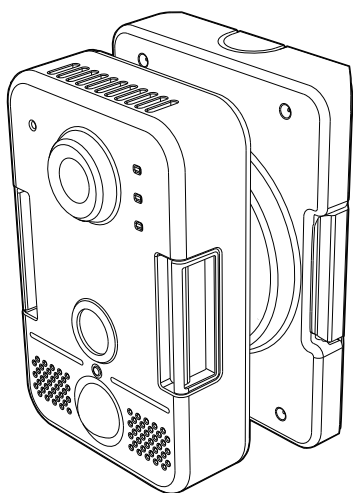




## 2M FHD IP INS Cube Camera

### ***User's Manual\_Install Part***

Ver. 1.0 / 2022.11

Before installing and using the camera, please read this manual carefully.  
Be sure to keep it handy for future reference.

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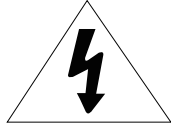
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## **SPECIFICATION**

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# Safety Instruction

These instructions are intended to ensure that the user can use the product correctly to avoid danger or property loss.  
If the product is not functioning properly or damaged, contact the service center or purchasing office.



## Warnings

Serious injury or death may be caused if any of these warnings are neglected.



## Cautions

Injury or equipment damage may be caused if any of these cautions are neglected.



## POWER

1. Use only standardized adapters written in the manual. Incorrect connection of the power source can cause fire, electric shock, or failure.
2. If there is smoke or a strange smell from the power source, disconnect the power immediately and contact the service center or purchasing office. If you continue to use it as it is, it can cause fire and electric shock.
3. Disconnect the power plug from the outlet before connecting to the power terminal block.



## INSTALLATION

1. Install it according to the temperature and humidity environment suitable for the product specifications. Otherwise, it can cause fire and electric shock.
2. Thunder and lightning can cause problems with the camera. When installing, be careful to minimize damage caused by lightning such as grounding.
3. Do not place conductive materials (drivers, coins, metal sticks, etc.) and water-filled containers on the camera. It causes injuries caused by fire, electric shock, and falling.
4. If you want to move the installed product, turn off the power and move it or reinstall it. Otherwise, it can cause fire and electric shock.
5. Do not install it in places where there is a lot of moisture, dust, soot, etc. It causes fire and electric shock.
6. Avoid places where direct sunlight comes in or where heat comes out, such as heating appliances. It causes fire and electric shock.



## CLEANING

1. Do not spray water directly on each part of the product when cleaning. It causes fire and electric shock.



## POWER

1. Use the power line after fixing it firmly to the power connection terminal. Incomplete connection can cause a fire.
2. Do not extend the adapter output cable. If you need to install the power cable extension, please contact the service center.
3. Use insulated power for PoE connected external power.



## INSTALLATION

1. It is recommended not to touch the lens when installing the product as the factory ships with a focus adjustment completed during the manufacturing completion inspection phase.
2. Avoid installing cameras facing bright lights like sunlight. Causes damage to the image sensor.
3. Make sure it safe and securely when installing camera on the wall or ceiling. This can cause injury by the fall.
4. Do not connect multiple cameras to one adapter. Excess capacity causes abnormal heat and fire.
5. Wear protective gloves when installing/uninstalling the camera. This causes burns caused by high temperature on the surface of the product.
6. Don't drop or shock the product. Please stay away from places where vibration is severe or magnet types are present.
7. Install it in a well-ventilated place. This can cause fire and failure.



## CLEANING

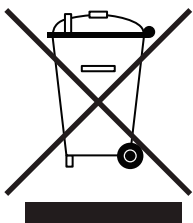
1. Wipe the contaminated surface with a clean, soft, dry cloth or wet the soft, dry cloth to prevent water from flowing, then wipe the contaminated area.

# Installation and Use Precautions

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1. The battery (battery pack or equipped battery) must not be exposed to excessive heat such as sunlight, fire, etc.
2. Do not disassemble the camera at your discretion.
3. If you forcefully install the product with excessive force, malfunction can damage the camera.
4. Do not punch or shake the camera and be careful not to damage the camera with careless storage or malfunction.
5. Be careful not to install the camera in a rainy or humid place, and do not leave it in a wet place.
6. Installing or using the product in water can cause serious product failure.
7. Do not install the product if there is chemical or vapor in the place where the product is installed, or if it can be generated.
8. Be careful not to get chemicals on the surface of the product when installing the product. Chemical solvents such as cleaning agents and adhesive components can cause fatal damage to the surface of the product.
9. Do not install it near the kitchen or cooking table as edible oil such as soybean oil can also cause product damage and deformation. It can cause product damage.
10. Be careful not to get foreign substances on the Micro SD card terminal. If there is any foreign substance, wipe it with a soft cloth.
11. Data will not be saved at the end of the life of the Micro SD card. In this case, purchase a new Micro SD card.
12. Moisture may occur in the glass of the camera when the new product box is opened (or when the product is initially running). The generated moisture is removed by a Gore vent attached to the camera within hours of the power connection.
13. For products enclosed with a desiccant or card-type absorbent, please install it according to the manual.
14. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
15. Unplug this apparatus when a cart is used. Use caution when moving the cart/apparatus combination to avoid injury from tip-over.





#### Disposal of Old Appliances

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1. The symbol marked in the product, will follow and covered by the Europe Directive 2002/95/EC.
2. All electronic disposal of waste is different by the government or locally, so so it need to check.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

# Specification

- FEATURES
- Optimized Multiple Profile Streaming ROI(Region of Interest)

Various web plug-in

Advanced built in ISP

Fluid integration way

Double Scan sensor with advanced built in ISP

A true all-in-one solution

## SPECIFICATION

| CAMERA            |                                        |
|-------------------|----------------------------------------|
| Image Sensor      | 1/2.8" Progressive Scan CMOS           |
| Lens              | 2.8mm, F1.6                            |
| Min. Illumination | 0.035Lux, AGC On : 0Lux with IR (F1.6) |
| IR Range          | Up to 10m                              |
| Angle of View     | 110°                                   |
| PIR Range         | Up to 10m, 120° Angle of View          |
| Day/Night         | IR cut filter with auto switch         |
| Shutter Speed     | 1/15s - 1/32,000s                      |

| COMPRESSION STANDARD |                     |
|----------------------|---------------------|
| Video Compression    | H.264, H.265, MJPEG |
| Video Bit Rate       | 100Kbps - 10Mbps    |
| Audio Compression    | G.711               |

| FUNCTIONS      |                                                                                                                           |
|----------------|---------------------------------------------------------------------------------------------------------------------------|
| Alarm Triggers | Motion Detection, Network Disconnect, IP address conflict, Storage exception, Temperature Critical, PIR Detection         |
| Local Storage  | Built-in Micro SD, SDHC, SDXC card slot, Up to 128GB                                                                      |
| Security       | One-key reset, Flash-prevention, Dual Stream, Password protection, Privacy mask, IP address filtering, Anonymous access   |
| Protocols      | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour |

| IMAGE                   |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| Max. Image Resolution   | 1920 x 1080                                                        |
| Frame Rate              | 60Hz : 30fps                                                       |
| Digital Noise Reduction | 3D DNR                                                             |
| Wide Dynamic Range      | Ture WDR                                                           |
| Image Setting           | Rotate mode, Saturation, Brightness, Contrast, Sharpness, AGC, ROI |

| PHYSICAL            |                                                 |
|---------------------|-------------------------------------------------|
| Working Temperature | -20°C - 50°C (-4°F - 122°F)<br>Humidity 90% max |
| Dimensions (VxH)    | 87.6mm x 114mm x 72.1mm                         |
| Weight              | 297g                                            |

| ELECTRICAL        |                                       |
|-------------------|---------------------------------------|
| Power Supply      | 12V DC ±10%, PoE 48 V (802.3af)       |
| Power Consumption | 12V DC 5.0W, PoE 48 V (802.3af) 11.5W |

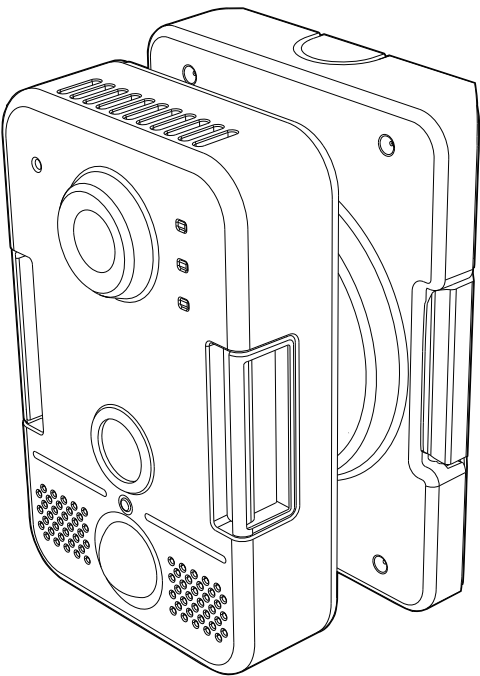
| INTERFACE             |                               |
|-----------------------|-------------------------------|
| Communications        | 1 RJ45 10M/100M Ethernet Port |
| Audio Input           | Built-in Microphone           |
| Audio Output          | Built-in Speaker              |
| Alarm out (NO/NC)     | 1                             |
| Tamper Alarm (Switch) | 1                             |

| WI-FI             |                                                       |
|-------------------|-------------------------------------------------------|
| Wireless Standard | IEEE802.11b, 802.11g, 802.11n                         |
| Frequency Range   | 2.4 GHz ~ 2.4835 GHz                                  |
| Channel Bandwidth | 20MHz, 40MHz Support                                  |
| Protocols         | 802.11b : CCK, QPSK, BPSK, DSSS ;<br>802.11g/n : OFDM |
| Security          | 64/128bit WEP, WPA/WPA2, WPA-PSK/ WPA2-PSk, WPS       |
| Wireless Range    | 20m (Dependent Upon Environment)                      |

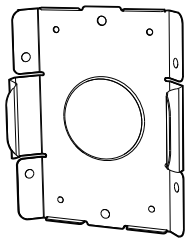
| CERTIFICATIONS |
|----------------|
| FCC, CE        |

# Introduction - Product & Accessories

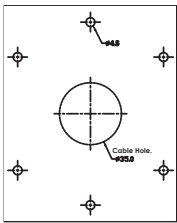
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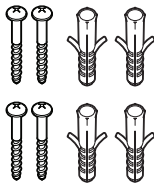
Camera



Mounting Bracket



Mounting Template



Mounting Screw (ø4x35mm)  
& Plastic Anchor-4pcs



Dc Plug Jack

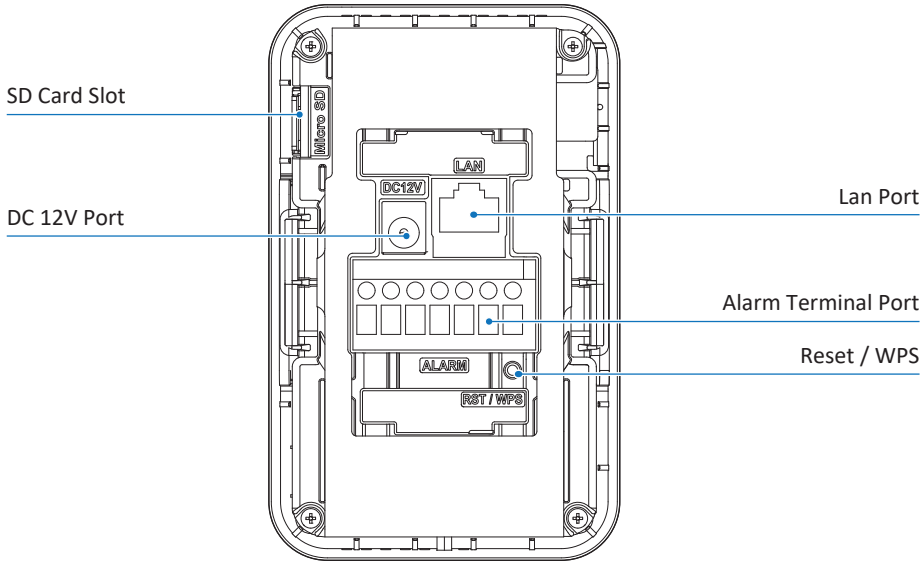
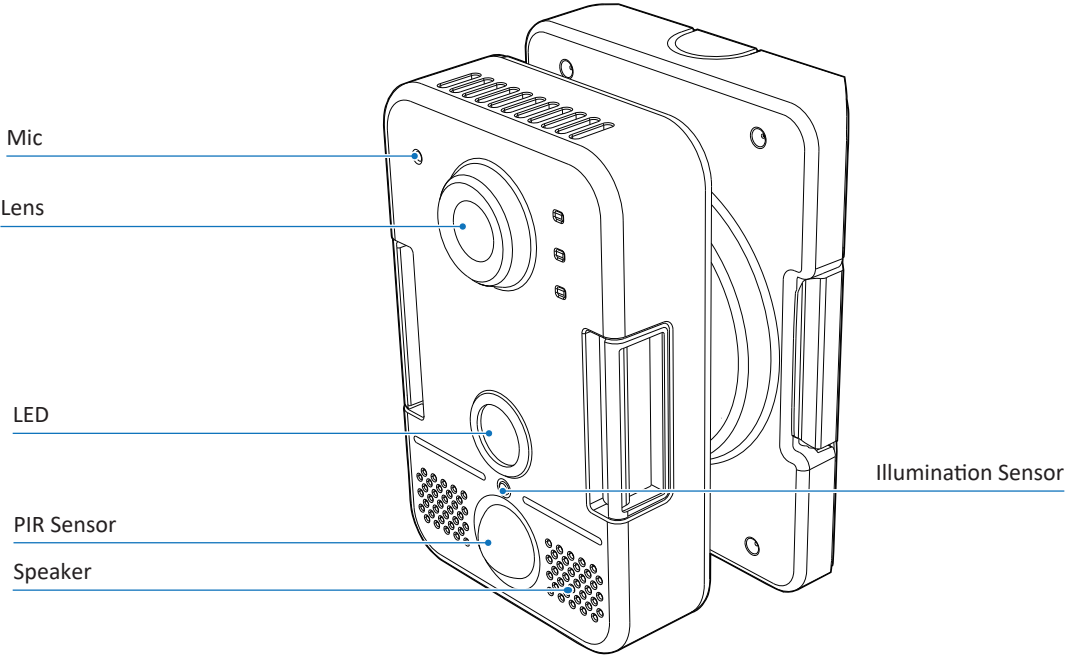


Screw 1pc

# Introduction -

## Part Name

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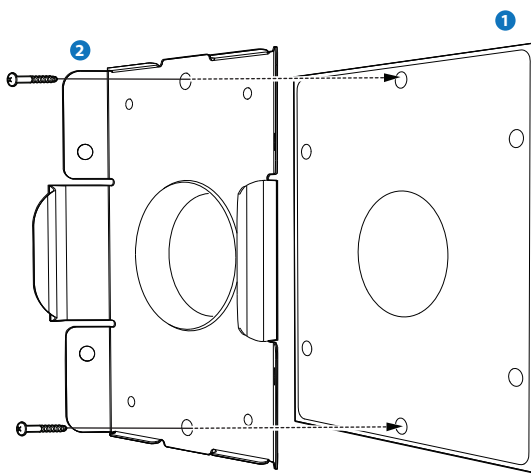


# Installation - Installation

**Before installing your camera, you have to read the following cautions.**

1. You have to check whether the location can bear five times of the weight of your camera.
2. Don't let the cable to be caught in improper place or the electric line cover to be damaged. Otherwise it may cause a breakdown or fire.
3. When installing your camera, don't allow any person to approach the installation site. If you have any valuable things under the place, move them away.

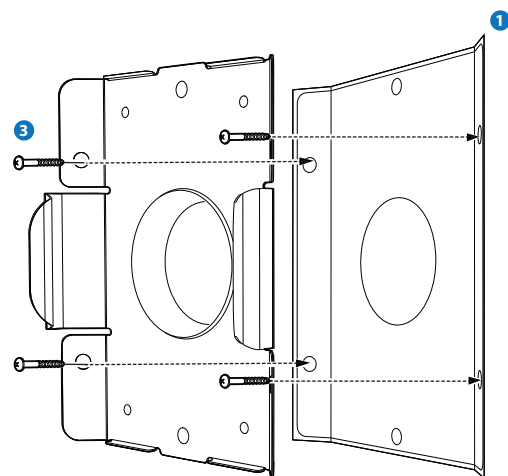
⚠ **Note :** Before installation, press both buttons on the camera and remove the camera and bracket.



## When you Install it on the wall

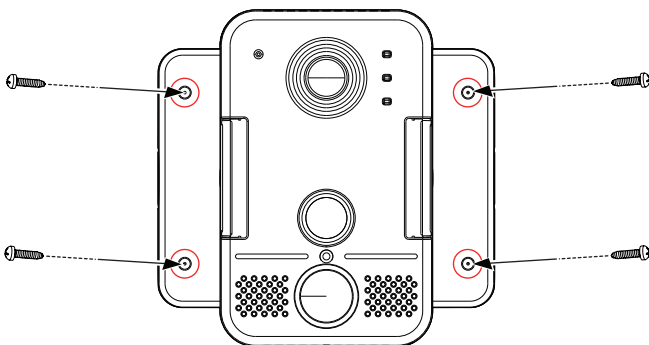
- 1 Use a mounting template to punch holes in the wall.
- 2 Install the mounting bracket on the perforated wall using two mounting screws.

⚠ If not using Mounting bracket, use the mounting screw to fix the 4 checked parts.



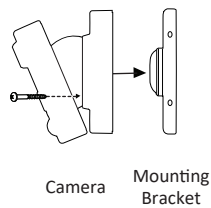
## When you Install it on the corner

- 3 Install the mounting bracket on the perforated wall using four mounting screws.

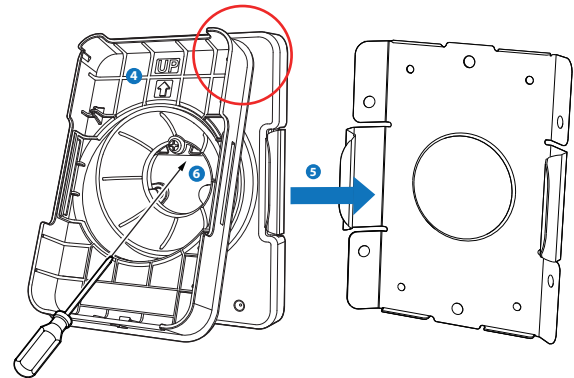
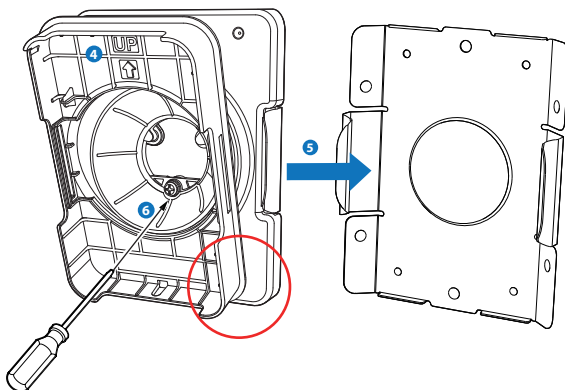
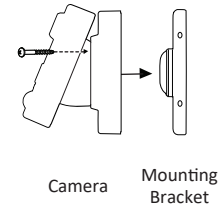


# Installation - Installation

Installation A



Installation B

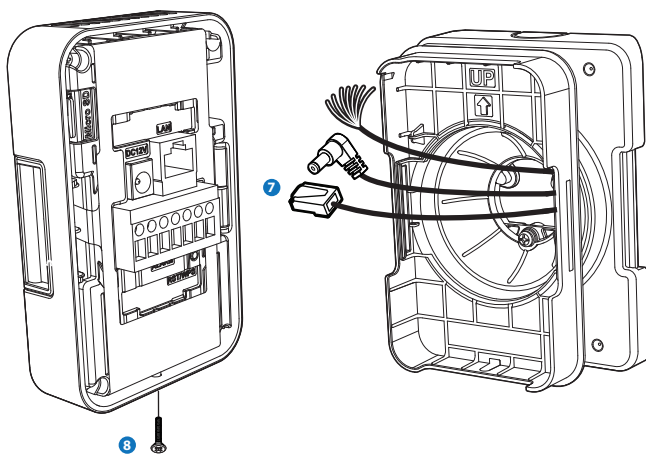


❌ Refer to installation A,B images and assemble according to the direction.

4 Adjust in the desired direction. (UP arrow up)

5 Fasten the camera to the mounting bracket fixed to the wall.

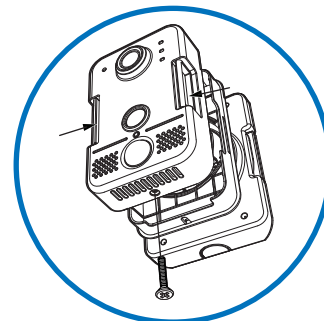
6 Tighten the screws to prevent the camera movement.



7 Connect the Cable.

❌ Use the DC plug jack included in the accessory when connecting the DC12V.

8 Press both side buttons to combine, then tighten the bottom of product with the provided accessory screw.



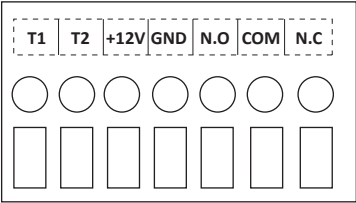
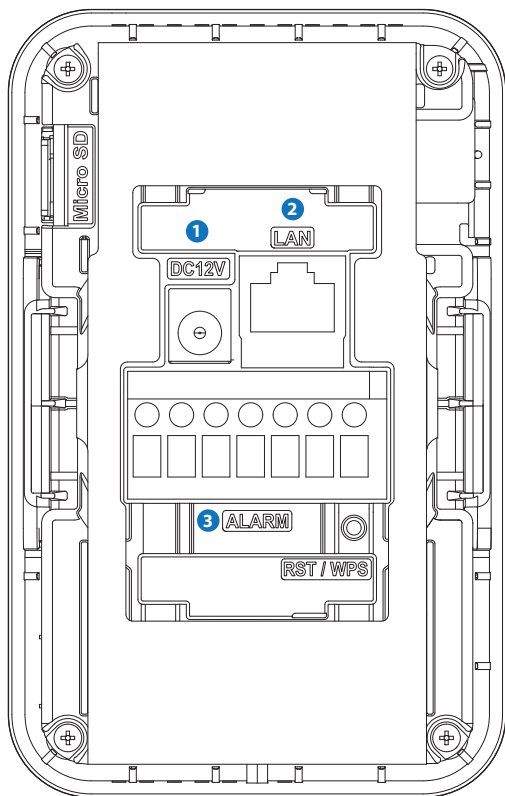
❌ **Reset to the Factory Default**

Press the reset button for 5 seconds to return the setup to the factory default.

❌ **Warning:**

If you press the 'Reset' button, you will lose all setting data. If needed, please, make a note for further installation.

# Installation - Cabling



|   |                    |
|---|--------------------|
| 1 | T1 (TAMPER SWITCH) |
| 2 | T2 (TAMPER SWITCH) |
| 3 | +12V (DC12V)       |
| 4 | GND (Ground)       |
| 5 | N.O (NOMAL OPEN)   |
| 6 | COM (Common)       |
| 7 | N.C (NOMALCLOSE)   |

### 1 Power Connection

Please, check the voltage and current capacity of rated power carefully.

| Rate Power | Power Consumption       | PoE                 |
|------------|-------------------------|---------------------|
| DC 12V     | DC : 6.4W<br>PoE : 6.8W | IEEE 802.3af Class3 |

### 2 Network Connection

Connect the crossover cable into the RJ-45.

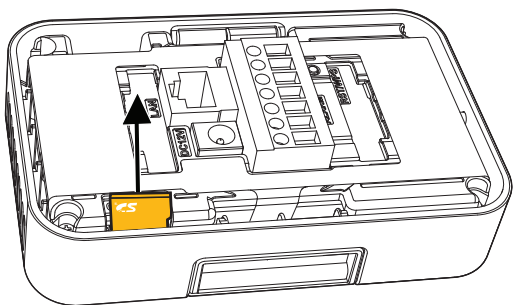
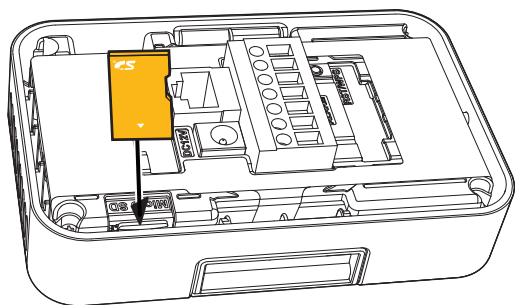
### 3 Relay Status

|                  |     |
|------------------|-----|
| Camera Power Off | N.O |
| Camera Power On  | N.C |

# Installation -

## Inserting/Removing a SD Memory Card

---



The memory card is an external data storage device that has been developed to offer an entirely new way to record and share video, audio, and text data using digital devices.



### ※ Recommended SD Card Specification (Not Included)

- Type: Micro SD (SD/SDHC/SDXC)
- Manufacturer: SanDisk, Samsung, Transcend, Micron
- Capacity: 4GB~128GB
- Class: UHS-I U3 Class 10
- ※ New Micro SD card over 64GB must be formatted on the first use.

### 1 Inserting an SD Memory Card

Insert the SD card in the arrow direction.

- ※ Don't insert the SD memory card while it's upside down by force. Otherwise, it may damage the SD memory card.

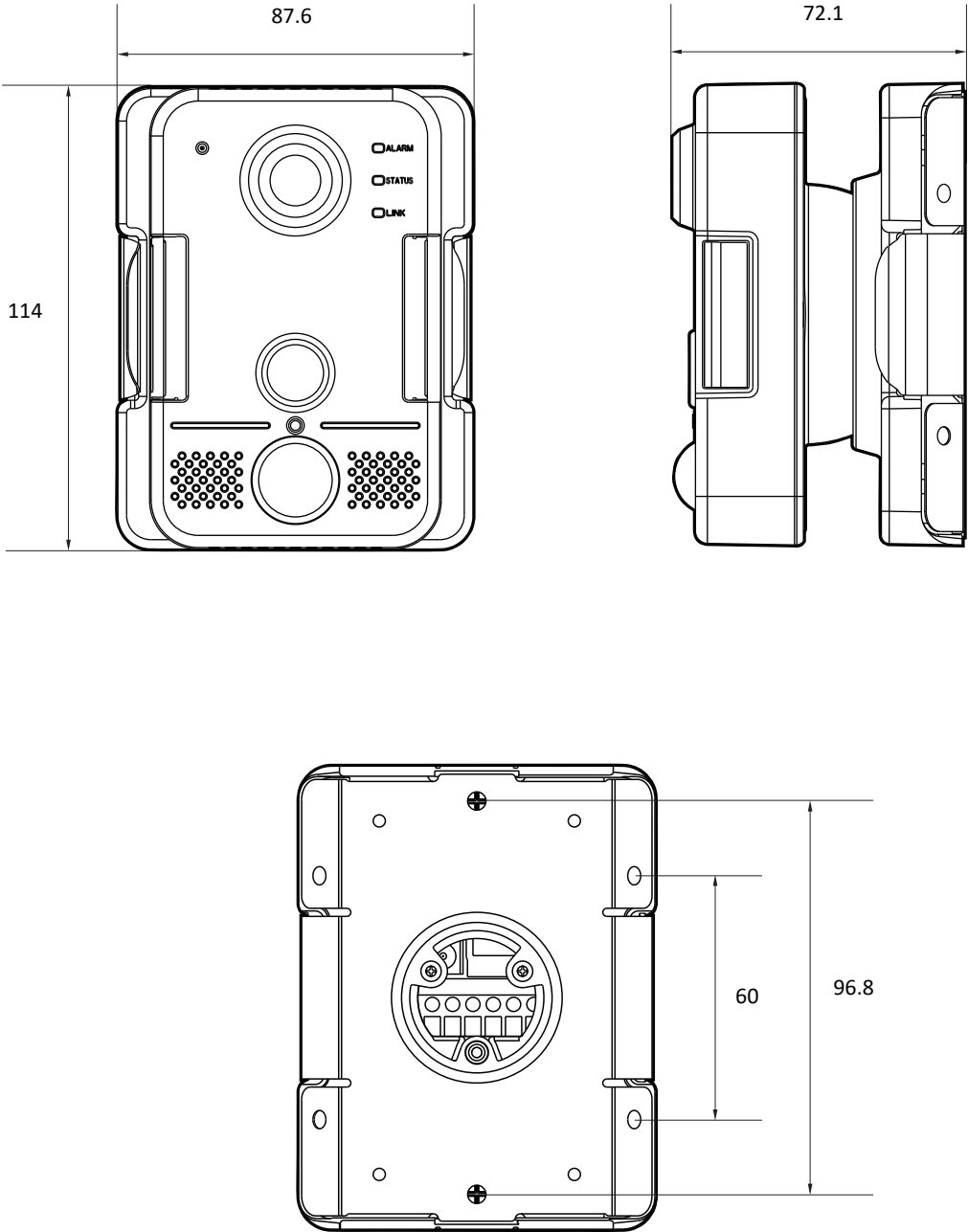
### 2 Removing an SD Memory Card

Gently press down on the exposed end of the memory card as shown in the diagram to eject the memory card from the slot.

- ※ Pressing too hard on the SD memory card can cause the card to shoot out uncontrollably from the slot when released.
- ※ If you have saved data in the SD memory card, removing the SD memory card prior to setting record to OFF will cause damage to the data stored in the card.

# Specifications - Dimension

Unit: mm



# FCC Instructions -

## FCC ID: 2AX2S-INS-CUBE

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### **FCC Instructions**

#### **FCC ID: 2AX2S-INS-CUBE**

#### **FCC Compliance Statement(Part 15.19 (3))**

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.

#### **FCC Interference Statement(Part 15.105)**

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 correct the interference by one 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 which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **FCC Caution**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **FCC Radiation Exposure Statement (Part 2.1091)**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

**This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.** This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.