

ZKTeco Encrypted Card Solution

RFID Card Cloning Protection Against Mobile Phones & Copying Tools

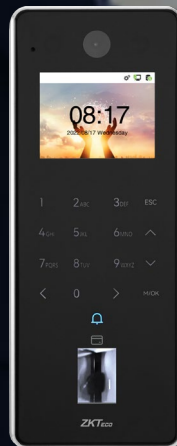
Compatible Devices:



ProID101



FR1500S-D



F35



CR100RW

Introduction

ZKTeco's encrypted card solution elevates standards in RFID security. Using DES, 3DES and AES-128 encryption algorithms, our solution eliminates the risks of RFID card cloning, unauthorized NFC simulation, and the use of counterfeit access tools.

Seamlessly integrated across the ZKTeco product line, it can work with ProID100 series reader, FR1500S-D biometric reader, and F35 standalone access control terminal-feature embedded encryption modules with configurable key management.

The CR100RW card encoder with its bundled encryption software CRSeriesTool_V1.17, enables DESFire user card encryption initialization and configure the card issuance. Configuration cards then encrypt and configure card reader and access control terminal.

Features

- Compatible with: DESFire EV1/EV2/EV3.
- Supports DES, 3DES and AES-128 encryption algorithms, ensuring secure encryption card file keys.
- Designed for compatibility with multiple ZKTeco products, including ProID100 series readers (ProID101/ ProID102 / ProID103) and FR1500S-D biometric reader that work with access controller or standalone access control terminal. It is also compatible with F35 standalone access control terminal for independent access management.
- The CR100RW card encoder bundled with CRSeriesTool_V1.17 software issues DESFire EV1/EV2/EV3 user card configuration to securely encrypt reader and access control terminal, making operation more efficient and convenient.

Supported Card Types

	DESFire EV1	DESFire EV2	DESFire EV3
ISO/IEC 14443 A 1-4	Yes	Yes	Yes
ISO/IEC 7816-4 support	Extended	Extended	Extended
EEPROM data memory	2/4/8KB	2/4/8/16/32KB	2/4/8/16KB
Flexible file structure	Yes	Yes	Yes
NFC Forum Tag Type 4	Yes	Yes	Yes
Unique ID	7B UID or 4B RID	7B UID or 4B RID	7B UID or 4B RID
Number of applications	28	As many as memory size supports	As many as memory size supports
Number of files per app	32	32	32
Data rates supported	Up to 848 Kbit/s	Up to 848 Kbit/s	Up to 848 Kbit/s
Crypto algorithms supported	DES/2K3DES/3K3DES/AES128	DES/2K3DES/3K3DES/AES128	DES/2K3DES/3K3DES/AES128
Delegated Application Management (Multi-Application)	/	Yes	Yes, preloaded keys
SUN (Secure Unique NFC Message)	/	/	Yes, compatible with NTAG DNA
Transaction MAC per app	/	Yes	Yes
Multiple keysets per app	/	Up to 16 keysets	Up to 16 keysets
Multiple file access rights	/	Up to 8 keys	Up to 8 keys
Inter-app file sharing	/	Yes	Yes
Transaction Timer	/	/	Yes
Virtual Card Architecture	/	Yes	Yes
Proximity Check	/	Yes	Yes
Delivery types	Wafer, MOA4 and MOA8	Wafer, MOA4 and MOB6	Wafer, MOA4 and MOA8

Compatible Devices



FR1500S-D

- IC/DESFire EV1/EV2/EV3 Encrypted
- Fingerprint(V10.0/V13.0)
- RS458 (OSDP)
- IP65



ProID101 / ProID102 / ProID103

- ID & IC/DESFire EV1/EV2/EV3 Encrypted.
- Wiegand & RS458 (OSDP, ver. 2.2).
- IP65 + IK04.
- Aluminum Alloy with tempered glass surface.



CR100RW

- USB 2.0 (Type-C)
- Dual-frequency (125 kHz & 13.56 MHz), supporting multiple card types;
- Supports encryption for IC, DESFire, and CPU cards ;
- Built-in SAM slot (Secure Access Module) ;
- Supports customizable card reading rules ;
- Powerful SDK for developing applications running directly on the reader.



F35

- Fingerprint/ID & IC & DESFire EV1/EV2/EV3 Encrypted
- Video intercom (SIP Client V 2.0)
- IP65
- TCP/IP, Wi-Fi (Optional).
- AC Push can convert to TA Push.



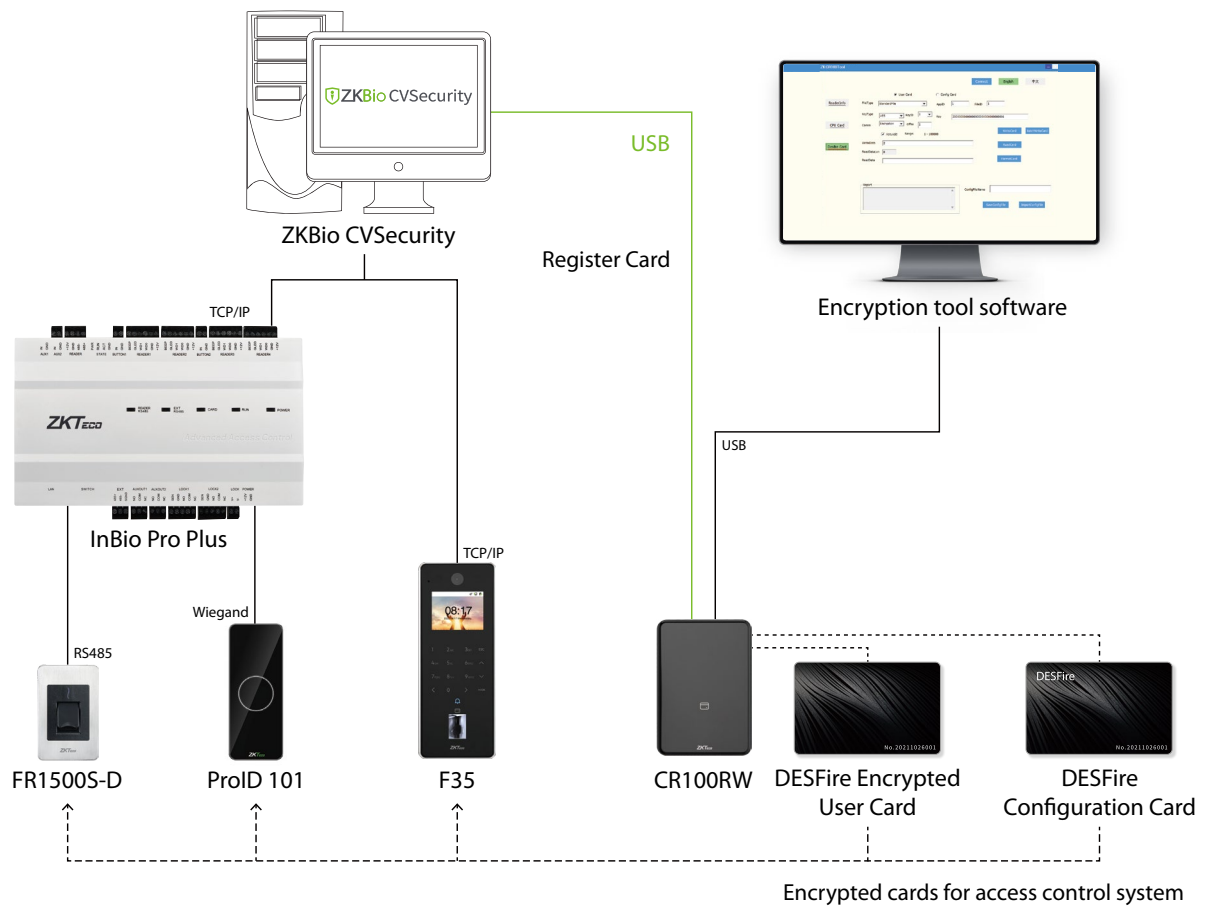
SpeedFace V5L SpeedFaceV4L Pro

SenseFace Series

SpeedFace V5L / SpeedFaceV4L Pro / SenseFace Series

- Note: ZKTeco Encrypted Card Technology will be available on more models soon.

Configurations



*Note: The CR100RW card issuer connects to ZKBio CVSecurity software via UsB 2.0 for user card registration.

