



Design Philosophy

QR Code is getting popular in Access Control application due to its cost effective on Visitor Management. In order to make this technology more applicable in Access Control environment, our reader designed based on the following concepts:

- ◆Flexible - support both Static and Dynamic QR Code.
- ◆Security - all the data inside the QR Code is encrypted by AES128, and support to set its validity period.
- ◆Easy to install - the reader used hand phone Bluetooth to synchronize the time so that no extra synchronize wire is required.

Function Description



Supports the different types of RFID technology:

- ◆ 125KHz
- ◆ 13.56MHz (Mifare, DesFire, LEGIC, Felica, iClass, China ID card's UID)



Supports Different Access technologies: QR code, Bluetooth, NFC, or use different card technologies.



Fully supports multiple Access Modes via App: Show-to-Go / Shake-to-Go/ Hands Free / Manual Button.



Supports on-site reader configuration in various ways: Reader Configuration Card, App (Bluetooth) and Barcode Configuration.



The App supports both Dynamic QR code and Bluetooth authorization simultaneously. One time authorization for both QR code and Bluetooth share the same card number.



Both Static and Dynamic QR Code support setting a validity period.



Built-in lighting control; Always ON, Always OFF and Turn ON while QR Code is showed.



Supports Wiegand and RS485 (OSDP V1, V2), and compatible with various controllers.



Adopts AES128 encryption to ensure communication and data security.



Provides API of Android and iOS, SDK of Windows system.

SPECIFICATIONS

Model	SP-BMT-Q22-3N (QR Code Reader)	SP-BMT-Q22-3K (QR Code Keypad Reader)
Functions		
Reader's Functions		
Reading Technologies	QR code & Bluetooth & RFID(13.56MHz & 125KHz)	
Typical Read Range	QR: 4 - 18cm / Bluetooth: 0.1 - 5m / RFID(13.56MHz & 125KHz): 1 - 8 cm	
Reader Output	Wiegand / RS485(OSDP V1,V2 Optional)	
Reader Output Format	CSN/UID 32bits, 34bits, 56bits (backward/forward), file content reading for programmed ID	
Baud Rate for OSDP	9600(default) / 38400 / 57600 / 115200 (Configurable)	
Keypad Output Format	N/A	4bits(default) / 8bits / 26bits
Buzzer Control	Reader & Controller control (Default) or Controller control only	
Typical Wiring Distance	Wiegand:150m / OSDP: 500m (22 AWG with shielded cable)	

QR Code Functions

Resolution	640* 480 CMOS	
Scanning Angel	+/- 70° for left & right, +/- 60° for front & back	
Minimum Resolution	6.6 mil	
Standard	Bar code	EAN-8, EAN-13, EAN-13 2 add-on, EAN-13 5 add-on, ISBN, UPC-A, UPC-E, Code 39, Code 39FULL ASCII, Code 93, Code 32, Code 128, Bar Code, Interleaved 2 of 5.
	QR code	PDF417, Data Matrix, QR code

Operating Specifications

Operating Voltage	9 - 24VDC
Operating Current	250mA (max.)
Operating Temperature	-20°C - 55°C
Operating Humidity	10% - 90%, non-condensing
Exterior Dimensions	115.5*84.5*20.5mm
Case Materials	PC + ABS
Standard Color	Black case Black cover / Beige case Silver cover / White case Silver cover
Weight	210g