
  - Push Buttons and LCD Display panel for setup and status
  - Command Line Interface (CLI)- scriptable configuration tool
  - API libraries support - combine GUI with user management utility
  - SNMP support for remote monitoring
  - SMTP support for email notification

## System Environment

- Operating Temperature : 0 ~ 35 °C
- Operating Humidity : 5% ~ 95 %, Non-condensing
- Power Dissipation : 25.3W/-24R, 22W/-12R

## Function Advantages

<b>Feature 1</b>	USB-C Computer Port Compatibility Mode
Supports basic compatibility when ARC-8050T5U is connected to a USB-C computer port.	
<b>Feature 2</b>	Advanced Configuration
Provide optimized parameter to adjust controlled firmware behavior for smooth data streaming.	
<b>Feature 3</b>	Controller-level Hardware Encryption
Board-level hardware encryption manages any kinds of drives attached to ARC-8050T5U without impacting the performance for higher levels of security.	
<b>Feature 4</b>	Flash-based Cache Backup Module Support
Supports a Flash-based cache backup module that protects all data in cache memory in the event of unexpected power outage for data availability.	
<b>Feature 5</b>	Intelligent Power On/Off Function
Turns ARC-8050T5U power in unison with the host computer power status for data integrity.	
<b>Feature 6</b>	Front Panel LCD and Buttons
Easy access for configuration and status report.	
<b>Feature 7</b>	Network Interface
Embedded web server for remote control from one 10/100 Ethernet (RJ-45).	

## Product Features

Form Factor	12/16/24-Bay 19-inch Rackmount Chassis
Connection Port	2 x Thunderbolt 5 or 2 x USB 3.2 Gne 2
Disk Support	12/16/24 x 12Gb/s SAS/SATA 3.5"/2.5"HDDs/SSDs
OS Support	macOS 15.0 or later & Windows 11 or later
Enclosure Management	Thunderbolt Port, LAN Port, and LCD
Expansion Support	One SFF-8644 expansion up to 256 HDDs
Computer Host Port	Works with any Thunderbolt 5   Thunderbolt 4   Thunderbolt 3 (Mac Only)   USB4 or USB 3.2 Gne 2
Cooling Fan	2/4 * redundant fan
Power Supply/In/out	2 redundant 550W power(100-240V,50/60Hz)
Dimension (W x H x D) (Without handles)	• ARC-8050T5U-12R : 88.2 x 445 x 448 mm • ARC-8050T5U-16R : 132.6 x 445 x 448 mm • ARC-8050T5U-24R : 176.4 x 445 x 448 mm
Weight (W/O Drives)	12-bay: 59.5 lbs / 27Kg ; 16-bay: 68.3 lbs / 31Kg 24-bay: 75 lbs / 34Kg



**Thunderbolt 5 Thchnology**



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