

**F8** “Fingerprint Template on Card” Reader is a user friendly and it supports traditional wiegand output. The OSDP and the ACX scramble RS485 encryption output 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.



## FEATURES

- Fingerprint Template on Card, 512 bytes
- Support NXP Mifare, Mifare Plus S / X, Mifare DESFire EV1 / EV2
- High quality material reader cover and water proof design
- Infra red light tamper design, overcome the mechanical defects
- Use configuration card to change the device in reader mode or enroller mode
- Fingerprint enrollment on device, no PC software and database required
- RED / Green / Blue or mixed color LED bar, user defined LED ON / OFF time interval
- Internal buzzer, user defined buzzer ON / OFF time interval
- Wiegand or OSDP or ACX Scramble RS485 dual output



## CARD TECHNOLOGY

Item Number	Card Type	Max. Template
F8A1	HID iCLASS 4K	2
F8A4	NXP Mifare 1K / 4K	1 / 2
F8A6	NXP Mifare Plus S / X ; 2K / 4K	1 / 2
F8A7	NXP DESFire EV1 / EV2 ; 4K / 8K	1 / 2
F8A8	LEGIC Advant 4K	2

## SPECIFICATION

<b>F8 (91HF08) Fingerprint Reader Enroller(Template on Card)</b>	
Fingerprint Sensor	Optical, 20mm x 15mm
Water Proof	IP65
Card Number	AES128 encrypted, card number in any format, maximum length is 64 bits, CSN or sector number selectable
Response Time	Less than 1 second
False Acceptance Rate	Less than 0.001% (Operation level = 3)
False Reject Rate	Less than 1.0% (Operation level = 3)
Reader Output	Wiegand format or OSDP or ACX scramble RS485
Reader Wires	Power, Ground, Wiegand D0, Wiegand D1, RS485(A), RS485(B), Green LED / ACK, Buzzer, Hold and shield wires (Pigtial) LAN Port for fingerprint template download
Installation	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	LED bar in RED ,Green & Blue color, user defined LED ON / OFF time interval (ms)
Audio Indicator	Internal buzzer, user defined beep sound ON / OFF time interval (ms)
Color	Black or White
Dimension	130mm(L) x 85mm(W) x 36mm(D)
Product Weight	250g
Operating Voltage	9-16 VDC
Operating Current	Average 80mA DC, peak 150mA DC
Operating Temperature	-20° C to +60° C
Operating Humidity	10% to 90% relative humidity non-condensing
Housing Material	Polycarbonate
Cable Distance	Wiegand interface: 500 feet (150 m), RS485 interface: 4000 feet (1200 m) Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent
Reader Installation Height	It is recommended that the center of the card reader be 1.35 meters above the ground