

K16 QR Code reader supports Bluetooth and various Contactless Smart Card technologies, making it an accurate solution for true contactless functionality in Smart Card or mobile device application.

The K16 reader is waterproof and made of high-quality materials to enhance reliability and longevity, hence suitable for both indoor and outdoor installations. Its output options include Wiegand and scramble encryption, catering to diverse security level requirements. The embedded Bluetooth technology also allows for reading encrypted virtual credential numbers from both Android and iPhone devices.







#### **FEATURES**

- Optical sensor for tamper protection, "I Am Alive" feature
- Support 125KHz, 13.56MHz ISO 14443 A, B & ISO15693, Bluetooth 4.0, and QR code
- Red / Green / Blue or mixed color LED circle ring for visual notification
- User-defined reader's access granted/denied LED & buzzer ON/OFF time and interval
- Wiegand and ACX proprietary scramble encryption RS485 format
- Waterproof IP65



### CARD TECHNOLOGY

Card Technology	Card Number Output	Item No. ( RF / RF+BLE )
HID iCLASS	1 ~ 64 bits CSN; HID card number	K511 / K5T1
HID 125 KHz	HID card number	K512 / K5T2
EM	1 ~ 40 bits CSN	K513 / K5T3
Mifare Classic 1K / 4K	1 ~ 56 bits CSN; Custom data models	K514 / K5T4
SONY Felica CSN	1 ~ 64 bits CSN	K515 / K5T5
Mifare Plus S / X	1 ~ 56 bits ; Custom data models	K516 / K5T6
Mifare DESFire EV1 / EV2	1 ~ 56 bits; Custom data models	K517 / K5T7
LEGIC Prime / Advant	1 ~ 64 bits CSN; Custom data models	K518 / K5T8

### **SPECIFICATIONS**

K16 QR Code Multi-Tech Reader		
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 diversified 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, 125KHz: 5cm+, 13.56MHz: 4cm+; Bluetooth Technology: 0.5m 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	
"I Am Alive"	User-defined 1 byte "I Am Alive" data at a certain interval	
Reader Cable	CAT 5 and Pigtail 10 wires  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. It includes a slotted mounting plate for European and Asian back box spacing	
Visual Indicator	LED circle ring in Red / Green / Blue / Amber / Purple / White / Light Purple; 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	44mm x 115mm x 20mm	
Product Weight	87g	
Operating Voltage	9-16 VDC, Linear supply recommended	
Operating Current	120mA AVG, 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	
Housing Material	Polycarbonate	

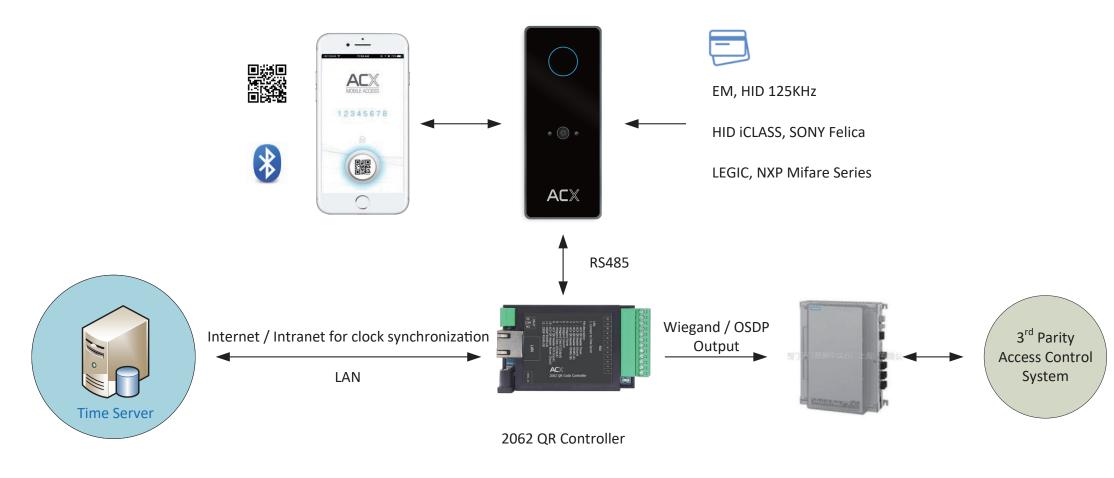
### **SPECIFICATION**

K16 QR Code 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	

# ACX K16 QR Multi-tech Reader works with 3rd party Wiegand controller



Scramble in every second, for staff



# ACX K16 QR Multi-tech Reader works with 3rd party Wiegand controller

