

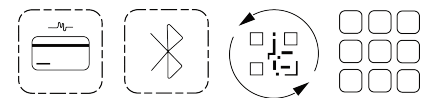
**X2** multi-technologies keypad reader embedded Bluetooth, NFC, QR code and different kinds of contactless smart card technologies, it becomes a perfect design for true-contactless and high accuracy contactless smart card, mobile device cross-platform application.

X2 keypad reader is suitable for different indoor 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 & NFC 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 management system
- 12 capacitance keys with black light
- 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 synchronous and for visitor management system (API provided)
- NFC technology compatibility
- Waterproof IP55

## CARD TECHNOLOGY

| Card Technology          | Card Number Output        | Item No. ( RF / RF+BLE ) |
|--------------------------|---------------------------|--------------------------|
| HID iCLASS               | 32 ~ 64 bits CSN          | X211 / X2T1              |
| HID 125KHz               | HID card number           | X212 / X2T2              |
| EM                       | 32 bits CSN               | X213 / X2T3              |
| Mifare Classic           | 32 ~ 56 bits CSN / Sector | X214 / X2T4              |
| SONY Felica CSN          | 32 ~ 64 bits CSN          | X215 / X2T5              |
| Mifare Plus S/X          | 32 ~ 56 bits CSN / Sector | X216 / X2T6              |
| Mifare DESFire EV1 / EV2 | 32 ~ 56 bits CSN / File   | X217 / X2T7              |
| LEGIC Prime / Advant     | 32 ~ 64 bits CSN / Sector | X218 / X2T8              |

## SPECIFICATION

| <b>X2 Bluetooth QR Code Card Multi-Tech Keypad Reader</b> |  |
|---|--|
| 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 Proprietary 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<br>125khz : 4cm to 8cm, 13.56MHz : 2cm to 6cm<br>Typical read range achieved in air; different types of metal will cause some degradation<br>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)<br>Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent  |