

# Installation Guide

## For IP-485 Multifunctional Gateway



# Welcome!

This guide applies to the IP-485 multifunctional gateway ETAC-C1-R10.

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# Before We Start

Your first time installing this product may take up to 40 minutes. You'll get faster after each installation.



## Warning

The installation procedure may involve handling high voltage wiring. Please be careful. To avoid serious personal injury, death, or property damage, turn OFF the power to the circuit and follow all safety precautions before proceeding.

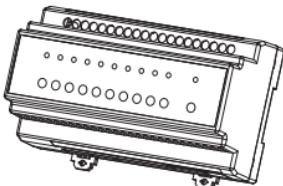
Working with electricity can be dangerous. If you are unsure about, or uncomfortable with the installation, seek the help of a qualified electrician.



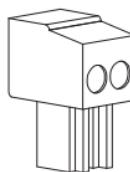
## Warning

Keep the device and all its parts out of the reach of children. The small parts or accessories contained may be a choking hazard to them.

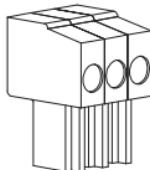
## In The Box



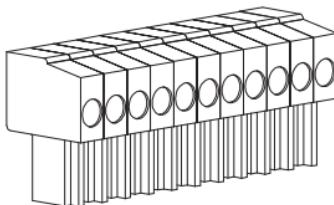
IP-485 Multifunctional  
Gateway x1



2-Pin Pluggable  
Terminal Block x1



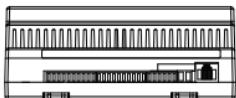
3-Pin Pluggable  
Terminal Block x1



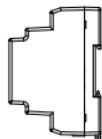
11-Pin Pluggable  
Terminal Block x2

# Check Compatibility

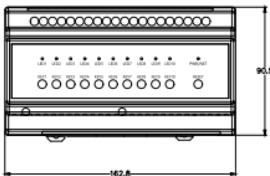
## Product dimensions (mm)



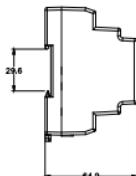
⑤ BOTTOM VIEW



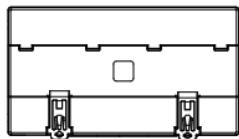
② RIGHT VIEW



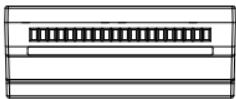
① FRONT VIEW



③ LEFT VIEW



④ BACK VIEW



⑥ TOP VIEW

## Electrical specifications

- Rated power consumption: 10W (maximum)
- Relay connections:
  - Maximum 10A at 5~30VDC or 100~240VAC, 50/60Hz per channel
  - Rated power: Maximum 2200W
- Input connections: 0~24VDC per channel

## Wire requirements

- **Wire sizes**
  - RS485/Inputs/AC power supply/DC power supply connections: 16~28AWG
  - Relay connections: 10~16 AWG
- **Wire preparation:**
  - Stripped and straight wire ends should be 8 mm (5/16 inch) after removing the plastic sheathing.



## Power supply options

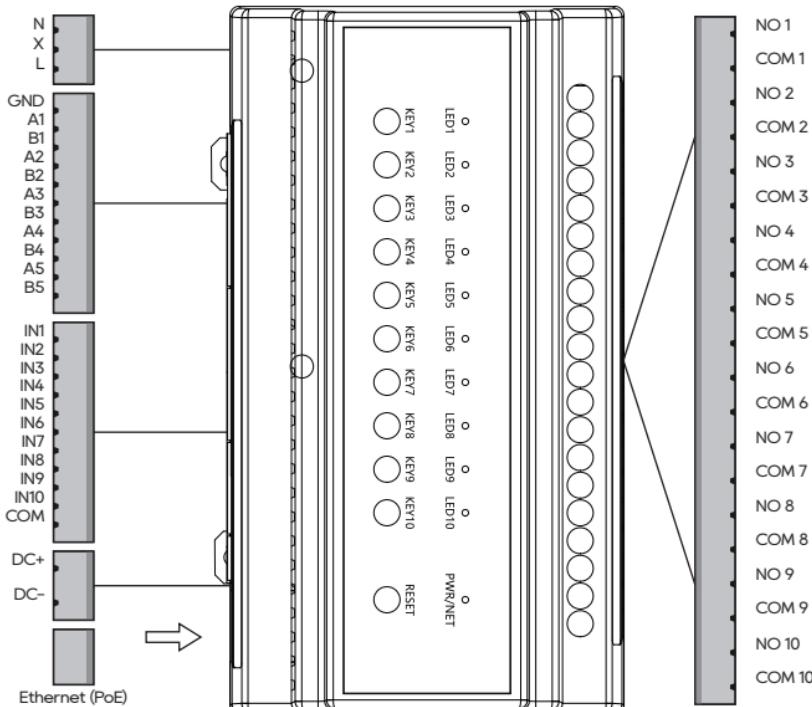
The gateway can be powered by any of the following methods:

- IEEE802.3af PoE
- 12~24VDC
- 100~240VAC, 50/60Hz

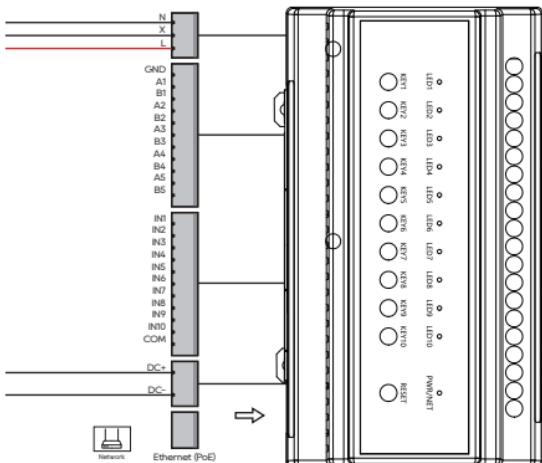
## Ethernet support

The gateway is compatible with wired networks only.

# Wiring



## Power supply connection



- **Power via PoE**

Connect an Ethernet cable from a PoE switch to the device's Ethernet port.

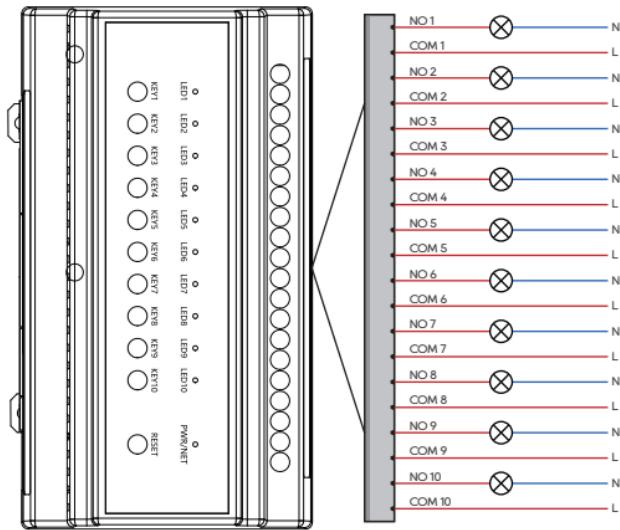
- **Power via 12~24V adapter**

Insert wires from a 12~24 V DC power adapter into the DC+ and DC- terminals.

- **Power via 100~240VAC source**

Connect the neutral wire to the N terminal and the live wire to the L terminal.

# Relay connections

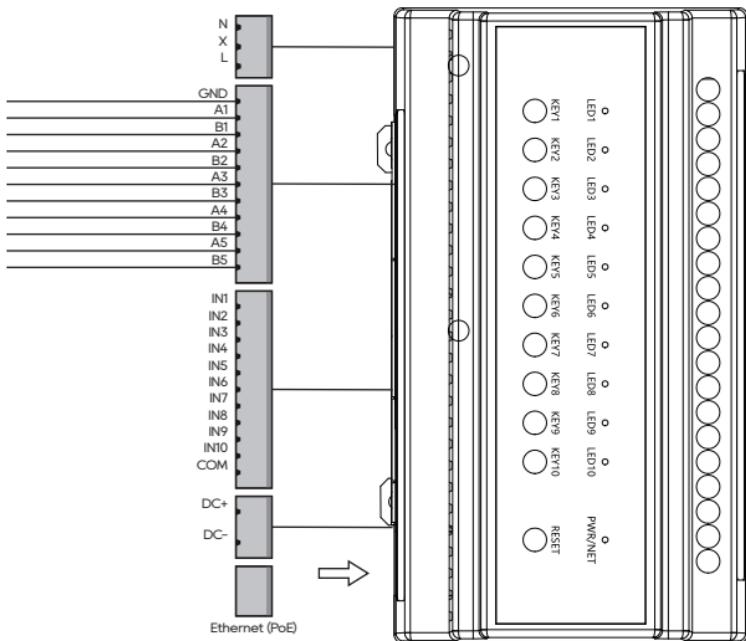


Connect the relay wires to the NO1~NO10 and COM1~COM10 terminals.

## NOTE:

- Relays can be high-voltage, low-voltage, or dry-contact devices, provided they meet the specified electrical requirements.
- When using high-voltage relays, power the switch actuator with a 100~240VAC source through the L and N terminals to ensure optimal performance and extend its lifespan.

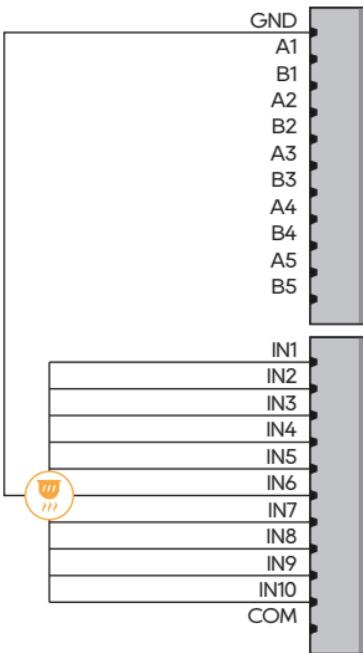
## RS485 device connections



- Connect the RS485 device wires to the A and B terminals.

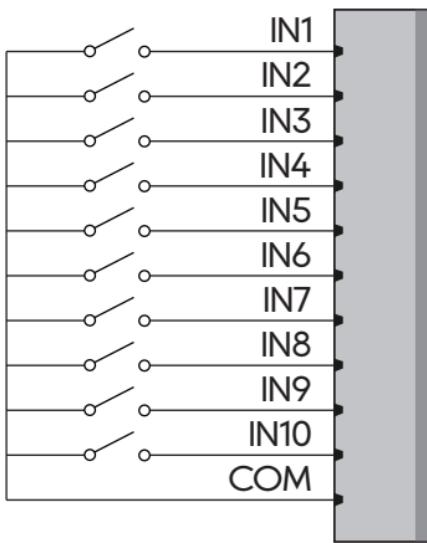
## Input connections

Sample connection 1: Devices with their own power source



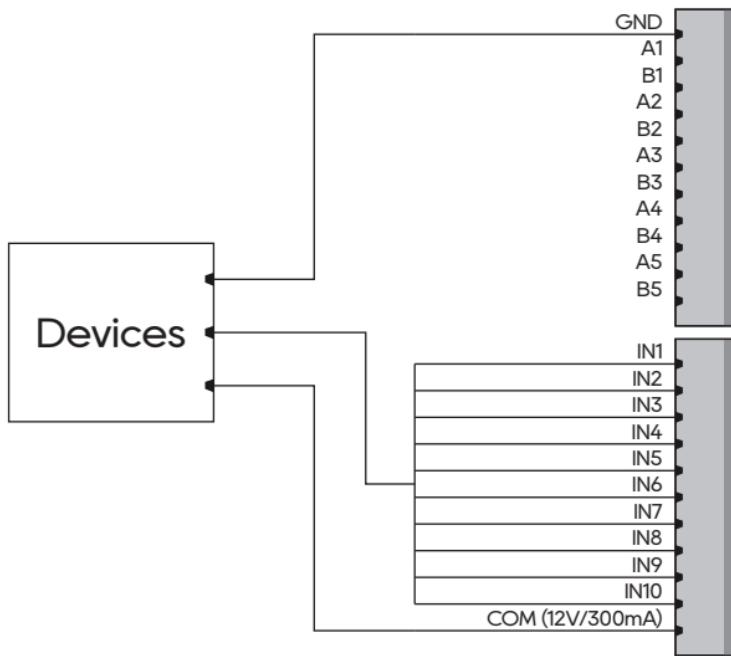
- Connect the device wires to the **GND** and **IN** terminals.

## Sample connection 2: Dry contact devices without power source



- For dry contact devices without their own power source (e.g., doorbell buttons, SOS pull-cord buttons), connect their wires to **COM** and **IN** terminals.

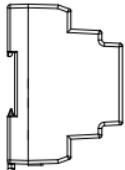
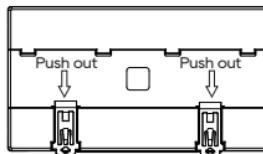
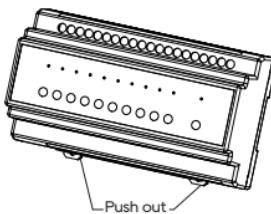
### Sample connection 3: Low-power devices without power source



- For low-power devices without their own power supply (e.g., open/closed switches), connect their wires to **IN**, **GND**, and **COM** terminals.

# Installation

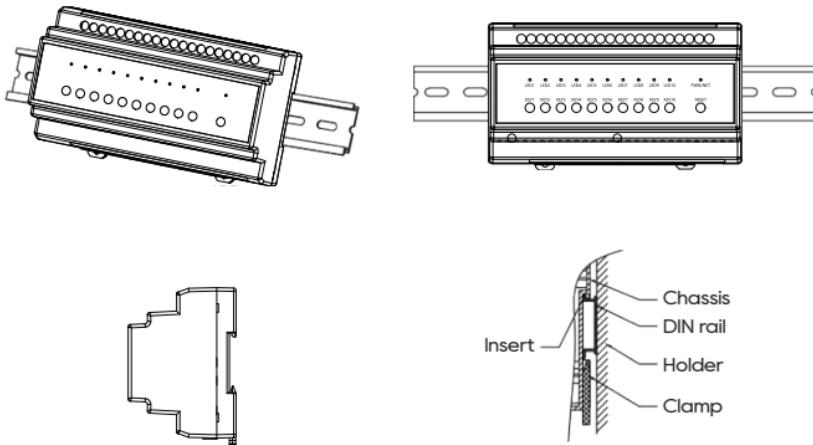
## 1 Pull out clamps



Pull out the two clamps.

2

## Attach to DIN rail

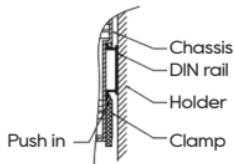
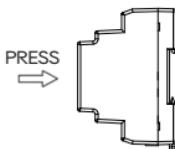
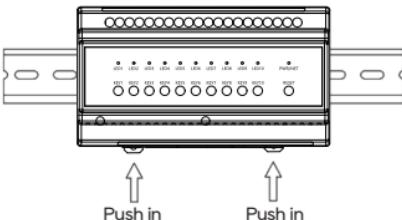
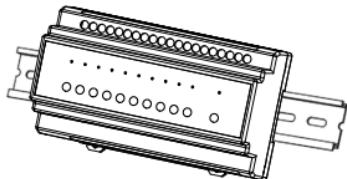


Description of partial section view

Clip the top of the gateway rail mount over the top of the DIN rail.

3

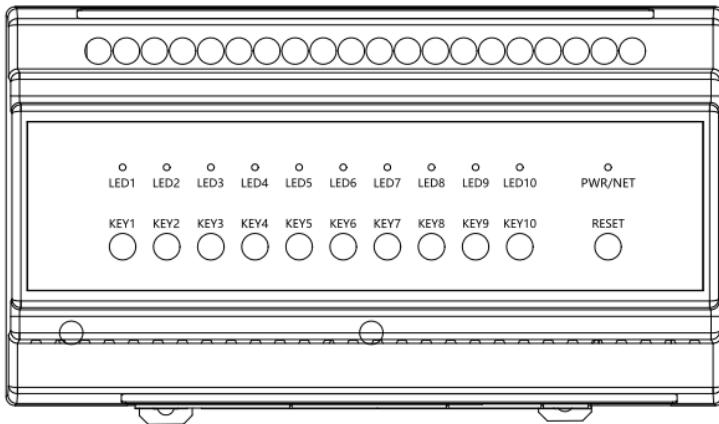
### Secure in place



Description of partial section view

Press the gateway onto the DIN rail, push the two clamps inward, and ensure the gateway snaps into place.

# Indicators and Buttons



LED Indicators / Buttons	Status	Description
LED 1~10	Solid green	Relay connected
PWR/NET	Solid green	Power and network connected
	Solid red	Powered, but no network connection
KEY 1~10	/	Press to turn the connected relay on/off
RESET	/	Press once to reboot the gateway
	/	Press and hold for more than 10 seconds for factory reset

# Congratulations!

You are done with the gateway installation!

Start your smart home journey with akubela now!

## Get Help

For help or more assistance,  
contact us at: <https://ticket.akuvox.com/>

For videos, guides, and additional product formation,  
visit us at: <https://knowledge.akuvox.com>