Biocryptodisk

Biocryptodisk SK101
Biometrics Smart Card Reader

Biocryptodisk SK101 is a portable biometrics secured Smart Card Reader. Together with a SIM size smart card, it is a portable biometrics token. It has an autonomous biometrics processor on board to match with live fingerprint and to store fingerprint template within SK101. The user's privacy is protected as the stored fingerprint template can never be extracted or copied.

A user's fingerprint biometric replaces their smart card PIN (Personal Identification Number), serving as the secure method of authentication to activate the smart card and make use of the stored credentials (certifcates and public/private keys, user names / password, etc.).

SK101 allows user to enroll 4 fingerprints. It allows a fingerprint to represent a PIN. Organizations that need the utmost security can require their employees to use 2 different fingerprints to authenticate to the smart card, enabling three factor security. Administration software is available to organization's information security administrator for recovery and re-use of device.

Customers specific firmware is available on request.

Special Features

- Multifactor authentication
- On board fingerprint enrollment and authentication
- Supports Digital Signature (Class 2 reader)
- Common Criteria EAL 3+ certified
- Live and Fake finger detection
- PINs are can be replaced by fingerprints
- OMNIKEY® Smart@Key Chipset
- Administrator function

Host Interface

Host Interface	USB2.0 Full Speed, CCID
Transmission Speed	12Mbps
Power Supply	Bus Power

Smart Card Interface

Standards	ISO 7816 & EMV^2 2000 Level 1
Protocols	T=0, T=1 2-wire: SLE 4432/42(S-=10), 3-wire: SLE 4418/28(S=9), I2C (S=8)
Card Size	ID-000 (SIM-size)
Smart Card Interface Speed	420kbs (when supported by Card)
Smart Card clock frequency	Up to 8MHz
Supported card types	5V, 3V and 1.8V Smart Cards ISO 7816 Class A, AB and C
Power to Smart Card	60mA
Smart Card detection	Automatic Detection of Smart Card type/Short circuit and thermal Protection
8 Pin Handling	C4/C8 supported

Supported APIs

- PC/SC driver (ready for 2.01)
- CT-API (on top of PC/SC)
- Synchronous-API (on top of PC/SC)
- OCF (on top of PC/SC)
- SPE-API (Secure PIN Entry, on top of PC/SC)

Hardware Specifications

Dimensions (LXWXH)	76.4mmX23.2mmX13.2mm
Weight	20g
Operating Temperature	0C to 50C
Operating Humidity	10-90% rH
Composition	PC
Durability	100,000 insertions
MTBF	500,000hours

PC/SC Driver Support

- Windows 98/ME, 2000 / XP(32-bit), 2003 Server
- Windows CE 5.0/CE.NET (depending on hardware)
- Windows XP 64bit (AMD64, EM64T, IA64)
- Windows Vista (32bit/64bit)
- Linux
- Mac OS X

Fingerprint Sensor Specification

CMOS active-pixel technology	
Maximum finger speed	Up to 40cm/s
Sensor strip (image) width	12.4mm
Array size	192 X 4 pixels
Image resolution	508DPI
ESD tolerance	IEC 61000-4-2 Level 4 +-15kV air discharge (Sensor surface)
FAR	1:1,000,000
FRR	1:1000

Card Reader Compliance/Certification by OMNIKEY®

- Microsoft WHQL
- EMV^2 2000 Level 1
- ISO 7816
- HBCI
- CCID
- Common Criteria EAL 3+

Safety / Environmental

- CE
- FCC
- RoHS

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