

## Use Citadel SSDs to Secure Your Data at Rest (DAR)

Protect against unauthorized access to laptops, desktops, and servers

- Easily Meet Federal Cybersecurity Requirements
- Commercial Pricing Enables Wide Deployment
- Operating System Agnostic

Citadel™ FIPS certified self-encrypting SSDs are the only SSDs to integrate pre-tested multifactor authentication and pre-boot authentication (PBA) in low-cost, easily deployed, common form factors. Citadel offers a hardware-based Data at Rest (DAR) security solution that's easy to implement and affordable enough to deploy widely across commonly used laptops, desktops, workstations, and tactical servers.

Powered by CipherDrive™, the built-in PBA unlocks access to the encrypted operating system or virtual machine on the Citadel SSD along with the data stored there. This secured data is encrypted by NSA-approved Advanced Encryption Standard (AES) 256-bit encryption at the hardware level. Once booted, Citadel allows no-overhead access to encrypted data at the full performance of the system.

## Secure Your Data at Rest

In accordance with collaborative Protection Profiles (cPP), Citadel SSDs can be installed and will manage key exchange with the DIGISTOR Secure SED (cPP Encryption Engine). The DIGISTOR line of Citadel SSDs is a secure storage solution available to be integrated into a one or two-layer security solution today.

### NIST Certification #3926

#### NSA Standardized Security

Citadel SSDs contain NSA-listed Authorization Acquisition (AA) capability that provides access to the FIPS-certified DIGISTOR Secure SED Encryption Engine (EE). This allows government customers to securely store sensitive Data at Rest in accordance with NSA standards.

**Remote Computers** - Secure your mobile workforce using Citadel's pre-boot authentication feature to unlock access to software. Citadel SSDs protect the entire contents of the drive, not just individual files or folders, mitigating field deployed laptop data security issues. They are easy to use and require minimal configuration.

**Loss and Theft** - While hard drives and SSDs can be removed from any system for attempts to retrieve data through sophisticated cyberattacks, Citadel SSDs protect sensitive information and intellectual property through locking the SSD and full-disk encryption.





## Citadel SSD Security Features

- Encryption - AES-256, FIPS PUB 197 specification
- Authorization Acquisition (AA) under Common Criteria cPP
- Compliant under collaborative Protection Profiles (cPP)
- Pre-Boot Authentication (PBA) supports booting and chain loading VMs / SecureView and other hypervisors
- PBA Admin and Management capabilities
- 2-Factor / Multi-factor Authentication support
- Support for CAC/PIV/CIV and SIPRNET cards and tokens
- Cryptographic Erase (CE)
- User Management
- TPM 2.0 support
- Key Management – Custom AK and DEK

### Military Grade Encryption

Citadel SSDs use military grade encryption AES 256-bit algorithms and are FIPS 140-2 Level 2 certified with tamper evident coating.

### Self Destruct / Crypto Erase

Citadel SSDs support an optional “self-destruct” feature with a configurable “dead man switch” that deletes the SSD’s encryption keys. A Security Officer or Administrator can also issue a Crypto Erase command to cryptographically erase all the data on the drive.

## Privacy Compliance

### Comply with Data Protection Mandates

Build Citadel into solutions to address Federal, state and local, as well as international privacy compliance rules and policies such as:

- General Data Protection Regulation (GDPR)
- California Consumer Privacy Act (CCPA)
- Sarbanes-Oxley Act (SOX)
- Health Insurance Portability and Accountability Act (HIPAA)
- The Payment Card Industry Data Security Standard (PCI-DSS)



### Hardware Technology

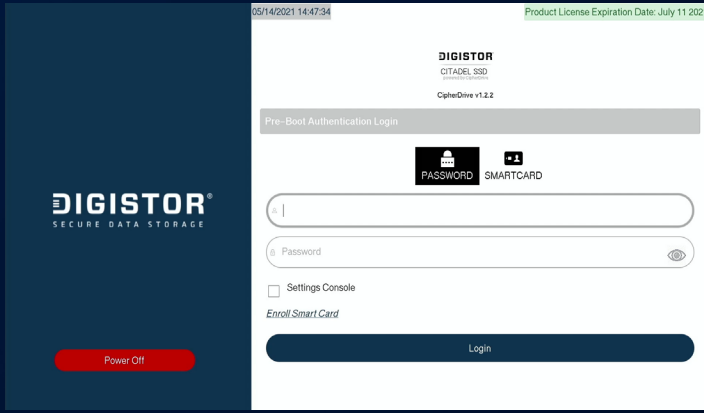
- On-device encryption
- FIPS 140-2 L2 (NIST Certification #3926)
- Tamper-evident coating
- TAA-compliant

### CipherDrive Pre-Boot Authentication Technology

- FIPS 140-2
- Common Criteria - NIAP Listed
- NSA Component Listed CSfC - Hardware Disk Encryption Standard (PCI-DSS)

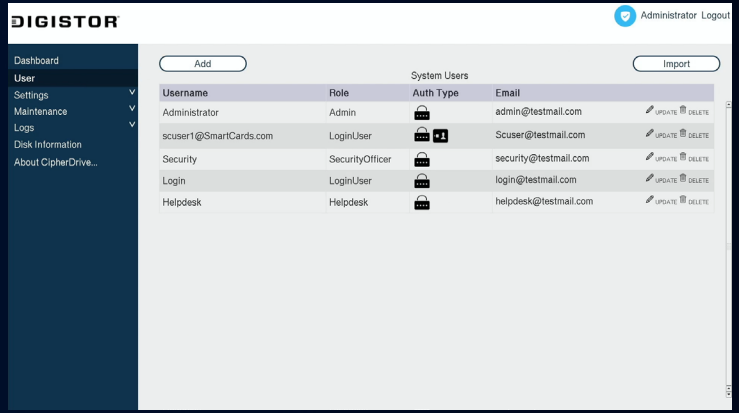


# Easy to Install and Easy to Manage Security



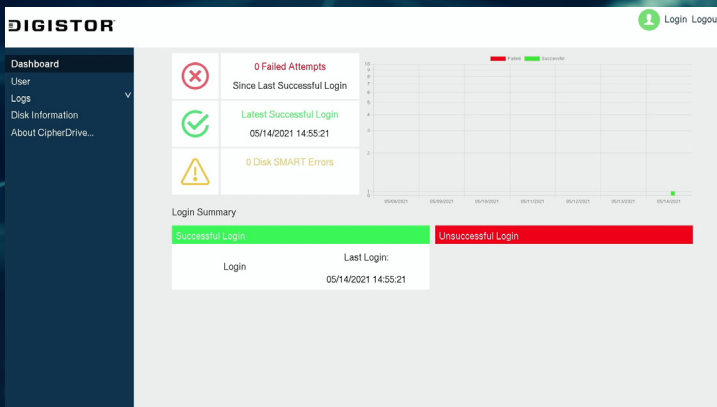
## Pre-boot Lock

A pre-boot authentication layer is built into Citadel SSDs to authenticate a user (using either a password or smart card) before the operating system boots. This pre-boot authentication, combined with full disk encryption, protects the entire DIGISTOR SSD and not just individual files.



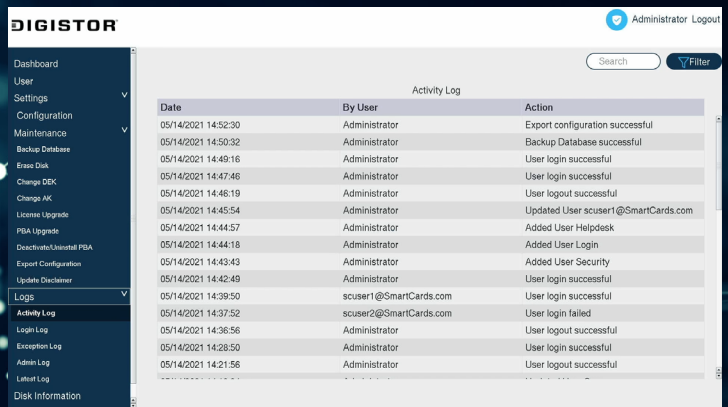
## Multiple User Support

Citadel SSDs can be configured to allow different users to unlock the computer to allow the drive to boot the operating system.



## Dashboard

The built-in dashboard gives a quick and detailed overview of the security profile of the computer.



## Audit and Logging

Five detailed logging types are available. Administrators can review the security profile of the computer and mitigate unauthorized access. These reports can be used to meet privacy compliance laws.

## Operating System Agnostic



# DIGISTOR Citadel Secure Storage SSDs

## Technical Specifications

Form Factors & Interfaces	<ul style="list-style-type: none"> <li>M.2 2280 PCIe Gen 3x4 NVMe 1.3</li> <li>M.2 2280 SATA 6 Gb/s</li> <li>2.5-inch 7mm SATA 6 Gb/s</li> </ul>	Advanced Flash Management	Static & Dynamic Wear Leveling Bad Block Management TRIM S.M.A.R.T.	Authentication Methods	CAC, USB, or YubiKey
Flash Type	BiCS4	MTBF	More than 1,600,000 hours	Confidentiality (Encryption)	AES-256 / FIPS PUB 197
Performance	SATA: Read: up to 550MB/s Write: up to 530MB/s NVMe: Read: up to 3,400MB/s Write: up to 3,100MB/s	Encryption	TCG Opal SSC hardware level AES 256-bit encryption	Authentication (Digital Signature)	Elliptic Curve Digital Signature Algorithm (ECDSA) over the curve P-384 with SHA-384 / FIPS PUB 186-4 RSA 2048-PSS with SHA-256 method / FIPS PUB 186-4
Power Consumption	Active mode: ≤2,300mW Idle mode: ≤110mW	Compliance	RoHS Compliant TAA Compliant	Integrity (Hashing)	SHA-384 / FIPS PUB 180-4
Temperature Range	Operation: 0°C ~ 70°C Storage: -40°C ~ 85°C				

Citadel SSDs are self-encrypting drives which secure all critical data using strong AES 256-bit encryption, with the encryption/decryption performed on the SSD hardware itself, independent from the host, which maintains the highest host performance by not impacting CPU load. Locked BOMs available.

### All Available Configurations are TAA-Compliant and FIPS 140-2 L2 Certified

#### M.2 2880 SSD SATA

	Single Drive	Multi-Drive
512GB	DIG-M2S45126	DIG-M2S25126
1TB	DIG-M2S410006	DIG-M2S210006
2TB	DIG-M2S420006	DIG-M2S220006

#### 2.5-inch SATA 6 Gbps SSD

	Single Drive	Multi-Drive
512GB	DIG-SSD2S45126	DIG-SSD2S25126
1TB	DIG-SSD2S410006	DIG-SSD2S210006
2TB	DIG-SSD2S420006	DIG-SSD2S220006

#### M.2 2280 PCIe (3x4) NVMe SSD

	Single Drive	Multi-Drive
512GB	DIG-M2N2S45126	DIG-M2N2S25126
1TB	DIG-M2N2S410006	DIG-M2N2S210006
2TB	DIG-M2N2S420006	DIG-M2N2S220006

### CipherDrive Technology is FIPS and Common Criteria Certified

## Contact Us

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