



## MISSION-CRITICAL DATA PROTECTION SYSTEMS



**Ciphertex-Protect®  
Encryption Key**



UP TO  
**60.8**  
TB SSD

# SecureNAS CX-80KSD

## Extreme Speed with Encrypted Storage in a Small Durable Package

Supporting eight hot-swappable 2.5" SSDs and up to two internal 2.5" SSDs, the **Ciphertex SecureNAS CX-80KSD** is a high-capacity, rugged, and reliable enterprise NAS powered by an Intel® Xeon® D (4, 8, or 16 Core) processor. Built-in 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 performance impact. Designed to optimize enterprise IT infrastructure, the **Ciphertex SecureNAS CX-80KSD** comes with two PCIe slots that support 10GbE/40GbE NIC, PCIe SSD, as well as graphics cards. Incorporating security and scalability, the **Ciphertex SecureNAS CX-80KSD** presents an ideal choice to accommodate multiple streams of 4K HDR video streaming as well as the high IO required for rendering animations. Secured by rugged enclosure that ensures full military-grade durability, the **Ciphertex SecureNAS CX-80KSD** system also includes a FIPS-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 highly-efficient 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 Ciphertex 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

|                        |  |
|------------------------|--|
| <b>PERFORMANCE CPU</b> | Intel® Xeon Processor D-1518<br>Socket FCBGA 1667 supported<br>CPU TDP support 35W |
| <b>CORES/CACHE</b>     | 4 Cores (upgradable to 8 and 16<br>Cores), 8 Threads /6MB Cache                    |
| <b>MEMORY CAPACITY</b> | Up to 128GB; Unbuffered<br>ECC/non-ECC UDIMM,<br>DDR4-2133MHz, in 4 DIMM slots     |
| <b>MEMORY TYPE</b>     | 2133/1866/1600MHz ECC DDR4 ECC<br>RDIMM and ECC/Non-ECC UDIMM                      |
| <b>DIMM SIZES</b>      | 4GB, 8GB, 16GB, 32GB   |
| <b>MEMORY VOLTAGE</b>  | 1.2V   |
| <b>ERROR DETECTION</b> | Corrects single-bit errors<br>Detects double-bit errors<br>(using ECC memory)      |
| <b>M.2 EXPANSION</b>   | M.2 Interface: 1 SATA/PCI-E 3.0 x4   |
| <b>SAS2</b>            | Broadcom 2116 SW controller for 16<br>SATA3 (6Gpbs) ports; SAS2 and SATA3          |

|                            |  |
|----------------------------|--|
| <b>IPMI</b>                | Support for Intelligent Platform<br>Management Interface v.2.0 IPMI 2.0<br>with virtual media over LAN and<br>KVM-over-LAN support |
| <b>NETWORK CONTROLLERS</b> | Dual LAN with 10G SFP+ from D-1500<br>SoC; Dual LAN with 1GbE w/Intel® I210  |
| <b>GRAPHICS</b>            | Aspeed AST2400 BMC   |
| <b>LED INDICATORS</b>      | Status/Power, USB, LAN   |
| <b>PUSH BUTTONS</b>        | Power, Reset, Copy   |
| <b>TEMPERATURE</b>         | 0 - 60°C (32°F ~ 140°F)  |
| <b>SMART FAN</b>           | 1 x 12cm (12V DC)  |
| <b>WEIGHT</b>              | 12.8 lbs (w/o drives)  |
| <b>SIZE</b>                | Height: 9.8" (243 mm)<br>Width: 7.0" (178 mm)<br>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** - SSD Drives
- K** - PCIe Extension
- L** - PCIe Extension

- M** - Cooling Fan
- N** - DB15 VGAPort
- O** - 10GbE SFP+ Ports
- P** - Optional 10G Ethernet Ports (4)
- Q** - 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.



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



**Ciphertex-Protect® Encryption Key** Each key serial number syncs with the SecureNas® serial number and customizable password.