66.00 mm

110.00 mm

OSDP & QR Code Reader



Wide Slim

User Manual

1. Introduction

It is a waterproof OSDP keypad reader with Wiegand output. It supports **Mifare (13.56MHz) card, DC 12-18V of Operation.** and features an integrated QR code scanning function.

Features:

> Metal case, anti-vandal
> Waterproof, conforms to IP67
> OSDP + Wiegand, AES-128 encryption, adjustable baud rate (up to 128000) & OSDP address (0-126)
> Card Type: 13.56MHz Mifare
> Programmable Wiegand output
EM card: Wiegand 26~44 bits output (default: 26bits)
Mifare card: Wiegand 26~44, 56, 58 bits output (default: 34bits)
HID card: Wiegand 26~37 bits output
> QR code with Wiegand output (only the content is 0-9, A-F, a-f)
> QR code OSDP output format: osdp_FMT, if exceed 64 characters, split to multiple packages
> PIN output: 4 bits, 8 bits or virtual card number

Specifications:

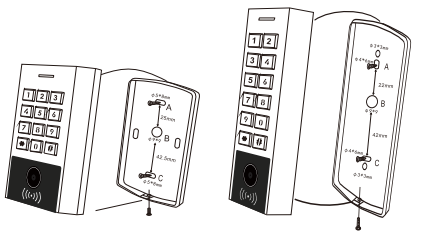
Operation Voltage	12-18V DC
Standby Current	≤80mA
Frequency	13.56MHz
Card Type	EM&HID or Mifare
Read Range	1~4 cm
Wiegand Output Format	EM card: Wiegand 26~44 bits output (default:26bits) Mifare card: Wiegand 26~44, 56, 58bits output (default:34bits) HID card: Wiegand 26~37 bits output
Keypad Transmission Format	4 bits (factory default) 8 bits or virtual card number can be set
Operating Temperature	-40°C~60°C
Operating Humidity	0% ~ 98% RH
Index of Protection	IP67
Dimension	L120 x W70 x H22mm (Wide) L144 x W55 × H21mm (Slim)
Net Weight	500g
Shipment Weight	605g

QR Code Specification:

Sensor	CMOS
Reading Code & Accuracy	QR code≥10mil Barcode ≥4mil
Reading Angle	Rotation: 360° Tilt: ±60° Deflection: ±60°

2. Installation

- Drill 2 holes (A, C) on the wall for the screws and one hole (B) for the cable
- Knock the rubber bungs to the holes (A, C)
- Fix the back cover on the wall with 2 screws
- Thread the cable though the cable hole (B)
- Attach the unit to the back cover



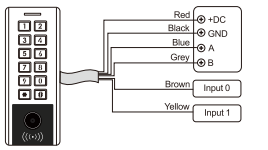
Wiring

Color	OSDP	Wiegand
Red	12-18V DC	12-18V DC
Black	Ground	Ground
Green	/	Data 0
White	/	Data 1
Brown	OSDP Input 0	Green LED Light Control
Yellow	OSDP Input 1	Buzzer Control
Blue	RS485A	/
Gray	RS485B	/

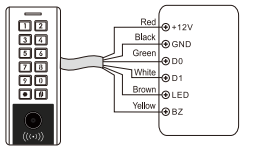
Remark: Please refer to Page 05 to set the Brown wire and Yellow wire's working mode.

Connection Diagram

Connect with OSDP Controller



Connect with Wiegand Controller



3. Programming

Note: When enter program mode,need press for 5 seconds, then press Master code # (Factory default master code:123456)

Set Master Code (6 digits)

The Master Code is used to prevent unauthorized access to the system,we highly recommend immediately updating it and recording the New Master Code.

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #** (factory default: 123456)
2. Update Master Code	**0 (New Master Code) #** **(Repeat New Master Code) #**
3. Exit Program Mode	*

Set Wiegand Format for EM Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Set Wiegand Format **OR** Disable EM Card	**1 (26~44) #** (Factory default is 26bits) **1 99 #**
3. Exit Program Mode	*

Set Wiegand Format for HID Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Output Format Setting **OR** Disable HID Card	**2 0 #** (Auto output, factory default) **2 (26-37) #** **2 99 #**
3. Exit Program Mode	*

Set Wiegand Format for MIFARE Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Output Format Setting **OR** Disable MIFARE Card	**3 0 #** (Auto output) **3 (26-44, 56, 58) #** (Factory default is 34 bits) **3 99 #**
3. Exit Program Mode	*

Set PIN Output Format

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Virtual Card Number 4 Bits 8 Bits	**4 0 #** **4 4 #** (fatory default) **4 8 #**
3. Exit Program Mode	*

Set Keypad Backlit & QR Led

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Keypad Backit Always ON **OR** Keypad Backlit Automatic OFF after 20s 2. QR Led Always oFF	**5 1 #** **5 2 #** (fatory default) **5 3 #**
QR Led Auto ON/OFF **OR** QR Led Always ON	**5 4 #** (fatory default) **5 5 #**
3. Exit Program Mode	*

Baud Rate Settings (Factory default: 9600)

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
Setting values:	**6 (4800, 9600, 14400,19200, 38400, 56000, 57600,115200,128000) #**
3. Exit Program Mode	*

Note: The baud rate of all readers under the same controller should be set to the same with the controller's baud rate, otherwise the connection will fail.

OSDP Address Settings (Factory default: 0)

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
Setting the address	**7 (0-126) #**
3. Exit Program Mode	*

Note: The addresses of all readers under the same controller should be set to be different, otherwise the two readers will conflict

Set Brown Wire and Yellow Wire Working Mode

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. LED & Buzzer Control Mode **OR** OSDP Input Mode	**8 0 #** (factory default) **8 1 #**
3. Exit Program Mode	*

Note: In OSDP Input Mode, Brown wire is for Input 0, Yellow wire is for Input 1; In LED Buzzer Control Model, Brown wire is for LED, Yellow wire is for Buzzer.

Set QR Code Wiegand Output

Wiegand output is generated only when the QR code content contains characters from the following sets: 0–9, A–F, a–f (i.e., hexadecimal characters only).
If the QR code contains only digits (0–9): The output value range is 0 to 18446744073709551615.
If the QR code contains hexadecimal letters (A–F or a–f): The maximum allowed length is 16 characters, which corresponds to 8 bytes of data.
If the QR code contains any other characters (e.g., G, X, #, symbols, non-hex letters, or multi-byte characters): No Wiegand output will be generated.

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Set QR Code Wiegand Output	**9 (26–64) #** (default: 64 bits)
3. Exit Program Mode	*

QR Code OSDP Output

The QR code content is output as osdp_FMT. If the data length exceeds 64 bytes, it will be split into multiple packets for transmission.

Reset to Factory Default (two methods)

Method 1

Programming Step	Keystroke Combination
1. Enter Program Mode	***(Master Code) #**
2. Reset to Factory Default	**5 0 #**
3. Exit Program Mode	*

Method 2 (This way is suitable for users forget the master code):

Power off, connect Yellow wire and GND wire, then power on, the LED in Orange, wait for 5 seconds, there will be a beep and LED turns to red,means reset to factory default successfully, then disconnect the Yellow wire and GND wire.

4. Indicator light status

Operation Status	Indicator light color	Buzzer
Standby status	OSDP Controller decides	
Correct Card	OSDP Controller decides	beep-
Error Card	OSDP Controller decides	beep-

5. Packing List

Name	Quantity
Reader	1
Manual	1
Self Tapping Screws	2(Φ4*25mm)
Rubber plug	2

6.FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
•Reorient or relocate the receiving antenna.
•Increase the separation between the equipment and receiver.
•Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
•Consult the dealer or an experienced radio/TV technician for help.
Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

2026-04-29_V1