

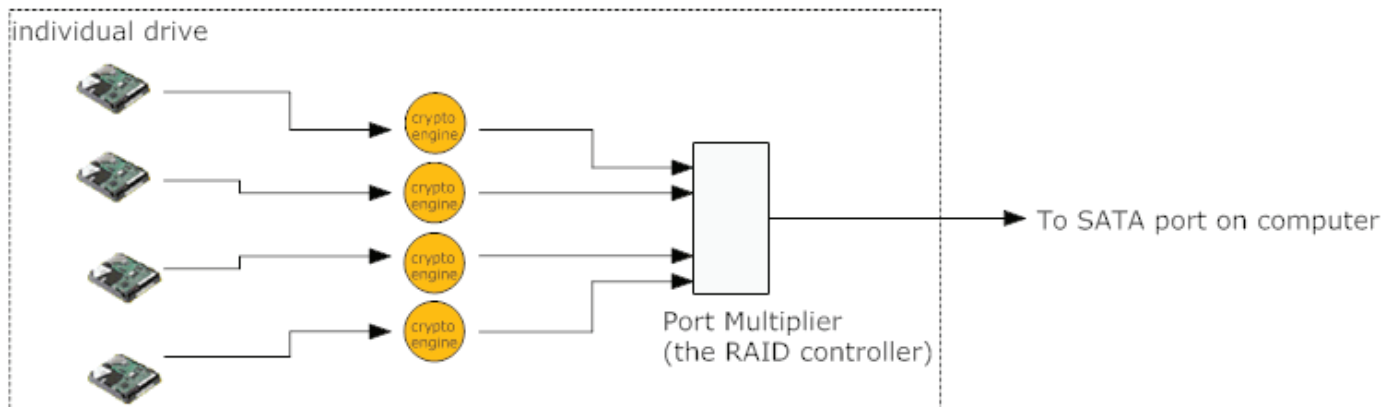
INTRODUCTION

This Cipher RAID Tower combines the small foot print of the Addonics mini storage tower together with the Ruby Cipher drive cartridge system. Designed using the Drive Level Encryption (DLE) architecture to provide superior performance and bullet proof AES 256-bit full disk hardware encryption, as many as four 2.5" hard drive can be installed into this tower and connect to any system via eSATA or USB 3.0/2.0 connection. The drives can be configured as RAID 0, 10, or 5. Other than the insertion of the encryption keys during the initial power up, the Cipher RAID Tower operates and performs just the same as an ordinary RAID system.

The DLV approach deploys one crypto engine per drive in the RAID set. It ensures maximum RAID performance but at a higher cost. Also the operation of the Cipher RAID Tower requires one Cipher key for each drive in the RAID group.



Cipher RAID Tower



Below is a summary of the PROs and CONs for the two RAID architectures:

| | DLE | RVE |
|--------------------------|--|--|
| encryption architecture | one crypto engine per drive | one crypto engine per RAID set |
| Performance | maximum 300 MB/sec depending on the speed of the SATA port | Maximum 150 MB/sec |
| Cost | higher | lower |
| Operation | requires multiple Cipher keys depending on the # of drives in the RAID set | one Cipher key to activate the Cipher RAID Tower |
| level of security | AES 256-bit full disk encryption, each drive can be encrypted with different cipher key code | AES 256-bit full disk encryption. Each drive uses the same Cipher key code |
| recommended applications | Video editing, high performance computing that require sustained throughput over 150 MB/sec | General office server application, file back up, database, web server, email server, video server and others |

FEATURES

- Install up to four 2.5" SATA hard drives of any capacity (drives not included)
- Connect to system via USB 3.0/2.0 or eSATA port (connecting cables are included)
- Drive level Encryption (DLE), one cipher key per drive
- FIPS certified AES 256-bit crypto engine
- Built-in RAID accelerator for high performance
- Drives are installed onto drive enclosures that can be added or removed like tape cartridge from each drive bay.
- Drives can be configured as RAID0 (Striping), RAID1 (Mirroring), RAID 5 (Parity), RAID10 (Mirrored Striped), JBOD (Concatenation), Clone Mode (N-Way Mirror) using built-in hardware RAID or as five individual drives without RAID
- Individual drive setting requires connecting to Port Multiplier compatible controller or USB port
- RAID setting via software utility under Windows or via dip switches on the back
- OS independent, can be used on any system
- RAID diagnostic via LED light or utility software under Window

Components list made up this model:

Mini Storage Tower (MST-B with SCSI-I back panel), 1 unit HPM-XU (AD5HPMREU), 4 units Ruby Cipher Drive Cartridge System with AES 256-bit encryption (RCDCS256S), 4 pairs of AES 256-bit Cipher keys (AAENKEY256-2), 6 feet A-B USB cable (AAUSBAB6F), 3 feet eSATA cable (AAESATA100C), 3 feet USB 3.0 cable (AAU3AB6F)

Note: As a standard set up, all cipher keys are coded the same. You may request to code them differently by leaving us a note in the instruction box at the final check out on our online store



SPECIFICATIONS

- Built-in four (4) Ruby Cipher drive cartridge systems
- Maximum # of drives installable - four (4) 2.5" SATA HDD or SSD
- Connectors on back of unit
 - 1 eSATA port
 - 1 USB 3.0/2.0 port
- Encryption
 - Encryption level - AES 256-bit
 - Architecture - DLE, one crypto engine per RAID volume
- Integrated Port Multiplier model (AD5HPMREU)Build in RAID accelerator
- Support type of RAID - RAID 1, 0, 10, 5, 5+S, Clone Mode
- Support JBOD (individual drive) mode when connects to PM compatible eSATA port or USB port
- Dip switches on back of unit for RAID configuration
- RAID monitor via LED lights or software
- Drives are installed into removable drive enclosures
- Hot swap support
- OS independent