



# **DS-K2M061 Secure Door Control Unit**

**User Manual**

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### **Data Protection**

During the use of device, personal data will be collected, stored and processed. To protect data, the development of Hikvision devices incorporates privacy by design principles. For example, for device with facial recognition features, biometrics data is stored in your device with encryption method; for fingerprint device, only fingerprint template will be saved, which is impossible to reconstruct a fingerprint image.

As data controller, you are advised to collect, store, process and transfer data in accordance with the applicable data protection laws and regulations, including without limitation, conducting security controls to safeguard personal data, such as, implementing reasonable administrative and physical security controls, conduct periodic reviews and assessments of the effectiveness of your security controls.

## Regulatory Information

### FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: 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

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

#### FCC Conditions

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

## EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info)



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

## Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. this device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope

rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

## Safety Instruction

### Dangers

- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- An all-pole mains switch shall be incorporated in the electrical installation of the building.
- Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.
- If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- Shock hazard! Disconnect all power sources before maintenance.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

### Cautions

- The equipment has been designed, when required, modified for connection to an IT power distribution system.
- This equipment is suitable for mounting on concrete or other non-combustible surface only.
- The serial port of the equipment is used for debugging only.
  - Install the equipment according to the instructions in this manual.
  - To prevent injury, this equipment must be securely attached to the floor/wall in accordance with the installation instructions.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- The device cover for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and lead to additional costs.

## Available Models

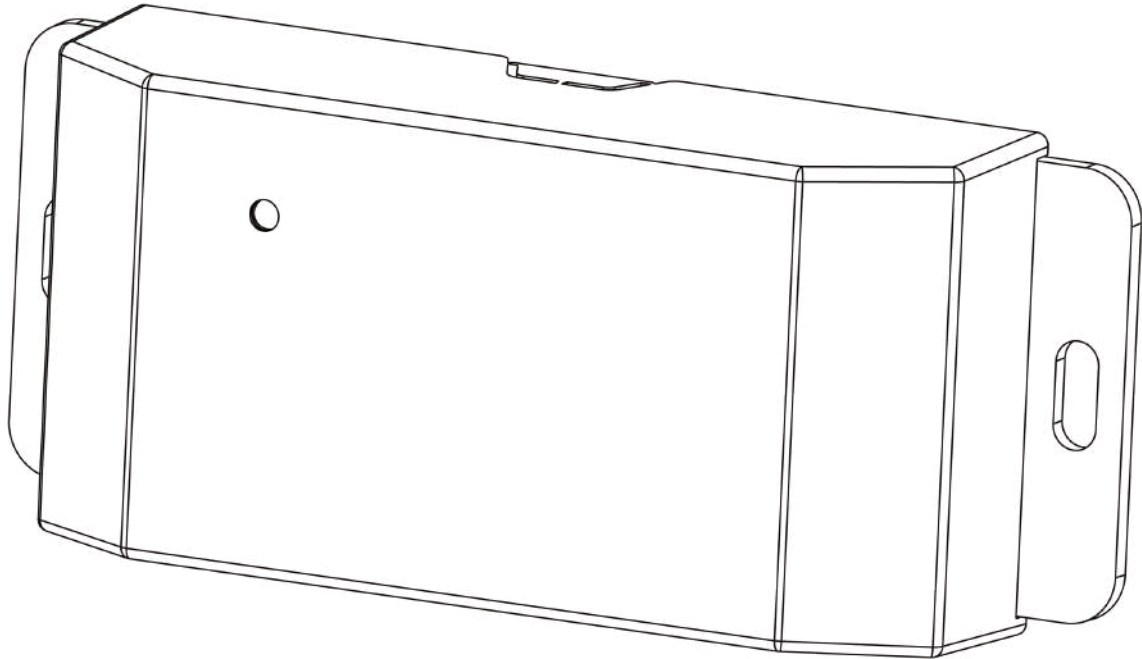
| Product Name             | Product Model |
|--------------------------|---------------|
| Secure Door Control Unit | DS-K2M061     |

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## Chapter 1 Overview

### 1.1 Product Introduction



**Figure 1-1 Appearance**

Secure door control unit (hereinafter referred as "unit"), is to keep the door in the status before the access control terminal is crashed when the access control terminal is crashed or damaged by external force.

Secure door control unit is the middle layer between access control terminal and door lock in the access control system. The top side can be connected to access control terminal, and the bottom side can be connected to door contact, door magnetic, exit button, Wiegand card readers and other external devices. Equipped with access control equipment, it is safer to control the door.

## 1.2 Appearance Introduction

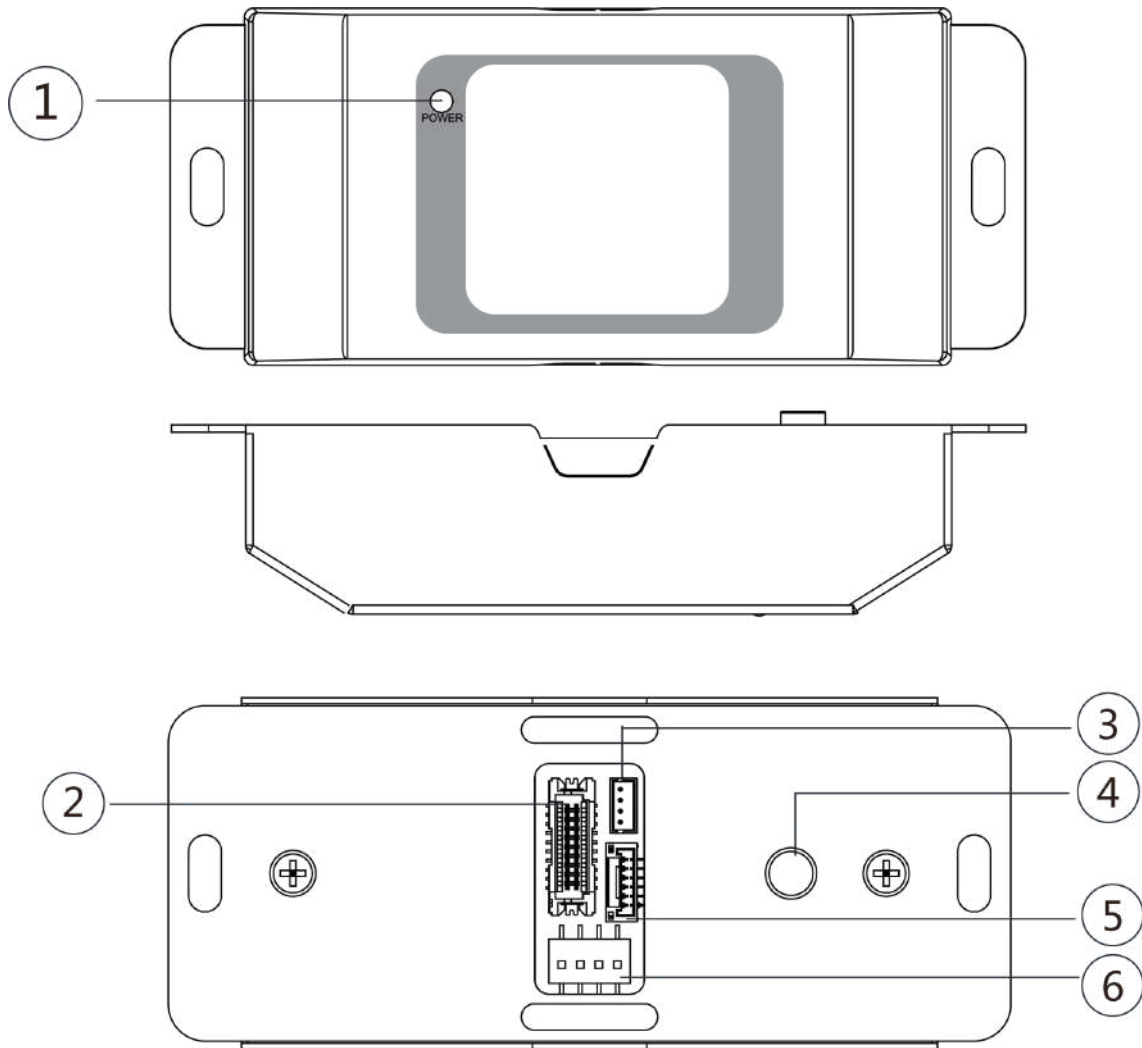



Figure 1-2 Appearance Description

Table 1-1 Appearance Description

| No. | Description   |
|-----|---|
| 1   | LED indicator. The LED indicator only includes the power indicator (POWER). When the indicator light is solid red, it indicates the device is powered on. |
| 2   | Cable Interface   |
| 3   | Debugging Port  |

| No. | Description  |
|-----|--|
|     |  <b>Note</b><br>The debugging port is for debugging use only. |
| 4   | Tamper   |
| 5   | Wiegand Interface  |
| 6   | DIP Switch   |

## Chapter 2 Interface Description

Connect access control devices, secure door control unit, door locks, and other related output devices ( you can choose connect Wiegand card reader) to establish communication.

### 2.1 Cable Interface Description

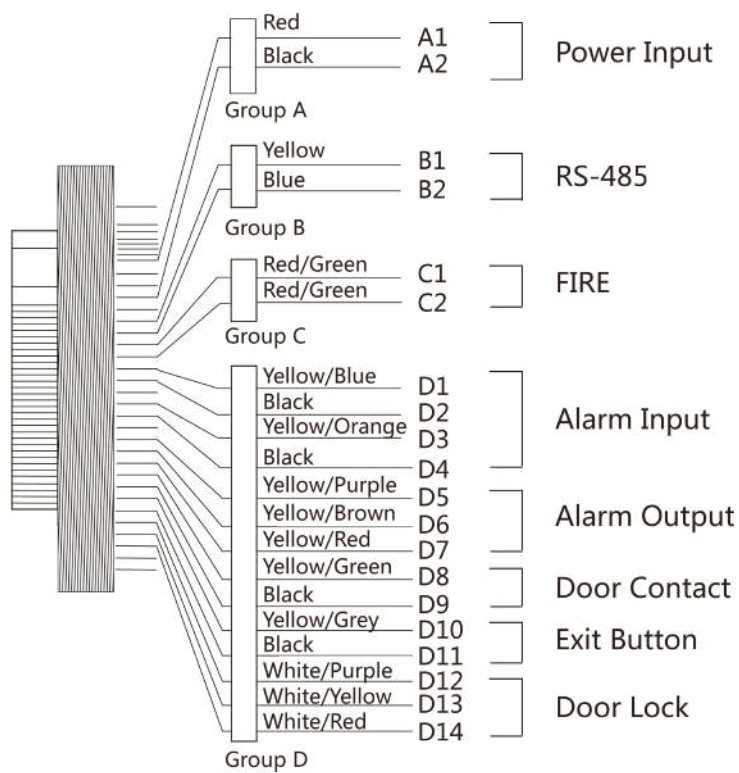



Figure 2-1 Cable Interface Description

Table 2-1 Cable Interface Description

| Group No. | Cable No. | Color     | Name    | Description |
|-----------|-----------|-----------|---------|-------------|
| Group A   | A1        | Red       | +12 V   | Power Input |
|           | A2        | Black     | GND     |             |
| Group B   | B1        | Yellow    | RS-485+ | RS-485      |
|           | B2        | Blue      | RS-485- |             |
| Group C   | C1        | Red/Green | FIRE+   | FIRE        |

| Group No. | Cable No. | Color         | Name        | Description  |
|-----------|-----------|---------------|-------------|--|
|           | C2        | Red/Green     | FIRE-       |  <b>Note</b> <ul style="list-style-type: none"> <li>The FIRE+ and FIRE- are in short circuit status by default. The fire signal is invalid and the door is locked.</li> <li>When the FIRE + and FIRE- are in open circuit status, the fire signal is valid and the door is unlocked.</li> </ul> |
| Group D   | D1        | Yellow/Blue   | ALM_IN1     | Alarm Input  |
|           | D2        | Black         | GND         |  |
|           | D3        | Yellow/Orange | ALM_IN2     |  |
|           | D4        | Black         | GND         |  |
|           | D5        | Yellow/Purple | ALM_NC      | Alarm Output   |
|           | D6        | Yellow/Brown  | ALM_COM     |  |
|           | D7        | Yellow/Red    | ALM_NO      |  |
|           | D8        | Yellow/Green  | DOOR_SENSOR | Door Magnetic Input  |
|           | D9        | Black         | GND         |  |
|           | D10       | Yellow/Grey   | DOOR_BUTTON | Exit Button  |
|           | D11       | Black         | GND         |  |
|           | D12       | White/Purple  | DOOR_NC     | Door Lock Output   |
|           | D13       | White/Yellow  | DOOR_COM    |  |
|           | D14       | White/Red     | DOOR_NO     |  |

## 2.2 Wiegand Interface Description

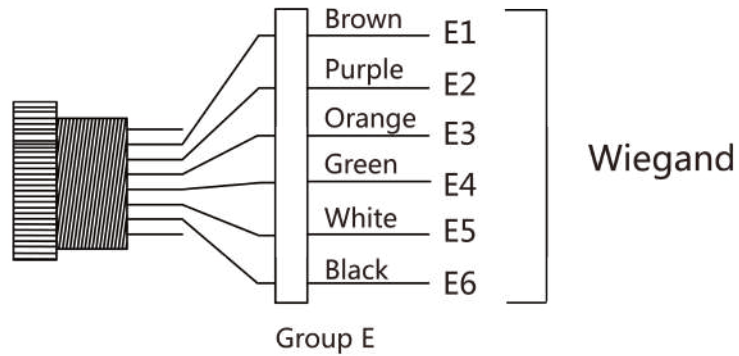


Figure 2-2 Wiegand Interface Description

Table 2-2 Wiegand Interface Description

| Group   | Cable No. | Color  | Name | Description                |
|---------|-----------|--------|------|----------------------------|
| Group E | E1        | Brown  | OK   | Access Wiegand Card Reader |
|         | E2        | Purple | BZ   |                            |
|         | E3        | Orange | ERR  |                            |
|         | E4        | Green  | W0   |                            |
|         | E5        | White  | W1   |                            |
|         | E6        | Black  | GND  |                            |

## Chapter 3 Wiring Description

The wiring of external devices is as following.

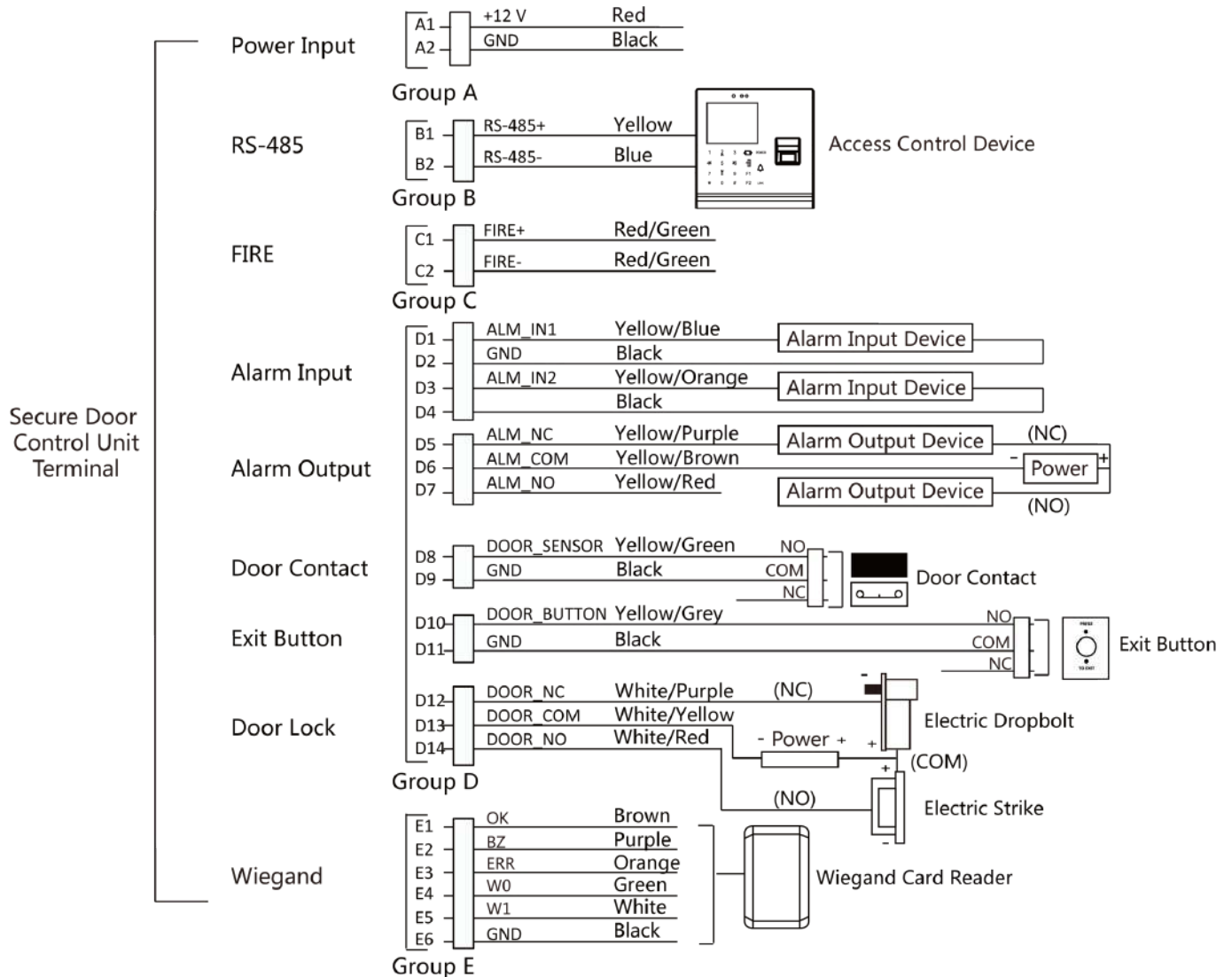


Figure 3-1 External Devices Wiring Description

## Chapter 4 Installation

Before installing the secure door control unit, please set the DIP switch and connect it with the cable.

### 4.1 DIP Switch Description

Refer to *Appearance Introduction* for the position of DIP switch. DIP switch description is as shown in the following figure. No. 1 to 4 in the figure are switch No.



Figure 4-1 DIP Switch Description

DIP switch meaning is as shown in the following table.

Table 4-1 DIP Switch Meaning

| Icon                                | Meaning                    |
|-------------------------------------|----------------------------|
| <input type="checkbox"/>            | Represent 0 in binary mode |
| <input checked="" type="checkbox"/> | Represent 1 in binary mode |

As shown in the figure below, the binary number represented by the DIP switch 1234 is 0011, which is the decimal address: 3.

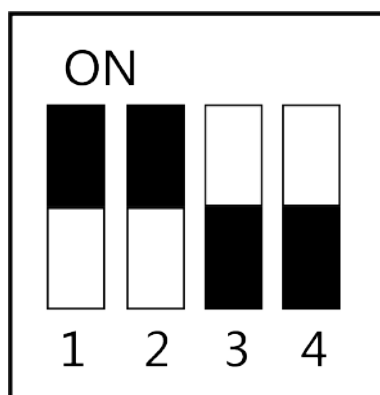


Figure 4-2 DIP Switch (Binary 0011)

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 **Note**

- The DIP switch No. 1 to 3 are suitable for setting the RS-485 communication address. No. 4 is for Wiegand mode (OFF: Wiegand input, ON: Wiegand output).
  - The DIP address cannot be repeated.
- 

## 4.2 Install Secure Door Control Unit

### Steps

1. Set the DIP of the secure door control unit according to the actual access control device requirements.
- 

 **Note**

The DIP binary ranges from 0001 to 1111.

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2. Drill holes on the wall or other places according to the mounting template.
- 

 **Note**

The minimum bearing weight of the wall or other places should be three times heavier than the device weight.

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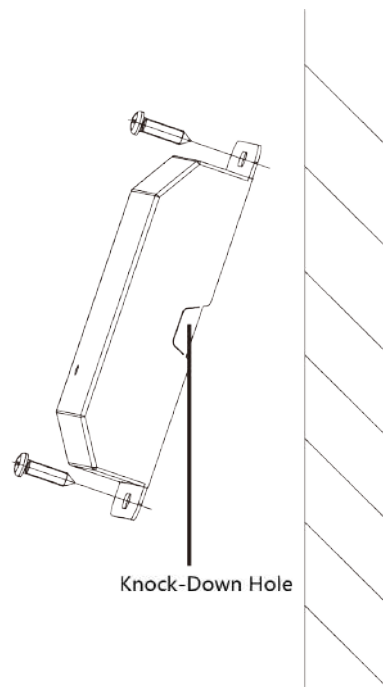
3. Insert the provided plastic sleeve of the A4 expansion screw into the punched hole.
  4. Insert the cable into the cable socket, and insert the Wiegand cable into the Wiegand interface.
- 

 **Caution**

If the cable needs to be connected from the side of the device, knock out the knockout hole on one side.

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5. Align the screw holes on both sides of the device with the sleeve in the wall and insert the provided screws to fix the device.
-



**Figure 4-3 Install Secure Door Control Unit**

## Appendix A. Dimension

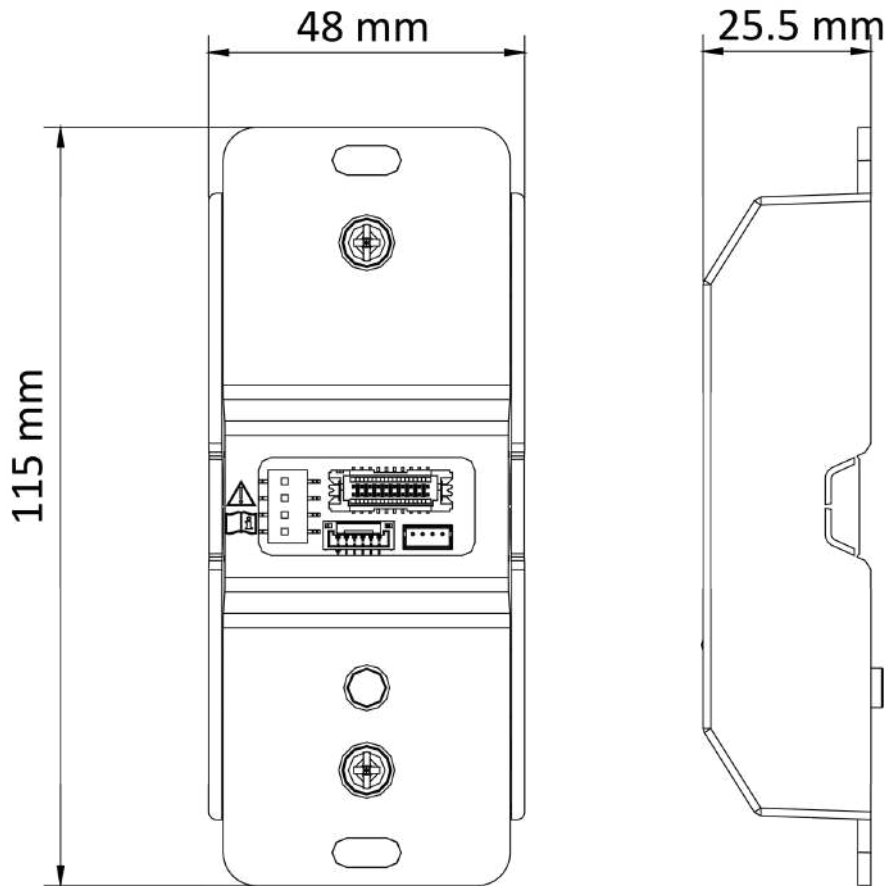


Figure A-1 Dimension

## Appendix B. Communication Matrix and Device Command

### Communication Matrix

Scan the following QR code to get the device communication matrix.

Note that the matrix contains all communication ports of Hikvision access control and video intercom devices.



Figure B-1 QR Code of Communication Matrix

### Device Command

Scan the following QR code to get the device common serial port commands.

Note that the command list contains all commonly used serial ports commands for all Hikvision access control and video intercom devices.



Figure B-2 Device Command



See Far, Go Further