ACX | DESIGN INNOVATIONS

X1 multi-technologies reader embedded Bluetooth, NFC, QR code and different kinds of contactless smart card technologies, it becomes a perfect design for true-contactless and high accuracy contactless smart card, mobile device cross-platform application.

X1 reader is waterproof design that suitable for different indoor and outdoor installation environment, it made by high quality material to ensure enhanced reliability and long-term duration.

Reader has wiegand and scramble encryption output which suitable for different security level applications.

Embedded Bluetooth technology can read the encrypted virtual credential number from Android phone and iPhone.

QR Code scanner can read the scramble QR code as a virtual credential number from Android phone and iPhone.

FEATURES

- QR Code scanner with backlight, 4cm to 22cm read range
- The reader can read the scramble QR code by ACX mobile APPS for access control system
- The reader can read the fixed QR code image by mobile or label for visitor managment system
- 2.4GHz Bluetooth 4.0+ works with ACX mobile apps
- 13.56MHz NFC works with ACX mobile apps
- 13.56Mhz Card technology includes LEGIC Prime and Advant, CSN for Mifare Classic, Mifare Plus, Mifare DESFire , SONY Felica and PicoPass
- RED / Green / Blue or mixed color reader LED for visual notification, reader buzzer for audio notification
- User defined reader's visual and audio notification for access granted and access denied
- Optical sensor for tamper protection, I am alive feature
- Reader outputs Wiegand and ACX proprietary scramble encryption RS485 format
- Reader LAN cable for clock synchromous and for visitor management system (API provided)
- NFC technology compatibility
- Waterproof IP55

CE IP55

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CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. (RF / RF+BLE)
HID iCLASS	32 ~ 64 bits CSN	X111 / X1T1
HID 125KHz	HID card number	X112 / X1T2
EM	32 bits CSN	X113 / X1T3
Mifare Classic	32 ~ 56 bits CSN / Sector	X114 / X1T4
SONY Felica CSN	32 ~ 64 bits CSN	X115 / X1T5
Mifare Plus S/X	32 ~ 56 bits CSN / Sector	X116 / X1T6
Mifare DESFire EV1 / EV2	32 ~ 56 bits CSN / File	X117 / X1T7
LEGIC Prime / Advant	32 ~ 64 bits CSN / Sector	X118 / X1T8

SPECIFICATION

X1 Bluetooth QR Code Card Multi-Tech Reader	
Key Authentication	Custom 128 bits diversify key
Card Data Security	Max. 64 bits card number mixed with original CSN, custom AES 128 bits key data encryption, CRC16
Reader Output	ACX Propriatery scramble RS485 output
QR Code Min. Resolution	5 mil, 1 mil = 0.0254mm
QR Code Resolution	640 x 480
QR Code Scanning Angle	± 60° for left & right, ± 40° for front and back, 360° rotation
QR Code Scanning Range	4cm to 22cm
NFC Technology	13.56 MHz NFC
Typical Read Range	Bluetooth Technology : 0.5m to 10m, NFC : 2cm to 4cm 125khz : 4cm to 8cm, 13.56MHz : 2cm to 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
Reader Cable	LAN 6 pins connector, Pigtail 10 wires
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 line 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	80mm x 130mm x 20mm
Product Weight	150g
Operating Voltage	9-16 VDC, Linear supply recommended
Operating Current	150mA AVG, 120mA 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
Housing Material	Polycarbonate
Cable Distance	RS485 interface: 4000 feet (1200m), Wiegand interface : 500 feet (150m) Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent