

MISSION-CRITICAL DATA PROTECTION SYSTEMS





SecureNAS CX-140KNVMe

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

Supporting fourteen hot-swap NVMe SSDs and two internal mirrored SSDs for OS hosting, **Ciphertex SecureNAS CX-140KNVMe** is the most efficient portable NAS on the market. Powered by an AMD® EPYC® Series (ROME) 24-core processor, this high performing enterprise NAS is engineered to accelerate workflow, collaboration, and file, block and object storage applications. The all-NVMe SSD architecture reduces latency, improves bandwidth, and substantially increases sequential and random read/write speed. To optimize IT infrastructure, **SecureNAS CX-140KNVMe's** two PCIe Gen4 x 16 link expansion slots support upgradable 100GbE and 200GbE NICs, as well as professional GPUs. This 14-bay NAS features **Ciphertex's all-in-one storage management platform** with cross-platform file share, automatic backup, Rsync, iSCSI, virtual machine hosting, and ZFS RAIDZ resiliency. SecureNAS's rugged enclosure ensures durability and protection in all environments. For added security, **CX-140KNVMe** comes with any requested number of FIPS 140-2 Level 3 Physical Encryption Keys (once activated, the device's volumes are only accessible when the key is inserted).

Highlights:

- Dual 10G base-T LAN for highly-efficient virtualization and intensive data transmission
- ZFS RAIDZ configurable: Mirror, Stripe Set, RAIDZ1, RAIDZ2, RAIDZ3
- Compartmentalized smart cooling; detects CPU and drive temperatures to dynamically control fan speeds for ultra quiet operation
- High-quality hardware enables optimum performance to fulfill diversified applications
- Supports DDR4 RDIMM (3200MHz), LRDIMM (2666MHz), NV DIMM (2666MHz)
- Centralized storage, backup, sharing, and Business Continuity and Disaster Recovery

- Upgradable 100GbE/200GbE expansion slots
- Maximum Data Security
 - FIPS 140-2 Level 3 Validated
 - NIST 800-88 Compliance
 - AES 256-Bit Encryption
 - HIPAA Compliance
 - Hardware Encryption Key
 - Key Lifecycle Management
 - Multi-Factor Authentication
- Each key serial number syncs with the Secure NAS[®] serial number and customizable password
- Optional Extended 5-Year warranty (Standard 3-Year included)

Ciphertex CX-Linux OS Software

Linux-based CX-OS, featuring ZFS, has an intuitive GUI accessible via web browser. CX-OS not only inherits the native intelligence of Linux and ZFS RAIDZ, the OS is designed to ensure streamlined storage management, file share, protection against data corruption, pool and disk protection, and seamless capacity expansion.

ORGANIZATIONS WORLDWIDE TRUST THEIR DATA TO CIPHERTEX























SPECIFICATIONS

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

LAN CONTROLLERS	Dual RJ45 10G base-T by Intel® X550- AT2
GRAPHICS	Aspeed AST2500, VRAM DDR4 256 ME
LED INDICATORS	Status/Power, USB, LAN
PUSH BUTTONS	Power, Reset, One-Touch-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" (298.5 mm) Width: 12.50 " (317.5 mm) 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
- ECD Display
- E ESC Button
- F Enter/Arrow Buttons
- G Key Lock
- **H** One-Touch Copy
- I USB (Type-C Port)
- J NVMe Drives (14)
- K PCle1: Gen4 x 16 Link
- L PCle6: Gen4 x 16 Link
- M Cooling Fan
- N VGA Port
- 0 2 x RJ45 10G base-T
- P Optional 100G or 200G Ethernet Ports
- -1x RJ45 DedicatedIPMI
- R 2 x USB 3.1 Gen1 Ports
- S Power Connector



SecureNAS features a durable, recessed handle for easy lift and carry operations.





Hard transport cases are the optimal solution for transporting large quantities of data safely and efficiently. Hard cases are military environmental testing lab certified.



SecureNAS systems have a protective lockable door and a FIPS 140-2 Level 3 validated encryption key to further protect your data.









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



Each key's serial number syncs with a SecureNAS® serial number and customizable password.