ACX | DESIGN INNOVATIONS

F2

Contactless Smart Card LCD Reader is a user friendly and multi-technology physical Access Control reader, it is a water proof design that suitable for different indoor and outdoor installation environment, it made by high-quality material and with touch sensor keypad technology to ensure enhanced reliability and long-term duration.
LCD can display custom graphics or company name, date, time, card number, cardholder name, access grant, and access denied message.

Reader wiegand output can directly connect to any wiegand door access controller.

The reader ACX scramble output ensures the data cannot be snooped by external device.

FEATURES

- Waterproof IP65 Contactless Technology LCD Keypad Reader
- 125KHz, 13.56MHz & Bluetooth 2.4GHz enable, dual technologies in the reader
- 128 x 64 dots Characters LCD graphic display, green backlight support
- LCD graphics display custom graphics or company name, date, time and access message or card number, multi-language supported
- Internal Real time clock
- 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 panel
- User defined “I am alive” feature
- Touch sensor keypad, overcome the membrane keypad problem

CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. (RF / RF+BLE)
HID iCLASS	32 ~ 64 bits CSN ; HID card number	91HF02 / F211
HID 125 KHz	HID card number	91LF02 / F212
EM	32 bits CSN	91LF02 / F213
Mifare Classic 1K / 4K	32 ~ 56 bits CSN / Sector	91HF02 / F214
SONY Felica CSN	1 ~ 64 bits CSN	91HF02 / F215
Miface Plus S / X	1 ~ 56 bits ; Custom data models	91HF02 / F216
Mifare DESFire EV1 / EV2	1 ~ 56 bits ; Custom data models	91HF02 / F217
LEGIC Prime / Advant	1 ~ 64 bits ; Custom data models	91HF02 / F218

SPECIFICATION

F2 Contactless Smart Card LCD Multi-Tech Reader	
Bluetooth	2.4 GHz Bluetooth 4.0
Key Authentication	Custom 128 bits deversify 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 define 1 bytes "I am alive" data in a certain interval, apply 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 and includes a slotted mounting plate for European and Asian back box spacing
Visual Indicator	LED bar in RED / Green / Blue / Amber / Purple / White / Light Purple color, 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	85mm x 130mm x 20mm
Product Weight	220g
Operating Voltage	9-16 VDC, Linear supply recommended
Operating Current	110mA AVG, 130mA PEAK
Operating Temperature	32º to 122º F (0º to 50º C)
Storage Temperature	23º to 140º F (-5º to 60º C)
Operating Humidity	5% to 95% relative humidity non-condensing
Certification	IP65, CE 0700, NCC, RoHS
Panel Connection	Pigtail
Housing Material	Polycarbonate

SPECIFICATION

F2 Contactless Smart Card LCD 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