

PKI



UniMate® Drive Datasheet

Selective Mass Storage

UniMate Drive is split into two partitions: a normal partition (read and write) and a Virtual CD-ROM (read-only) partition.

Two-Factor Authentication

As opposed to single-factor authentication, where often a password is only needed to authenticate, two-factor authentication requires two factors: "Something You Know" and "Something You Have". Both the correct password ("Something You Know") with the correct UniMate device ("Something You Have") is needed to successfully complete the authentication process. UniMate features the ability to generate encryption keys and store passwords, digital certificates and personal credentials within the key.

High-Performance Smart Card Based Device

Although RSA encryption is computationally intensive, the device is optimized with an on-board smart card to generate RSA encryption key pairs quickly, enabling sophisticated security with minimal hassle and effort.

Multi-Level Permission Management

UniMate utilizes three levels of token permission management: Administrator, User and Guest, where Administrator holds the highest permission level to Guest holding the lowest. Any operation on the token requires explicit permissions, ensuring the security of the device is maintained to users with the appropriate permissions.

Secure File System

In addition to secure authentication, UniMate also provides users with a secure file system. The file system operates using a multi-level protection method to protect digital credentials. UniMate implements three separate levels of permissions: Administrator, User and Guest. Any operation on the UniMate device requires explicit permission, where operations on the device are granted to users with the necessary permissions.

Mass Storage

The two partitions on the device are the normal partition and Virtual CD-ROM partition.

Technical Specifications-UniMate Drive

Features	UniMate Drive
CCID	
Secure Mass Storage	✓
On-Demand Partition	✓
Smart Card	
Onboard Encryption	✓
PKCS#11 Supported	✓
MS-CAPI Supported	✓
X.509 Certificate Supported	✓
Globally Unique Hardware ID	✓
Customized UniMate Name	✓
3-Level Permission Management	✓
Customization Service	✓
Secure Memory	✓

Normal Drive

The normal partition functions as ordinary flash memory that can be used to store files and other data, with capacity up to 32GB and is customizable on a customer's requests.

Virtual CD-ROM

After formatting the partition with your data, the Virtual CD-ROM partition appears as a CD-ROM disc upon connecting the UniMate Drive. Much in the same way as CD or DVD, the contents of the virtual CD-ROM can only be read but not modified. All files stored in the Virtual CD-ROM partition are protected against unauthorized deletion or modification, guaranteeing the integrity of data.

Customization Service

OEM customization is available to customize UniMate to your business' needs.

Customization options include logo laser engraving, custom case design, custom color options, as well as custom HID/naming service, and more.

Technical Specifications-UniMate® Drive

Capacity	
Onboard capacity	> 64 KB
Flash memory	2GB, 4GB, 8GB, 16GB, 32GB
Dimensions	57 × 16 × 8 mm
Weight	9 grams
Temperature	
Operating	0°C to 70°C
Storage	-10°C to 85°C
Humidity Rate	0-70% without condensation
Min. Operating Voltage	5 V
Humidity	USB 2.0 high speed
Operating Systems Supported	Windows 2000, XP, 2003, Vista, 7, 8, 10, Server 2008 2012 and Linux (both 32-bit and 64-bit)
Hardware Algorithms	
Data	AES Cipher-Block chain model
Encryption Keys	256-bit Hardware
PKI	PKCS#11, MS-CAPI
Onboard Encryption Algorithms	2048-bit RSA, 1024-bit RSA, 128-bit AES, 192-bit AES, 64-bit DES, 64-bit TDES
Onboard Hashing	160-bit SHA-1, 160-bit HMAC_SHA, 128-bit MD5, 128-bit HMAC-MD5