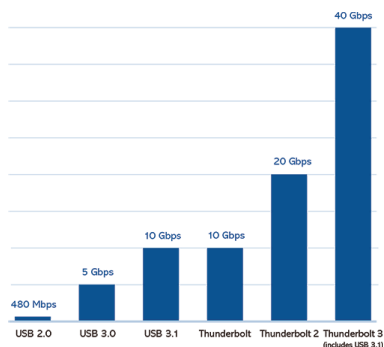# areca®

ARC-8050T3 Rackmount

Thunderbolt™ 3 Technology

THUNDERBOLT™

Highlights

- High performance 40Gbps Thunderbolt 3 interface

- Support simultaneous 4K in/output workflow

- Dual Thunderbolt 3 ports for daisy-chaining

- EFI Option ROM supported for macOS multi-boot

- Configuration by the Thunderbolt /LAN port/LCD

- Support bootable drive via Thunderbolt

- Advanced configuration for video optimized performance settings

- Delivers enterprise-class data protection and security

- Controller-level hardware encryption

- Support FBM/BBM option for cache protection

- Intelligent power On/Off function for data integrity

- Thunderbolt 3 (USB-C) cable included

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                                              40 Gbps

                                       20 Gbps

                         10 Gbps  10 Gbps
                  5 Gbps
       480 Mbps
       USB 2.0  USB 3.0  USB 3.1  Thunderbolt  Thunderbolt 2  Thunderbolt 3
                                                              (includes USB 3.1)
```

Thunderbolt ARC-8050T3 Rackmount

Unleash Your Creativity Faster Than Ever

Thunderbolt™ 3 brings Thunderbolt to USB-C at speeds up to 40 Gbps, creating one compact port that does it all – delivering the fastest, most versatile connection to any dock, display, or data device. ARC-8050T3 rackmount is equipped with dual Thunderbolt 3 ports for connecting to any Thunderbolt 3-enabled host and offers an additional Thunderbolt 3 port for daisy-chaining other peripherals, while also supplying power for quick notebook charging. Thunderbolt daisy-chaining allows connection of up to six devices, so customers can connect ARC-8050T3 rackmount for massive amounts of video storage with a single Thunderbolt connection to their host computer. ARC-8050T3 rackmount can meet the demand of users when working with rich, ultra-high resolution media through Thunderbolt 3 interface. ARC-8050T3 rackmount also sports a full sized DisplayPort video output on its rear, allowing for a quick and easy 4K 60Hz display setup.

Unparalleled Performance for 4K Workflow

ARC-8050T3 rackmount is the 12/24-bay Thunderbolt 3 rackmount SAS/SATA RAID storage with RAID control capabilities solution for both PC and Mac. ARC-8050T3 rackmount incorporated on-board 1.2GHz dual core ROC and 2GB DDR3-1866 ECC SDRAM memory to deliver true high performance hardware RAID protection against drive failure.This combination helps to provide a high performance storage device perfect for the video editor working with Real time multi-stream HD and 4K workflows. It runs efficiently without disruption or major drops in performance to meet the requirements of 4K data workflow. It is so quick it allows for 4K displays at the same time as daisy chaining ARC-8050T3 rackmount and doing a simultaneous 4K output and file transfers while maintaining maximum throughput.

Enterprise-class Data Availability and Security

With components redundancy, the ARC-8050T3 rackmount gives professionals enterprise data availability and security. Cooling fans, disks, and power supply units are fully redundant, hot-swappable capability, and user-serviceable. Hardware RAID 6 engine provides two HDDs failures without impacting the existing data and performance. Intelligent power On/Off function on storage turns power in unison with the host computer power status. It can intelligently power down the unit after the thunderbolt host shuts down everything for data integrity. ARC-8050T3 rackmount also supports a flash-based/battery backup option that protects all data in cache memory in the event of unexpected power outage. Board-level hardware encryption manages any kinds of drives attached to ARC-8050T3 rackmount without impacting the performance for higher levels of security.

Enabling an Easy-to-Manage Storage

Configuration and monitoring can be managed either through the LCD control panel, Thunderbolt interface or LAN port. The ArcSAP quick manager is a multi-language management software specifically designed for managing and configuring the ARC-8050T3 rackmount. The intelligent cooling continuously adapts to environmental conditions by automatically controlling the speed of the cooling fans for the rapidly growing demand from the video editing markets. You can even configure ARC-8050T3 rackmount to intelligently spin down drives during periods of inactivity to further reduce noise and save energy.

Controller Architecture

- 1.2 GHz dual core ROC for RAID core and SAS microcode
- 2GB on-board DDR3-1866 SDRAM with ECC protection
- Redundant flash image for adapter availability
- System status indication through LCD, LED and alarm buzzer
- FBM/BBM backup module ready (optional)

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 (Self-encrypting drives) function support
- Support HDD firmware update
- Support for native 4K and 512 byte sector SAS and SATA devices
- 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

Feature 1	Bootable Drive Support
Provides user the capability of adding bootable drive via Thunderbolt on Apple thunderbolt-capable machine.	

Feature 2	Advanced Configuration
Provide optimized parameter to adjust controlled firmware behavior for smooth data streaming.	

Feature 3	Controller-level Hardware Encryption
Board-level hardware encryption manages any kinds of drives attached to ARC-8050T3 without impacting the performance for higher levels of security.	

Feature 4	FBM/BBM Support
Supports a flash-based/battery backup option that protects all data in cache memory in the event of unexpected power outage for data availability.	

Feature 5	Intelligent Power On/Off Function
Turns ARC-8050T3 power in unison with the host computer power status for data integrity.	

Feature 6	Front Panel LCD and Buttons
Easy access for configuration and status report.	

Feature 7	Network Interface
Embedded web server for remote control from one 10/100/1000 Ethernet (RJ-45).	

Product Features

Form Factor	12/24-Bay 19-inch Rackmount Chassis
Host Connection	Thunderbolt 3 x 2 / Display Port x 1
Disk Support	12/24 x 12Gb/s SAS/SATA 3.5"/2.5"HDDs/SSDs
OS Support	macOS 10.12 or later & Windows 8/10 or later
Enclosure Management	Thunderbolt Port, LAN Port, and LCD
Expansion Support	One SFF-8644 expansion up to 512 HDDs
Cooling Fan	2/4 * redundant fan
Power Supply/In/out	2/3 * redundant 400W power (100-240V,50/60Hz)
Dimension (W x H x D) (Without handles)	• ARC-8050T3-12R 2U: 88.2 x 445 x 448 mm (3.5 x 17.5 x 17.6 in) • ARC-8050T3-24R 4U: 176.4 x 445 x 448 mm (6.9 x 17.5 x 17.6 in)
Weight (W/O Drives)	12-bay: 59.5 lbs / 27Kg ; 24-bay: 75 lbs / 34Kg

Thunderbolt 3 Technology

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At the Heart of Storage