



## MISSION-CRITICAL DATA PROTECTION SYSTEMS



**Ciphertex-Protect®  
Encryption Key**



UP TO  
**480**  
TB HDD

# SecureNAS CX-160KSD-X

## Class-Leading Throughput and IOPS with Large Encrypted Tiered Storage Capacity

Supporting up to sixteen hot-swappable 3.5" HDDs and two internal 2.5" SSDs, the **Ciphertex SecureNAS CX-160KHD-X** 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, random number generation, and authenticated encryption, providing strong security while also reducing performance impact. Designed to optimize enterprise IT infrastructure, the **Ciphertex SecureNAS CX-160KHD-X** comes with two PCIe expansion slots that support 10GbE/40GbE NIC, PCIe SSD, as well as graphics cards. Incorporating security and scalability, the 16-bay NAS 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 Secure NAS's rugged enclosure ensures military-grade durability and protection. For additional security, this 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
- 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 OS (Operating System)

The Ciphertex OS featuring ZFS has the ability to maintain the utmost data integrity. Not only does our OS inherit the 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

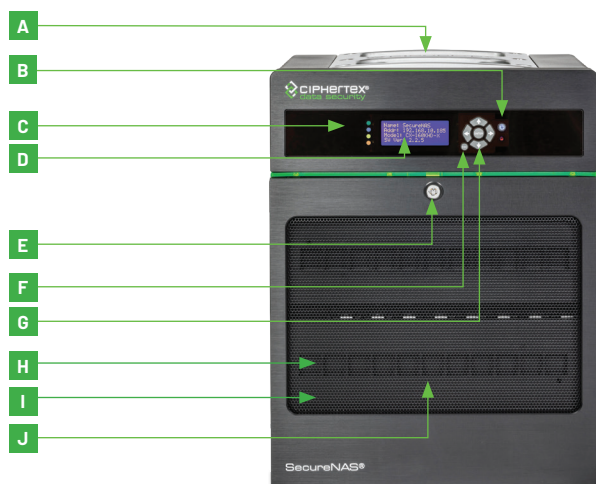


# SPECIFICATIONS

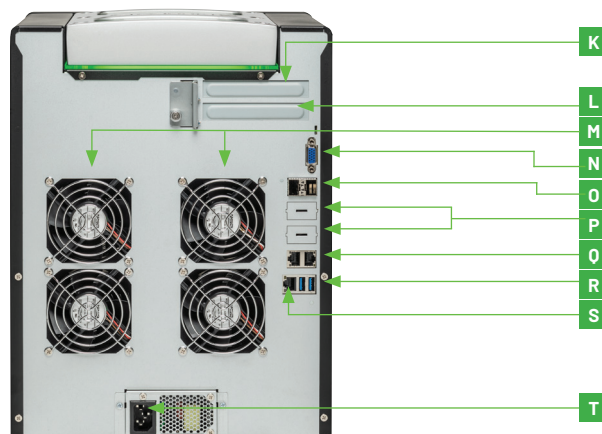
<b>PERFORMANCE CPU</b>	Intel® Xeon Processor D-1518 Socket FCBGA 1667 supported CPU TDP support 35W
<b>CORES/CACHE</b>	4 Cores (upgradable to 8 and 16 Cores), 8 Threads /6MB Cache
<b>MEMORY CAPACITY</b>	Up to 128GB; Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
<b>DIMM SIZES</b>	4GB, 8GB,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

<b>NETWORK CONTROLLERS</b>	Dual LAN with 10G SFP+ from D-1500 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>	32 lbs (w/o drives)
<b>SIZE</b>	Height: 15.25" (387.35 mm) Width: 11.25" (285.75 mm) Depth: 10.5" (266.75 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** - HDD Drives (16)



- K** - PCIe Extension
- L** - PCIe Extension
- M** - Cooling Fan
- N** - DB15 VGA Port
- 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.