

**W<sub>2</sub>** reader embedded Scramble QR Code, Bluetooth 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.

W2 reader designs for the reader that flush-mount on the wall, the readers look so thin and creates fancy decoration for the interior design of buildings.

Reader has wiegand, OSDP and ACX 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.



## FEATURES

- Supports 125KHz, 13.56MHz ISO 14443 A, B & ISO15693, Bluetooth 4.0 and QR Code Backlight for the lighting compensation on the QR code paper.

## CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. ( RF / RF+BLE )
HID iCLASS	1 ~ 64 bits CSN; HID card number	W211 / W2T1
HID 125 KHz	HID card number	W212 / W2T2
EM	1~40 bits CSN	W213 / W2T3
Mifare Classic 1K / 4K	1 ~ 56 bits CSN ; Custom data models	W214 / W2T4
SONY Felica CSN	1 ~ 64 bits CSN	W215 / W2T5
Mifare Plus S / X	1 ~ 56 bits CSN ; Custom data models	W216 / W2T6
Mifare DESFire EV1 / EV2	1 ~ 56 bits CSN ; Custom data models	W217 / W2T7
LEGIC Prime / Advant	1 ~ 64 bits CSN ; Custom data models	W218 / W2T8

## SPECIFICATION

W2 QR Code Multi-technology Reader	
QR Code Min. Resolution	Custom 128 bits diversify key
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 20cm
Bluetooth	Bluebooth 4.0+, 2.4 GHz
Key Authentication	Custom 128 bits diversify key for custom data model on Mifare Classic, Mifare Plus, Mifare DESFire, LEGIC
Card Data Security	Max. 64 bits card number mixed with original 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	QR Code : 3cm to 10cm ; 125 KHz : 5cm+, 13.56 MHz : 4cm+, Bluetooth Technology : 2m to 10m 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
Reader Cable	4 wires cable, Power, Ground, RS485(A), RS485(B)
Audio Indicator	Internal buzzer, user defined beep sound ON / OFF time interval (ms)
Color	Black or White
Dimension	86mm x 86mm x 5mm Flush Mount Inside surface 30mm installation BS1299 electric junction box
Product Weight	100g
Operating Voltage	9-16 VDC, Linear supply recommended
Operating Current	120mA AVG, peak 150mA PEAK
Operating Temperature	-13° to 131° F (-25° to 55°C)
Storage Temperature	-67° to 185° F (-55° to 85°C)
Operating Humidity	5% to 95% relative humidity non-condensing
Cable Distance	Wiegand interface : 500 feet (150m) ; RS485 interface: 4000 feet (1200m) Recommended cable is ALPHA 1295 (22 AWG) 5 conductor minimum stranded with overall shield or equivalent