

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.

S3 reader designs for the reader mounted inside the lift panel, user can use mobile for lift access control.

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	S311 / S3T1
HID 125 KHz	HID card number	S312 / S3T2
EM	1~40 bits CSN	S313 / S3T3
Mifare Classic 1K / 4K	1 ~ 56 bits CSN; Custom data models	S314 / S3T4
SONY Felica CSN	1 ~ 64 bits CSN	S315 / S3T5
Mifare Plus S / X	1 ~ 56 bits CSN; Custom data models	S316 / S3T6
Mifare DESFire EV1 / EV2	1 ~ 56 bits CSN ; Custom data models	S317 / S3T7
LEGIC Prime / Advant	1 ~ 64 bits CSN ; Custom data models	S318 / S3T8

## **SPECIFICATION**

S3 QR Code Multi-Tech 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	$\pm~60^{\circ}~$ for left & right, $\pm~40^{\circ}~$ for front and back, 360° rotation	
QR Code Scanning Range	4cm to 20cm	
Bluetooth	Bluetooth 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	85mm x 85mm x 20mm	
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)	
StorageTemperature	-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	