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JDAR
Type-1 Data-at-Rest Encryptor Module

Protect and encrypt data at rest and leave unattended

- NSA Type-1 certified for SAB
- 6 Gbps high-speed encryption that writes up to four locations at once
- Scalable and system-agnostic SoC architecture and interfaces

- Low-power, 0.9 lb. form factor with 30,000 hrs. MTBF
- Cold start <12sec, 7W power consumption
- VNX/3U VPX interface option
- MIL-STD 461F, MIL-STD 810, DO-160

The JDAR is a miniature, Type-1 certified, rugged data-at-rest inline encryption solution that stores and protects Secret and Below (SAB) data. Flexible, compact, and fast, it can be integrated into existing systems or used as a standalone encryption device for avionics and unmanned platforms, as well as unattended sensors, surveillance, communication, and wearable systems.

HIGHLIGHTS

- Prevent unauthorized access to classified data if hard drives are lost or stolen with Suite B encryption algorithms and a tamper-resistant design
- Multiple zeroization capabilities that enable classified data to be left unattended without risk of compromise, reducing costs associated with physical guarding
- Use as a standalone module or easily integrate into existing rackmount or embedded systems via VNX/3U VPX connectors, standard SATA interfaces, and a scalable host-agnostic system-on-chip (SoC) architecture
- Quickly configure and encrypt JDAR with legacy and modern fill devices and upgrade options to support Key Management Infrastructure (KMI)
- Quickly write encrypted data to up to four storage devices or locations at once with four ports and 6 Gbps high-speed encryption
- Simplify management using an intuitive Windows-based software interface or GUI
- Easily transport and protect critical information on a range of space-constrained platforms including UAV, UUV, ground vehicles, remote vehicles, aircraft, ships, and tanks through a SWaP-optimized, tamper-resistant, and rugged form factor weighing <1 lb

CONTACT US

TECHNICAL SPECIFICATIONS

Encryption

Type-1 Secret and below; other encryption options available for system high operation

Stores two (2) NSA-issued keys
   (1) Red Key Encryption Key (KEK)
   (1) Black Media Encryption Key (MEK)

Multiple MEKs may be encrypted by the same KEK

Status discretes: zeroize, alarm, tamper, and state

Suite B encryption algorithms

Zeroization

Multiple zeroization paths and three different forms of zeroization

Unattended/self-attended write-only operation

Effective protection for resident keys

Multiple zeroize interfaces and integrated self-zeroization/ key protections

Data Exchange

6 Gbps SATA bulk data input (1) and output (4) ports

SMART (Self Monitoring Analysis and Reporting Technology) SSD support

Subsystem Integration Features

Low-power VNX/3U VPX interface

Customizable design for any platform

Compatibility

Implements DS-101 over RS-485

Compatible with EKMS 308-compliant fill devices

Diagnostics and Management

Built-in-Test (BIT)

Easy-to-use Windows software interface (GUI)

Mechanical and Environmental

Dimensions
   5.04 x 3.94 x 0.63 inches
   (12 x 10 x 16.6 mm)

Weight: 0.9 lb (0.4 kg)

7 W max power consumption

MIL-STD 461F

MIL-STD 810

DO-160

Extended operational temperature
   -40^0C to $+85^0$C continuous
   30,000 hrs. MTBF

Cold Start <12 sec

Compliance

NSA IAD Management Directive 110 compliant

SATA III compliant

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