ACX | DESIGN INNOVATIONS

F5

mini Contactless Smart Card Reader is a user-friendly and high-security physical access control reader. It is water-proof and made of high-quality materials to enhance reliability and longevity, hence suitable for both indoor and outdoor installations.

Its Wiegand output means the reader can directly connect to any Wiegand door access controller. Its highly secured data encryption output also works with ACX 2080 Gateway, ensuring the data cannot be snooped by external devices. This effectively resolves the Wiegand signal transmission issue.

FEATURES

- Waterproof - IP65
- 28 applications, with each one creating up to 32 files
- Max. file size: 2K bytes
- 16 sets key for file data read, write and change key
- Red / Green / Blue or mixed color LED bar, user-defined LED ON / OFF time interval. LCD contrast adjustable
- Internal buzzer, user-defined buzzer ON / OFF time interval
- User-define Wiegand pulse interval to serve different door access panels
- User-defined "I Am Alive" feature
- Standard mode: Wiegand output to Wiegand door access panel, RS485 to host for reader communication
- Secure mode: high-security data encryption on output. ACX 2080 Gateway helps avoid card data being snooped

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CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. (RF / RF+BLE)
HID iCLASS	32 ~ 64 bits CSN	91HF05 / F511
HID 125 KHz	HID card number	91LF05 / F512
EM	32 bits CSN	91LF05 / F513
Mifare Classic	32 ~ 56 bits CSN / Sector	91HF05 / F514
SONY Felica CSN	32 ~ 64 bits CSN	91HF05 / F515
Miface Plus S / X	32 ~ 56 bits CSN / Sector	91HF05 / F516
Mifare DESFire EV1	32 ~ 56 bits CSN / File	91HF05 / F517
LEGIC Advant	32 ~ 64 bits CSN / Sector	91HF05 / F518

SPECIFICATION

F5 Mini Contactless Smart Card Reader	
Key Authentication	Custom 128 bits diversified key
Card Data Security	Max. 64 bits card number mixed with original CSN, custom AES128 bits key data encryption, CRC16
Reader Output	ACX scramble RS485 output and Wiegand output
Typical Read Range	Bluetooth Technology : 2m to 10m, 13.56 MHz : 4cm+, 125 KHz : 5cm+ 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.
"I Am Alive"	User-defined 1 byte "I Am Alive" data at a certain interval
Reader Cable	10 wires, Power, Ground, D0, D1, ACK, Buzzer, hold, RS485 (A), RS485 (B), spare
Mounting	Wall switch size, designed to mount and cover single-gang switch boxes primarily used in the Americas. It includes a slotted mounting plate for European and Asian back box spacing
Visual Indicator	LED bar in Red, Green, and Blue; user-defined LED ON / OFF time interval
Audio Indicator	Internal buzzer, user-defined beep sound ON / OFF time interval (ms)
Color	Black or White
Dimension	48mm x 110mm x 20mm
Product Weight	90g
Operating Voltage	9-16 VDC, Linear supply recommended
Operating Current	100mA AVG, 110mA PEAK
Operating Temperature	-31º to 150º F (-35º to 65º C)
Storage Temperature	-67º to 150º F (-35º to 85º C)
Operating Humidity	5% to 95% relative humidity non-condensing
Certification	IP65, IK06, CE 0700, NCC, RoHS
Panel Connection	Pigtail
Housing Material	Polycarbonate
Cable Distance	RS485 interface: 4000 feet (1200 m) Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent

CE RoHS COMPLIANT IP67 IK06