areca®

ARC-8050T3 SAN

Thunderbolt™ 3 Technology

THUNDERBOLT™

Highlights

- High performance 40Gbps Thunderbolt 3 interface

- Support simultaneous 4K in/output workflow

- 24-bays SAN storage for 9 users

- Configuration by the Thunderbolt /LAN port/LCD

- 4GB ECC SDRAM memory

- Advanced configuration for video optimized performance settings

- Delivers enterprise-class data protection and security

- SED-level hardware encryption

- Support flash-based/battery option for cache protection

Thunderbolt ARC-8050T3 SAN

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 SAN is a storage solution that offers 9 x Thunderbolt 3 ports allowing connection to nine clients which are able to simultaneously edit, transfer and share data on PCIe RAID storage over Thunderbolt connection at unprecedented speeds. The reserved Mac mini caddy on 4U 24-bays enclosure is the best solution for adding one Mac mini server and computer to an ARC-8050T3SU4 rack chassis. ARC-8050T3 SAN leverages Thunderbolt interface and transforms it into a more flexible Thunderbolt SAN architecture and eliminates the high costs of Fibre Channel SAN or 10 Gigabit Ethernet.

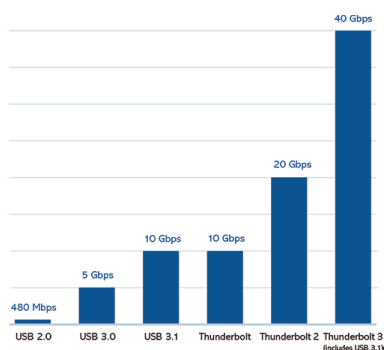### Unparalleled Performance for 4K Workflow

ARC-8050T3 SAN is a 24-bay Thunderbolt 3 rackmount SAS/SATA RAID storage with RAID control capabilities solution for both PC and Mac. ARC-8050T3 SAN incorporated on-board 1.2GHz dual core ROC and 4GB 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. The SAN RAID storage solution can support capacity expansion by adding expander enclosures. You can gradually expand the storage up to 512 Hdds through the expander enclosures.

Enterprise-class Data Availability and Security

With full component redundancy, the ARC-8050T3 SAN gives professionals enterprise data availability and security. Cooling fans, disks, and power supply units are fully redundant, hot-swappable capability, and user-serviceable. The hardware RAID 6 engine provides two HDDs failures without impacting the existing data and performance. ARC-8050T3 SAN also supports a flash-bases/battery backup option that protects all data in cache memory in the event of unexpected power outage. SED-level hardware encryption manages the ISE, FIPS and SED drives attached to ARC-8050T3 SAN 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 SAN. 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 SAN to intelligently spin down drives during periods of inactivity to further reduce noise and save energy.

Bar chart of interface speeds:
- USB 2.0: 480 Mbps
- USB 3.0: 5 Gbps
- USB 3.1: 10 Gbps
- Thunderbolt: 10 Gbps
- Thunderbolt 2: 20 Gbps
- Thunderbolt 3 (includes USB 3.1): 40 Gbps

Controller Architecture

- 1.2 GHz dual core ROC for RAID core and SAS microcode
- 4GB on-board SDRAM with ECC protection
- Redundant flash image for adapter availability
- System status indication through LCD, LED and alarm buzzer
- Flash-based/battery 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
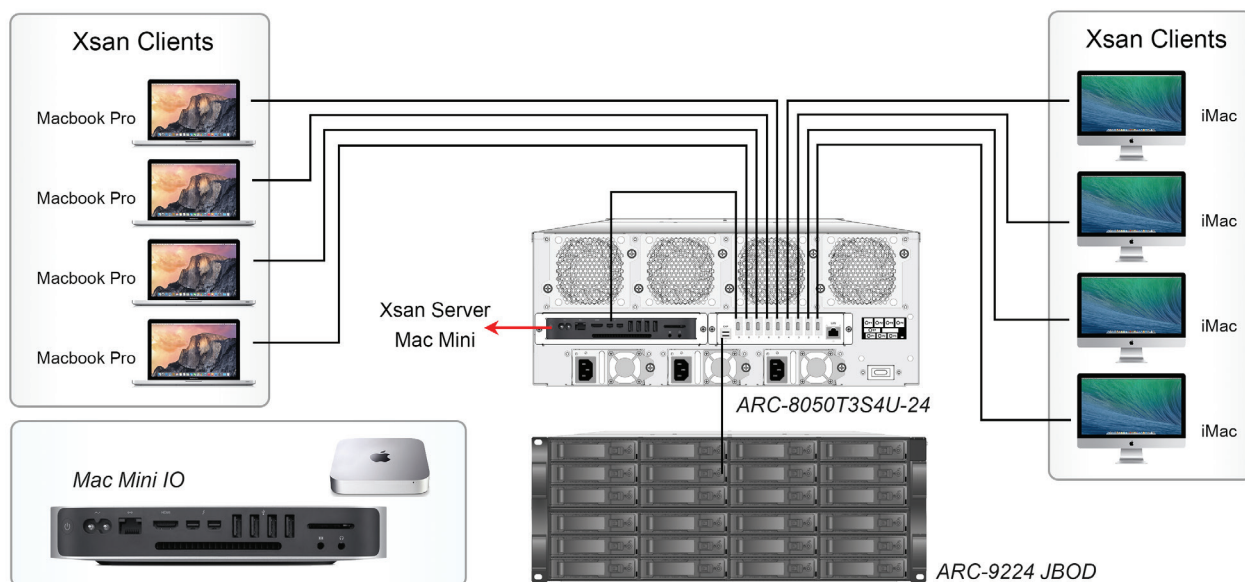 - SMTP support for email notification

System Environment

- Operating Temperature : 0 ~ 35 ˚C
- Operating Humidity : 5% ~ 95 %, Non-condensing

Function Advantages

Feature 1	Advanced Configuration

Provide optimized parameter to adjust controlled firmware behavior for smooth data streaming.

Feature 2	SED-level Hardware Encryption

SED-level hardware encryption manages the ISE, FIPS and SED drives attached to ARC-8050T3 without impacting the performance for higher levels of security.

Feature 3	Flash-based/Battery Backup Module Support

Supports a battery backup option that protects all data in cache memory in the event of unexpected power outage for data availability.

Feature 4	SAN Architecture For Thunderbolt 3

Provide up to 9 Thunderbolt 3 host ports to access the RAID storages.

Feature 5	Front Panel LCD and Buttons

Easy access for configuration and status report.

Feature 6	Network Interface

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

Product Features

Form Factor	24-Bay 19-inch Rackmount Chassis
Host Connection	Thunderbolt 3 x 9
Disk Support	24 x 12Gb/s 3.5"/2.5" SAS/SATA Disks
OS Support	macOS 10.12 or later & Windows 8/10
Enclosure Management	Thunderbolt Port, LAN Port, and LCD
Expansion Support	One SFF-8644 expansion up to 512 HDDs
Cooling Fan	4 * redundant fan
Power Supply/In/out	3 * redundant 400W power (100-240V,50/60Hz)
Dimension (W x H x D) (Without handles)	176.4 x 445 x 448 mm (6.9 x 17.5 x 17.6 in)
Weight (W/O Drives)	75 lbs / 34Kg

Xsan Clients — Macbook Pro / iMac

Mac Mini IO

Xsan Server Mac Mini

ARC-8050T3S4U-24

ARC-9224 JBOD