

F3

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

The reader is equipped with touch sensor keypad technology. Its Wiegand output means the reader can directly connect to any Wiegand door access controller, while the ACX scramble RS485 output ensures the data cannot be snooped by external devices.



FEATURES

- Waterproof IP67 Contactless Technology Keypad Reader
- 125KHz, 13.56MHz & Bluetooth 2.4GHz, dual technologies in the reader
- Waterproof capacitive touch sensor technology, 3 x 4 Key, 0 to 9, *, #
- Red / Green / Blue or mixed color LED bar, user-defined LED ON / OFF time interval
- 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
- Touch sensor keypad, zero mechanical operation problems



CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. (RF / RF+BLE)
HID iCLASS	1 ~ 64 bits CSN ; HID card number	91HF03 / F311
HID 125 KHz	HID card number	91LF03 / F312
EM	1~40 bits CSN	91LF03 / F313
Mifare Classic 1K / 4K	1 ~ 56 bits CSN ; Custom data models	91HF03 / F314
SONY Felica CSN	1 ~ 64 bits CSN	91HF03 / F315
Mifare Plus S / X	1 ~ 56 bits ; Custom data models	91HF03 / F316
Mifare DESFire EV1 / EV2	1 ~ 56 bits ; Custom data models	91HF03 / F317
LEGIC Prime / Advant	1 ~ 64 bits ; Custom data models	91HF03 / F318

SPECIFICATION

F3 Contactless Smart Card Keypad Multi-Tech Reader	
Bluetooth	2.4 GHz Bluetooth 4.0
Key Authentication	Custom 128 bits diversified key for custom data model on Mifare Classic, Mifare Plus, Mifare DESFire, LEGIC
Card Data Security	Max. 64 bits card number mixed with CSN, custom AES 128 bits key data encryption, CRC16. Apply for custom data models
Reader Output	Wiegand, Clock and Data, OSDP in RS485, ACX Scramble in RS485
Typical Read Range	Bluetooth Technology : 0.5m to 10m, 13.56 MHz ISO card : 4cm+, 125 KHz ISO card : 6cm+ 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, applied for Wiegand interface
Reader Cable	Power, Ground, Wiegand D0 / Magnetic Card Format Data, Wiegand D1 / Magnetic Card Format Clock, Magnetic Card Format Card present, RS485(A), RS485(B), Green LED / Permission approval, buzzer, hold, signal mask line
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 line in Red / Green / Blue / Amber / Purple / White / Light Purple; user-defined LED ON / OFF time interval
Audio Indicator	Internal buzzer, user-defined beep sound ON / OFF time interval (ms)
Color	Black or White
Keypad	Waterproof capacitive touch sensor technology, 3 x 4 Key, 0 to 9, *, #
Dimension	80mm x 115mm x 20mm
Product Weight	140g
Operating Voltage	9-16 VDC, Linear supply recommended
Operating Current	110mA AVG, 130mA PEAK
Operating Temperature	-31° to 150° F (-35° to 65° C)
Storage Temperature	-67° to 185° F (-55° to 85° C)
Operating Humidity	5% to 95% relative humidity non-condensing
Certification	IP67, IK06, CE 0700, NCC, RoHS
Panel Connection	Pigtail
Housing Material	Polycarbonate

SPECIFICATION

F3 Contactless Smart Card Keypad Multi-Tech Reader

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