



#### MISSION-CRITICAL DATA PROTECTION SYSTEMS













# SecureNAS CX-40KHD

## Large Encrypted Storage Capacity in a Small Durable Package

Supporting up to four hot-swappable 3.5" HDDs or four 2.5" SSDs and up to two internal 2.5" SSDs, the **Ciphertex SecureNAS CX-40KHD** is a high-capacity, rugged, and reliable enterprise NAS powered by an Intel® Xeon® D (4, 8, or 16 Core) processor. Built-in 8 Intel® AES-NI provides integrated support to enable fast and secure data encryption and decryption for a wide range of cryptographic applications, such as bulk encryption/decryption, authentication, random number generation, and authenticated encryption, providing strong security while also reducing latency. Designed to optimize enterprise IT infrastructure, the **Ciphertex SecureNAS CX-40KHD** comes with two PCle slots that support 10GbE and 40GbE interfaces, PCle SSD, as well as graphic cards. Incorporating security and scalability, the **Ciphertex SecureNAS CX-40KHD** presents an ideal choice for a complete business-ready storage solution with cross-platform file sharing, comprehensive backup and disaster recovery, iSCSI & virtualization, and many other business applications. The **Ciphertex SecureNAS CX-40KHD's** rugged enclosure ensures military-grade durability. For additional security, this system also includes a FIPS 140-2 (Level 3) certified Encryption Key that can be used for locking and unlocking encrypted volumes.

#### **Features**

- Intel® Xeon® processor D-1518 4-Core, with optional 8 and 16-Core expandability, featuring the latest 14nm energy-efficient SoC
- Dual 10GbE fiber & copper expandability for highlyefficient virtualization and intensive data transmission
- LCD display for real-time information and easier system management
- Compartmentalized smart cooling; detects CPU and hard drive temperatures to dynamically control fan speeds for quieter operation
- High-quality hardware enables optimum performance to fulfill diversified applications
- Supports four DDR4 memory modules for a maximum of 128GB RAM
- One built-in M.2 SATA 6GB/s slot to provide the greatest flexibility in tiered storage configuration with native high speeds that empower SSD caching

- Centralized management solution for networked computing devices
- Supports centralized storage, backup, sharing, and disaster recovery

#### Maximum Data Security

Protect data storage, both at rest and in transit with Ciphtertex SecureNas®

- FIPS 140-2 Level 3 Certified
- NIST 800-88 Compliance
- AES-256 Encryption
- HIPAA Compliance
- Hardware Encryption Key
- Key Lifecycle Management
- Multi-Factor Authentication
- Each key serial number syncs with the SecureNAS® serial number and customizable password
- Optional 5 year warranty (3 years included)

### **Ciphertex CX-Linux OS Software**

The new Ciphertex Linux-based CX-Linux OS, featuring ZFS has the ability to maintain the utmost data integrity. Not only does our OS inherit the amazing native features of ZFS, its powerful features ensure 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	Intel® Xeon Processor D-1518 Socket FCBGA 1667 supported CPU TDP support 35W
CORES/CACHE	4 Cores (upgradable to 8 and 16 Cores), 8 Threads /6MB Cache
MEMORY CAPACITY	Up to 128GB; Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
MEMORY TYPE	2133/1866/1600MHz ECC DDR4 ECC RDIMM and ECC/Non-ECC UDIMM
DIMM SIZES	4GB, 8GB, 16GB, 32GB
MEMORY VOLTAGE	1.2V
ERROR DETECTION	Corrects single-bit errors Detects double-bit errors (using ECC memory)
M.2 EXPANSION	M.2 Interface: 1 SATA/PCI-E 3.0 x4
SAS2	Broadcom 2116 SW controller for 16 SATA3 (6Gpbs) ports; SAS2 and SATA3

IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM- over-LAN support
NETWORK CONTROLLERS	Dual LAN with 10G SFP+ from D-1500 SoC; Dual LAN with 1GbE w/Intel® I210
GRAPHICS	Aspeed AST2400 BMC
LED INDICATORS	Status/Power, USB, LAN
PUSH BUTTONS	Power, Reset, Copy
TEMPERATURE	$0 - 60^{\circ}$ C (32°F ~ 140°F)
SMART FAN	1 x 12cm (12V DC)
WEIGHT	12.8 lbs (w/o drives)
SIZE	Height: 9.8" (243 mm) Width: 7.0" (178 mm) Depth: 9.5" (241 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 Key Lock
- F ESC Button

- G Enter/Arrow Buttons
- **H** One-Touch Copy
- I USB (Type-C Ports)
- J HDD Drives
- K PCle Extension
- L PCle Extension
- M Cooling Fan
- N DB15 VGAPort
- 0 10GbE SFP+ Ports
- P Optional 10G Ethernet Ports(4)
- - RJ-45 1GbE (2)
- R USB 3.0 (Type-A Ports)
- S IPMI Port
- T Power Connector

\*Optional Thunderbolt 3 Ports



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 Key Each key serial number syncs with the SecureNas® serial number and customizable password.



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