AES ENCRYPTION 256

FIPS VALIDATED 140-2

SUPERSPEED+ USB 10Gbps

SUPERSPEED USB

10GbE

FIPS Level 3 Certified 140-2 Ciphertex-Protect® Encryption Key

UP TO 320 TB HDD

SecureNAS CX-160KHD-X

Class-Leading Throughput and IOPS with Large Encrypted Tiered Storage Capacity (64TB - 320TB)

Supporting sixteen hot-swap 3.5" HDDs and two internal mirrored SSDs for OS hosting, **SecureNAS CX-160KHD-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 a wide range of cryptographic applications, such as bulk encryption/decryption, random number generation, and authenticated encryption, for robust security and reduced latency. Designed to optimize enterprise IT infrastructure, **CX-160KHD-X** includes two PCIe expansion slots that can support additional 10GbE to 40GbE NICs, PCIe SSDs, as well as graphics cards. This 16-bay NAS is an ideal choice for a scalable, business-ready storage solution. Featuring Ciphertex's all-in-one storage management platform with cross-platform file share, automatic backup, Office 365 backup, Rsync, iSCSI, virtual machine hosting, and ZFS RAIDZ resiliency. SecureNAS's rugged enclosure ensures durability and protection in all environments. For additional security, CX-160KHD 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).

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 configurable: Mirror, Stripe Set, RAIDZ, RAIDZ2, and RAIDZ3

- 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

- Supports centralized storage, backup, sharing, and disaster recovery

- IPMI

- **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.

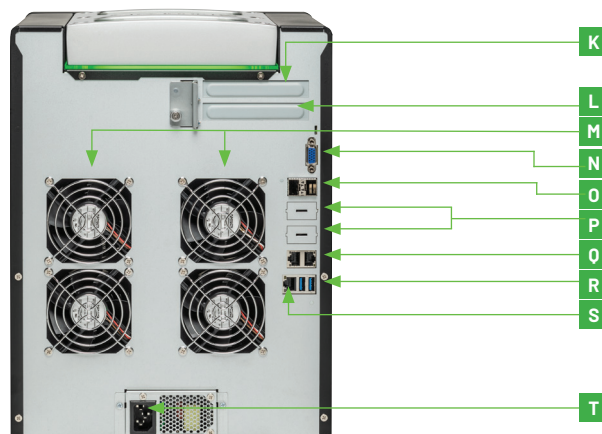ORGANIZATIONS WORLDWIDE TRUST THEIR DATA TO CIPHERTEX

U.S. AIR FORCE   Bank of America   NASA

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
DIMM SIZES	4GB, 8GB, 16GB, 32GB
MEMORY VOLTAGE	1.2V
ERROR DETECTION	Corrects single-bit errors Detects double-bit errors (using ECC memory)
SAS2	Broadcom 2116 SW controller for 16 SATA3 (6Gpbs) ports; SAS2 and SATA3

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°C (32°F ~ 140°F)
SMART FAN	1 x 12cm (12V DC)
WEIGHT	32 lbs (w/o drives)
SIZE	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.
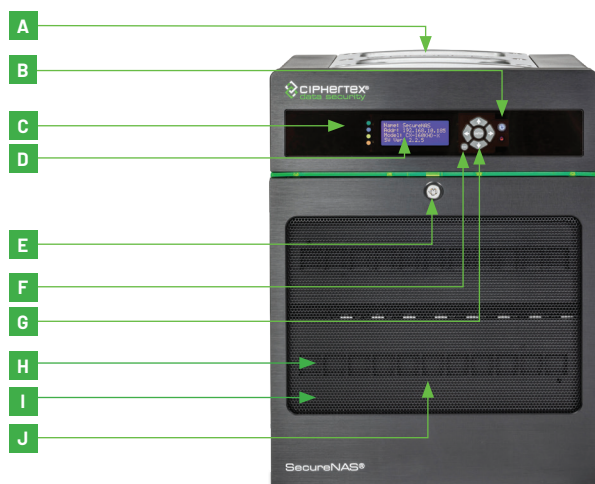
A - Durable handle
B - Power Button
C - LED Indicators
D - LCD Display
E - ESC Button
F - Enter/Arrow Buttons

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 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.

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

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