# CIPHERTEX® data security

**PROUDLY MADE IN THE USA**

**AES ENCRYPTION 256**
**FIPS Level 3 Certified 140-2**
**SUPERSPEED+ CERTIFIED USB 10Gbps**
**40 GbE**
**100 GbE**

**CIPHERTEX® OS OPERATING SYSTEM**

**Ciphertex-Protect® Encryption Keys**

**UP TO 420 TB NVMe**

# SecureNAS® CX-140KNVMe

*Information in this data sheet applies to models:*
*SNCX-140KNVME-4C-32G-105TB     SNCX-140KNVME-4C-32G-210TB     SNCX-140KNVME-4C-32G-420TB*

## Blazing-Fast NVMe Server for Accelerated Data Access and Critical Workloads (28TB - 420TB All-NVMe Storage)

This high-capacity, reliable enterprise NAS is powered by an AMD® EPYC® Series (ROME) processor. It offers support for up to fourteen hot-swappable NVMe SSDs and two internal 2.5" SSDs for the operating system. Featuring built-in Intel® AES-NI technology, the durable **SecureNAS® CX-140KNVMe** enables fast and secure data encryption and decryption for a variety of cryptographic applications, providing strong security and reducing latency. With two PCIe slots, it allows for the expansion of network interface cards, optimizing your enterprise IT infrastructure. Designed with security and scalability in mind, the **SecureNAS® CX-140KNVMe** offers cross-platform file sharing, comprehensive backup and disaster recovery, iSCSI & virtualization, and various other business applications, making it the ideal choice for a complete business-ready storage solution. The rugged design ensures military-grade durability, and for added security, it includes FIPS 140-2 (Level 3) certified encryption keys for locking and unlocking encrypted volumes.

## Features

- AMD® EPYC® Series (ROME) processor with 16-core (can expand to 64 cores)
- Complimentary dual 10G base-T LAN for highly-efficient virtualization and intensive data transmission
- Upgradable 100GbE/200GbE expansion slots
- ZFS RAIDZ configurable: Mirror, Stripe Set, RAIDZ1, RAIDZ2, RAIDZ3
- Smart cooling fan
- Supports DDR4 RDIMM (3200MHz), LRDIMM (2666MHz), NV DIMM (2666MHz)
- Centralized storage, backup, sharing, and Business Continuity and Disaster Recovery
- Pre-installed Operating System software included (no licensing fee)

- Centralized storage, backup, sharing, and disaster recovery support for varied applications
- Each key serial number syncs with the SecureNAS® serial number and customizable password
- Optional 5-year warranty (3 years included)
- **Maximum Data Security**
  - FIPS 140-2 Level 3 Certified
  - NIST 800-88 Compliance
  - AES-256 Encryption
  - HIPAA Compliance
  - Hardware Encryption Key
  - Key Lifecycle Management
  - Multi-Factor Authentication
  - Instant Secure Erase (ISE) Enabled
  - Rsync Supported
  - USB Blocker for Enhanced Security

## CiphertexOS (Operating System)

The CiphertexOS featuring ZFS can maintain the utmost data integrity. Not only does our OS inherit the amazing native features of ZFS, it ensures persistent, reliable storage management, protection against data corruption, seamless capacity expansion, several data integrity mechanisms, as well as pool and disk encryption protection.

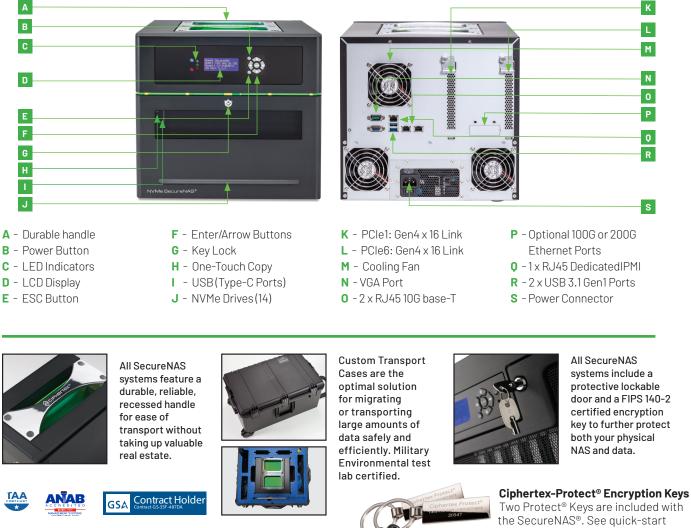## ORGANIZATIONS WORLDWIDE TRUST THEIR DATA TO CIPHERTEX®

# SPECIFICATIONS

| | |
|---|---|
| **PERFORMANCE CPU** | AMD® EPYC 7002 SERIES<br>2.8 (GHz) Base Freq.<br>3.35 (GHz) Max. Boost Freq. |
| **CORES/CACHE** | 24 Cores (upgradable to 64 Cores),<br>48 Threads / 256MB L3 Cache Socket |
| **MEMORY CAPACITY** | Eight Channel DDR4 memory technology<br>Supports DDR4 RDIMM, LRDIMM |
| **DIMM SIZES** | RDIMM: 64GB, 32GB, 16GB, 8GB<br>LRDIMM: 128GB, 64GB, 32GB |
| **MEMORY VOLTAGE** | 1.2V |
| **ERROR DETECTION** | Corrects single-bit errors<br>Detects double-bit errors<br>(using ECC memory) |
| **SATA CONTROLLER** | 4 x SATA3 6.0 Gb/s (from mini SAS HD, Gen3) |
| **SLIMLINE** | Slimline x 7 (PCIe Gen4 x 8) |

| | |
|---|---|
| **LAN CONTROLLERS** | Dual RJ45 10G base-T by Intel® X550-AT2 |
| **GRAPHICS** | Aspeed AST2500, VRAM DDR4 256 MB |
| **LED INDICATORS** | Status/Power, USB, LAN |
| **PUSH BUTTONS** | Power, Reset, Copy |
| **TEMPERATURE** | OP: 10C ~ 35C / NON-OP: –40C ~ 70C |
| **SMART FAN** | 3 x 12cm (12V DC) |
| **WEIGHT** | 26 lbs (w/o drives) |
| **SIZE** | Height: 11.75" (288.5 mm)<br>Width: 12.50 " (317.5 mm)<br>Depth: 14.25" (362.0 mm) |

All product specifications and data are subject to change without notice to improve security, reliability, function, design or otherwise.



**A** - Durable handle
**B** - Power Button
**C** - LED Indicators
**D** - LCD Display
**E** - ESC Button
**F** - Enter/Arrow Buttons
**G** - Key Lock
**H** - One-Touch Copy
**I** - USB (Type-C Ports)
**J** - NVMe Drives (14)
**K** - PCIe1: Gen4 x 16 Link
**L** - PCIe6: Gen4 x 16 Link
**M** - Cooling Fan
**N** - VGA Port
**O** - 2 x RJ45 10G base-T
**P** - Optional 100G or 200G Ethernet Ports
**Q** - 1 x RJ45 Dedicated IPMI
**R** - 2 x USB 3.1 Gen1 Ports
**S** - Power Connector

All SecureNAS systems feature a durable, reliable, recessed handle for ease of transport without taking up valuable real estate.

Custom Transport Cases are the optimal solution for migrating or transporting large amounts of data safely and efficiently. Military Environmental test lab certified.

All SecureNAS systems include a protective lockable door and a FIPS 140-2 certified encryption key to further protect both your physical NAS and data.

**Ciphertex-Protect® Encryption Keys**
Two Protect® Keys are included with the SecureNAS®. See quick-start guide for pairing instructions. Each key serial number syncs with the SecureNAS® serial number and customizable password.

**TAA** COMPLIANT
**ANAB** ACCREDITED MANAGEMENT SYSTEMS
**GSA** Contract Holder Contract GS-35F-487DA

FCC CE COMPLIANCE - Designed/Assembled/Integrated/Tested in the USA using domestic and/or foreign components. Made in the U.S.A.

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