



**Ciphertex-Protect®  
Encryption Key**



UP TO  
**160**  
TB HDD

# SecureNAS CX-80KHD-X

## Class-Leading Throughput and IOPS with Large Encrypted Tiered Storage Capacity (32TB - 160TB)

Supporting eight hot-swap 3.5" HDDs and two internal mirrored SSDs for OS hosting, the **Ciphertex SecureNAS CX-80KHD-X** is a high capacity, rugged, and reliable enterprise NAS powered by an Intel® Xeon® D 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, **SecureNAS CX-80KHD-X** comes with two PCIe slots that support 10GbE/40GbE NIC, PCIe SSD, as well as graphics cards. Incorporating security and scalability, **CX-80KHD-X** 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 **SecureNAS CX-80KHD-X's** rugged enclosure ensures military-grade durability. 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
- ZFS RAIDZ
- 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
- 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 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, 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

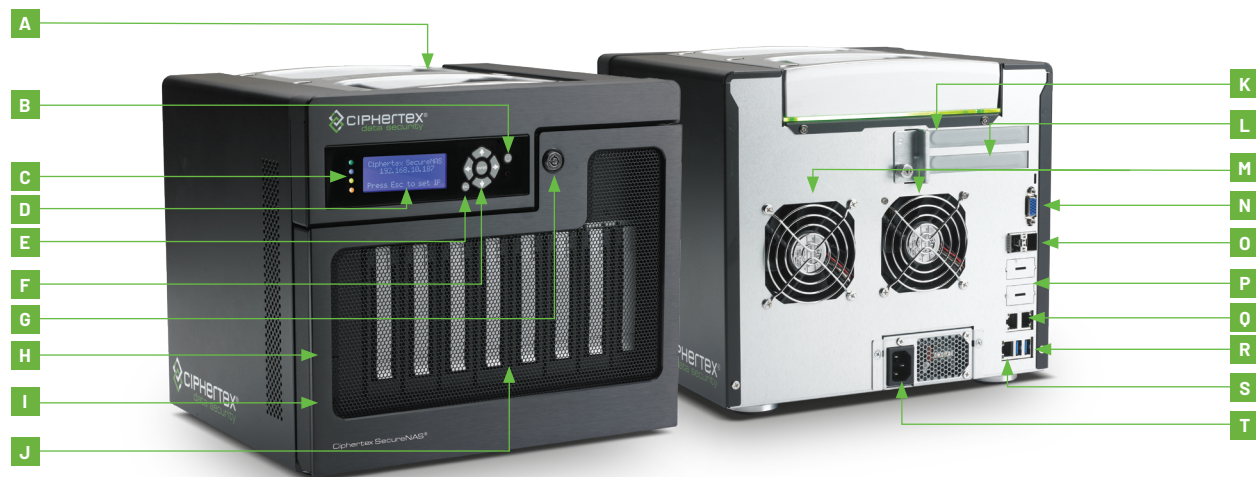


# SPECIFICATIONS

<b>PERFORMANCE CPU</b>	Intel® Xeon Processor D-1518 Socket FCBGA 1667 supported CPU TDP support 35W
<b>CORES/CACHE</b>	4-core (upgradable to 8 or 16-core), 8 Threads /6MB Cache
<b>MEMORY CAPACITY</b>	Up to 128GB; Unbuffered ECC/non-ECC UDIMM, 8 Threads /6MB Cache
<b>MEMORY TYPE</b>	Up to 128GB; Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
<b>MEMORY TYPE</b>	2133/1866/1600MHz ECC DDR4 ECC 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 Detects double-bit errors (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 SATA3 (6Gpbs) ports; SAS2 and SATA3

<b>IPMI</b>	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
<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>	20.5 lbs (w/o drives)
<b>SIZE</b>	Height: 9.8" (248.92 mm) Width: 11.25" (285.75 mm) Depth: 9.75" (247.65 mm)

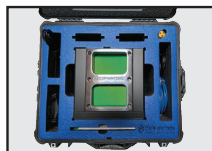
All product specifications and data are subject to change without notice to improve security, reliability, function, design or otherwise.



- 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 (8)
  - 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.