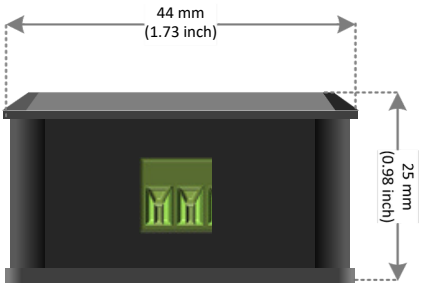
EVM-6P/DCM

6 port Dry contact input module 12V Output

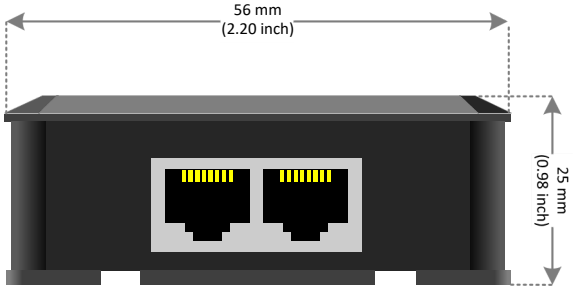
Sensor Description

The 6-Port Dry Contact Input Module is designed to expand the monitoring system by allowing the integration of multiple dry contact sensors. It enables the connection of external sensors—such as smoke detectors and window/door contacts—to the PDU and its embedded software interface, ensuring reliable data transmission and effective system monitoring. Additionally, a 12V DC output (up to 200mA) is available to power external sensors.

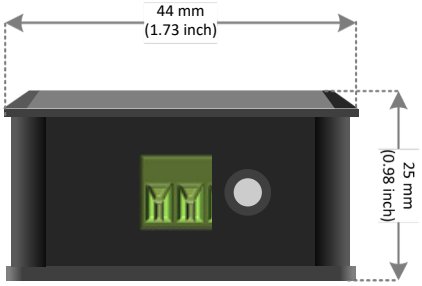
Right Panel View



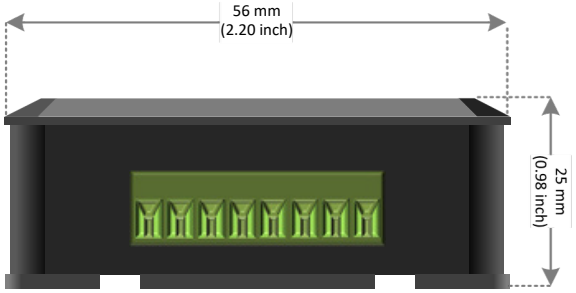
Front Panel View



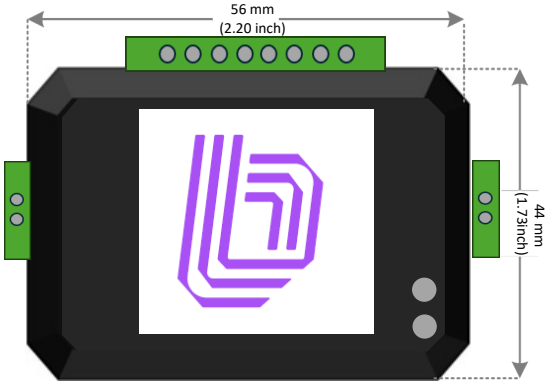
Left Panel View



RearPanel View



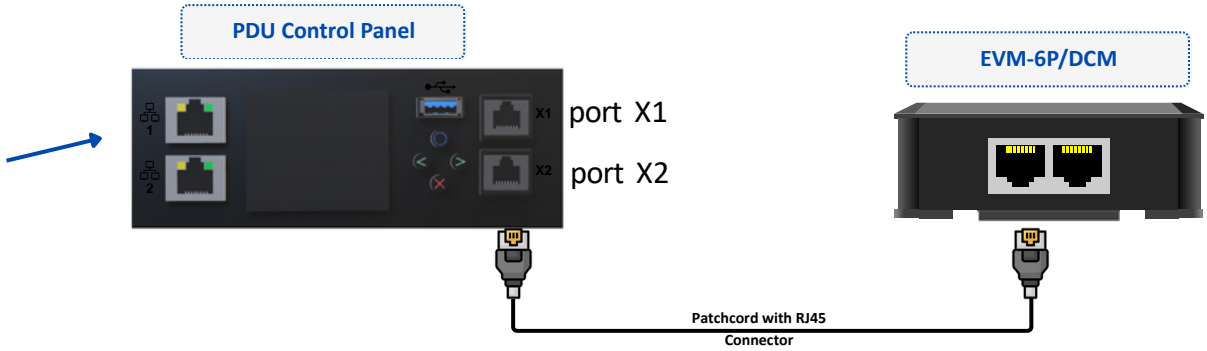
Top Panel View



Status LED
Power LED

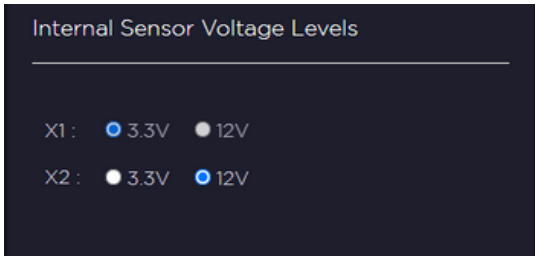
Connecting the EVM-6P/DCM to the PDU

🔧Connection Steps:

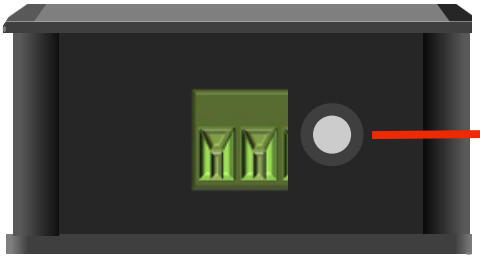


Step 1 – Connection to PDU

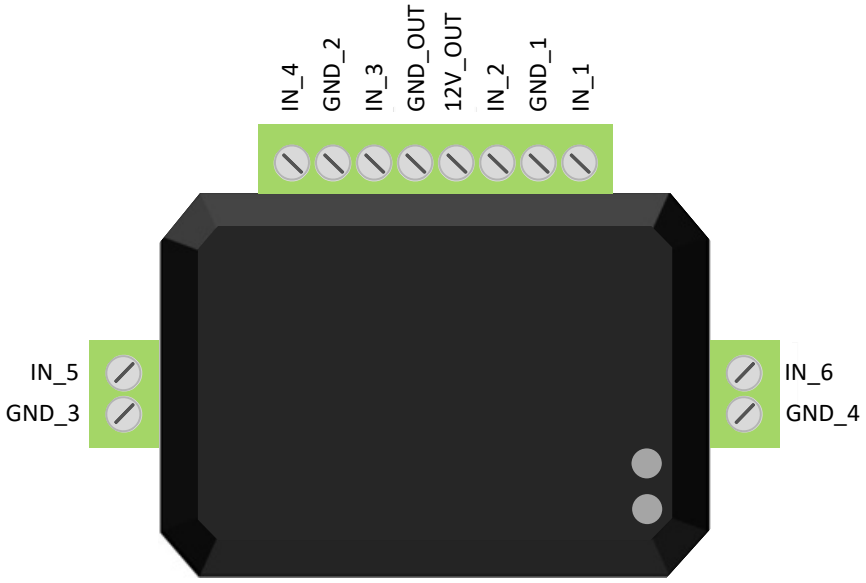
- Before connecting the dry contact module to port X2 of the PDU, make sure to set the voltage level to 12V in the 'Internal Sensor Voltage Levels' section of the PDU's web interface. X1 is fixed and provides a default output of 3.3 V. This value is not user-configurable.



- One of the RJ45 ports located on the front panel of the device is used to establish a connection to the PDU control panel's X2 port via a standard Ethernet (RJ45) cable.
- Connection to the X2 port is recommended due to its appropriate voltage level.
- This connection allows the sensor data to be transmitted and read by the PDU system.



The button on the device is used for Modbus ID configuration. When the button is pressed during device startup, the device enters boot mode and the Modbus ID is set to 1.



Step 2 – Connection to Sensors

🔹 **Top Terminal Block:**

- IN_1 and IN_2 share the GND_1 terminal.
- IN_3 and IN_4 share the GND_2 terminal.
- 12V_OUT and GND_OUT provide power for external sensors.

🔹 **Side Terminals:**

- IN_5 works with GND_3.
- IN_6 works with GND_4.

Features:

- Shared GND terminals simplify cabling.
- Each GND is clearly associated with its input(s) to prevent connection errors.
- 12V output allows direct powering of external detectors.

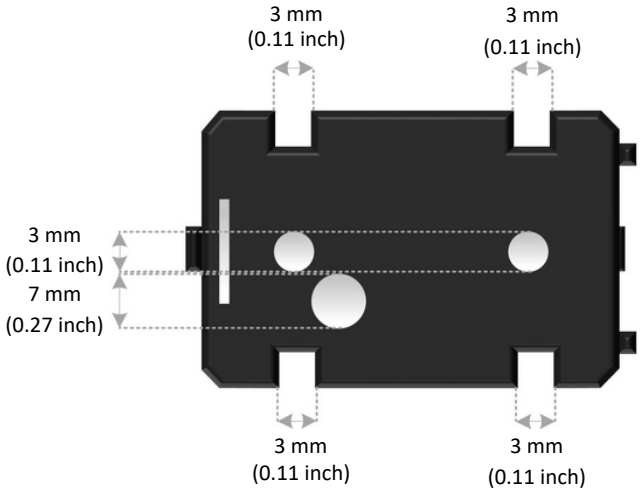
🔧 **Example:**

- To connect a door detector to IN_1:
- → One wire goes to IN_1, the other to GND_1.

- For a smoke detector:
- → Power: 12V_OUT and GND_OUT
- → Signal: IN_3

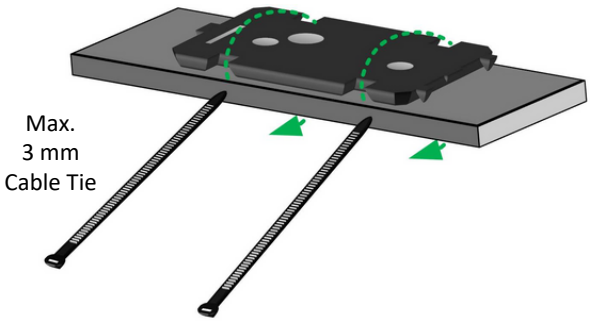
Mounting the EVM-6P/DCM

Montage Bracket

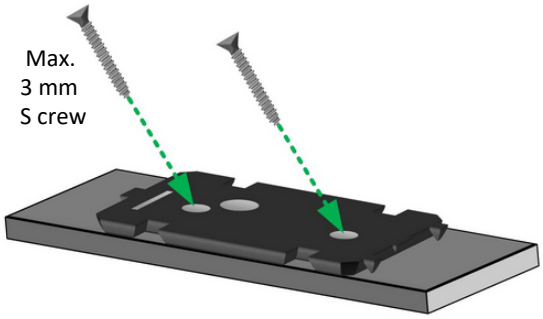


STEP A

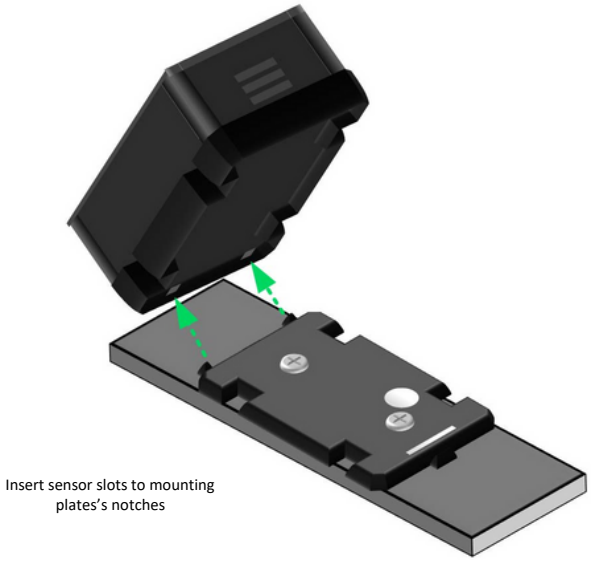
Mounting Type - 1



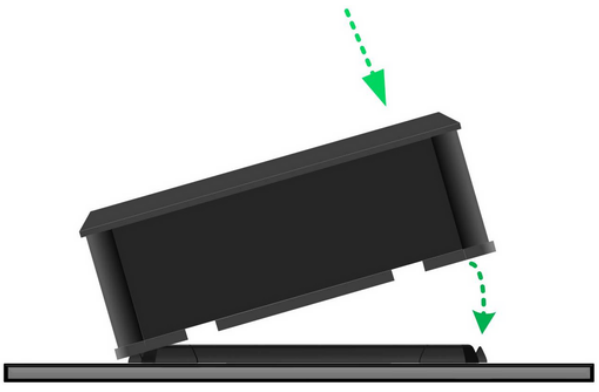
Mounting Type - 2



STEP B



STEP C



- **STEP A – Preparing the Mounting Plate**

The mounting plate has Two 3 mm holes that allow it to be fixed with either cable ties or screws. The center 7 mm slot is used for routing and aligning the sensor cable. Before installation, adjust the orientation of the plate based on the direction the cable will exit.

- **STEP B – Securing the Mounting Plate**

Three mounting methods are available:

Mounting Type - 1 (Cable Tie Mounting):

Place the mounting plate on the desired surface. Pass cable ties (maximum 3 mm width) through the side slots and tighten securely. This method is suitable for temporary setups or environments with vibration.

Mounting Type - 2 (Screw Mounting):

Use the holes on the plate to fix it with screws (maximum 3 mm diameter). Ensure the screws are flush with the surface and do not distort the plate. This method is preferred for permanent installations.

Mounting Type - 3 (Double sided Sticky Tape 3M Mounting):

Apply a suitable sticky tape (such as strong double-sided adhesive) to the bottom of the mounting plate. Press the plate firmly onto a clean, flat surface. This method is ideal for tool-free installation in low-vibration, indoor environments.

- **STEP C – Attaching the Module**

After the mounting plate is fixed, the EVM-6P/DCM module is inserted at an angle. The bottom hooks align with the slots on the plate. Press the module down firmly until a clicking sound is heard, indicating it is securely locked.

Once installed, gently pull the module upward to ensure it is properly secured.

🏠 Indoor Use Only: The Dry Contact Input Module 6 Port is designed for indoor use. Avoid installation in areas with high humidity, dust, or prone to condensation without additional protection.

🛠️ Avoid Overloading: Do not overload the ports by connecting more sensors than the system supports. This may cause malfunction or unreliable operation.

✅ Post-Installation Testing: After installation, test the module by activating the connected sensors to ensure the correct functionality of the ports. Ensure the activated ports respond appropriately.

🔧 Secure Connections: Secure the sensor’s cables and ensure they are properly connected to the activated ports. Protect cables from mechanical stress, vibration, or movement to avoid disconnections or damage.