PULSE

Pulse 3028 Contactless Smart Card Fingerprint Reader

is an user friendly and high security physical Access Control reader, reader high security data encryption random output which works with High Security Module or ACX Data Exchanger to ensure the data cannot be snooped by external device, totally solve the wiegand signal transmission problem.

Match-on-Card is the concept of both matching and storing fingerprints on a smart card. This establishes the physical presence of a cardholder and thereby facilitates a secure proof of identity. The matching takes a split second and is therefore both convenient and fast to use.

Smart cards are known for their tamper-proof environment. By both storing and matching a biometric fingerprint template on a smart card, the fingerprint not only acts as a pure PIN replacement, but becomes an integral part of the smart card; making use of the secure environment of the chip.

KEY FEATURES:

- Optical fingerprint sensor
- Two / Three Fingerprint templates on card, 512 bytes template
- Normal access maximum two fingerprint templates
- Duress alarm one fingerprint template (optional)
- No need extra cable connection to host for central database
- Support NXP Mifare Plus S 2K/4K contactless smart card
- RED / Green / Blue LED and internal buzzer
- Read fingerprint template from card LED notification
- Internal buzzer, user defined buzzer ON / OFF time interval
- 2 x 128 bits Data encryption key can be defined by end user
- User defined configuration card master key for reader configuration
- Reader firmware effective by present configuration card
- High security encrypted data random output, work with Data Exchanger avoiding card data to be snooped
- High Security Module decode the card reader data and output wiegand data to door access panel
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TECHNICAL DATA

Model Number	3028
Card Technology	NXP Mifare Plus read
ISO standard	ISO14443A
Transmit Frequency	13.56MHz
Key Authentication	Custom 128 bits diversify key for Mifare Plus
Card Data Security	Max. 64 bits card number mixed with original CSN, custom AES 128 bits key data encryption, CRC16
Reader output	Wiegand output or; Scamble RS485 output , work with ACX 2080 Gateway. ACX 2080 outputs wiegand data to door access panel
Fingerprint	512K bytes per template. Fingerprint on card which is encrypted by custom AES128 bits key
Typical Read Range	ISO Card : 4cm ; Keyfob : 2cm Typical read range achieved in air; Different types of metal will cause some degradation Use spacers to space product off metal and improve read range if required
Response time	Read x 2 Finger template : 0.45s / 1 FP Read 2 pcs FP template from card : 0.215s
Card number format	Any card number format, max 64 bits card number
Reader cable	4 wires for Power, Ground, RS485(T), RS485(R)
Mounting	Wall Switch Size; designed to mount and cover single gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing
Visual indicator	RED / GREEN / BLUE or mixed
Audio indicator	Internal buzzer, user defined beep sound ON / OFF time interval (ms)
Color	Dark Grey / White
Dimension	130mm (L) x 85mm (W) x 36mm (D)
Weight	250g
Operating Voltage	9 ~ 15VDC
Operating Current	300mA @12VDC
Operating Temperature	0º to 60º C
Operating Humidity	10% to 90% relative humidity non-condensing
Panel Connection	2 x 7 PIN connector
Housing Material	Polycarbonate
Cable Distance	Wiegand interface : 500 feet (150m), RS485 interface: 4000 feet (1200m) Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent