![akubela]

IP-485 Multifunctional Gateway Configuration Guide

ETAC-C1-R10

Contents

Before Getting Started

1. The multifunctional gateway can only be added to a family through a home center device.

 Ensure your home center is one of the following models and has the required firmware version:

Supported Device	Required Firmware
HyPanel Pro (PG71)	71.1.39.423 and later
HyPanel Ultra (PH81)	281.1.39.415 and later
HyPanel Supreme (PHX1)	1001.1.39.412 and later
HyPanel (PS51)	51.1.39.426 and later
HyPanel V2 (PS51(V2))	251.1.39.406 and later
HyPanel Plus (PS52)	52.1.39.413 and later
HyPanel KeyPlus (KS53)	53.1.39.410 and later
SmartPanel (X933H)	933.1.39.405 and later
SmartPanel Elite 10 (C319H)	119.1.39.405 and later

2. Ensure your computer, HyPanel device, and the multifunctional gateway are connected to the same local network.

Wiring

NOTE:
Always turn off the circuit power before wiring!

The gateway can be powered by any of the following methods:
- IEEE802.3af PoE
- 12~24VDC
- 100~240VAC, 50/60Hz

The gateway supports connections to:
- RS485 devices
- Relay outputs
- Digital input terminals

For detailed wiring and installation instructions, see here.

Operation Elements

| LED / Button	Status	Description
PWR/NET	Solid green	Power on; network normal
	Flashing red	Power on; network abnormal
	Flashing green	Pairing mode active
LED 1-10	Solid green/off	Relay active/inactive
	Off, no response when press the corresponding key	Relay fault
KEY 1-10	/	Press to turn relay on/off
RESET	/	Press once to reboot the gateway
	/	Hold for more than 10 seconds to restore factor settings

Add the Gateway to akubela System

You can add the multifunctional gateway to the akubela system through an akubela home center device or the home center's device web portal.

Via akubela Panel

1. Ensure the PWR/NET LED is flashing green, indicating the gateway is in pairing mode. If not, check the network and power connections.

2. Choose the method based on your panel type:

● **Large-Screen Panels**
   (1) On the Home screen, tap **Locations** at the top.
   (2) Select the room where you want to add the gateway.
   (3) Tap **+**, and wait for the gateway to be detected.
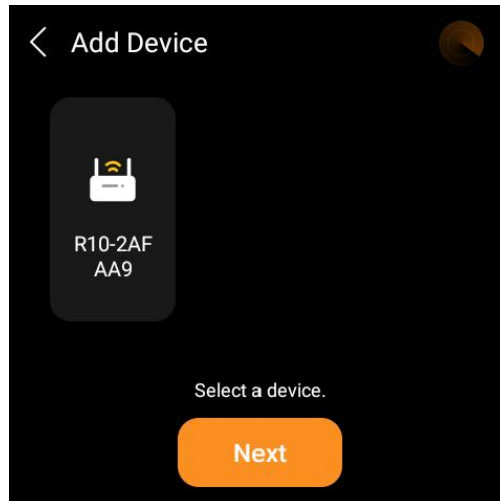   (4) Select the detected gateway (identified by the last six digits of its MAC address).
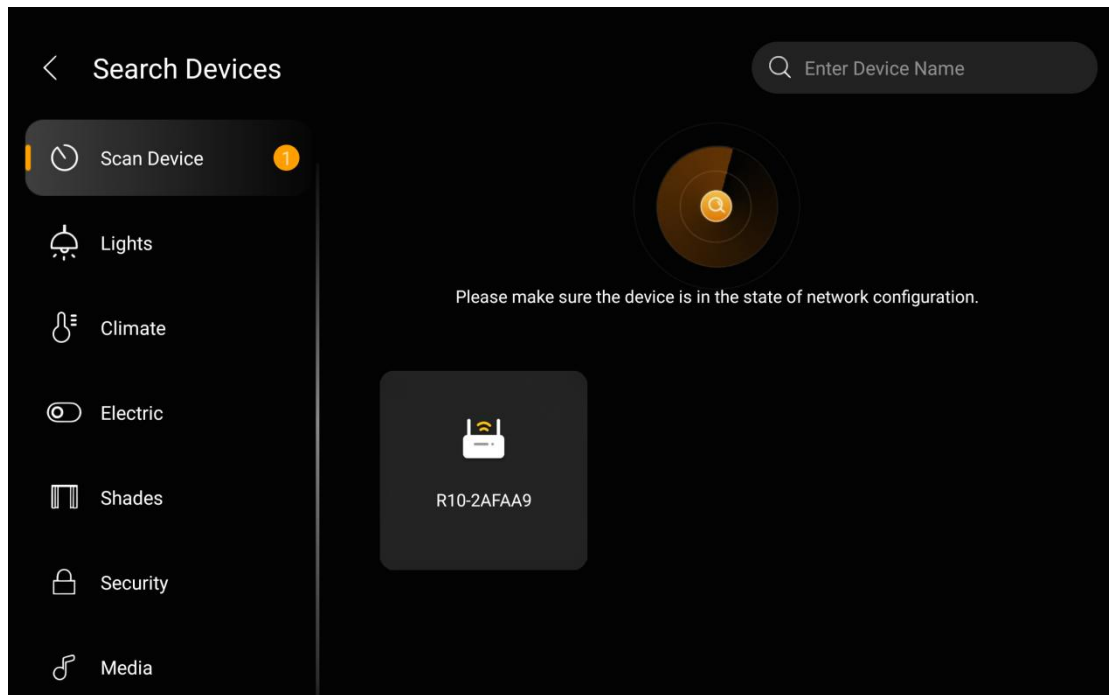
(5) Name the gateway and assign its location.
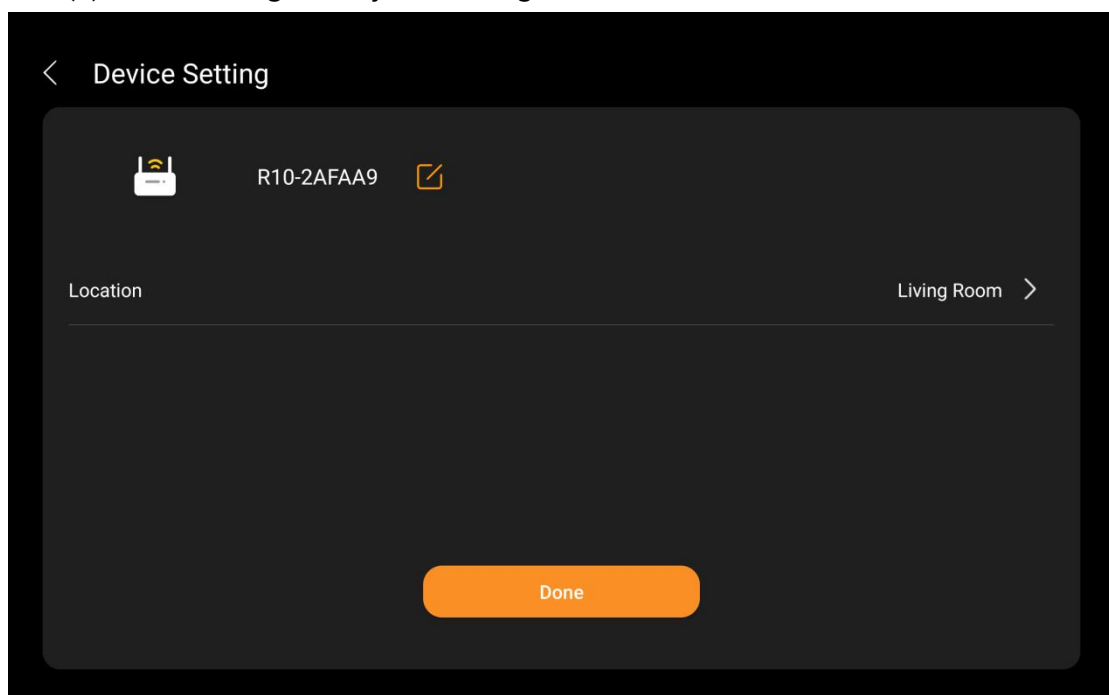
- **Small-Screen Panels**
  (1) Swipe down from the top edge of any screen.

  (2) Tap ⚙ **> Device Management >** ⊕.

  (3) Select the detected gateway.

(4) Name the gateway and assign its location.

Via Device Web Portal

(1) Enter the home center's IP address in a browser to open its device web portal.
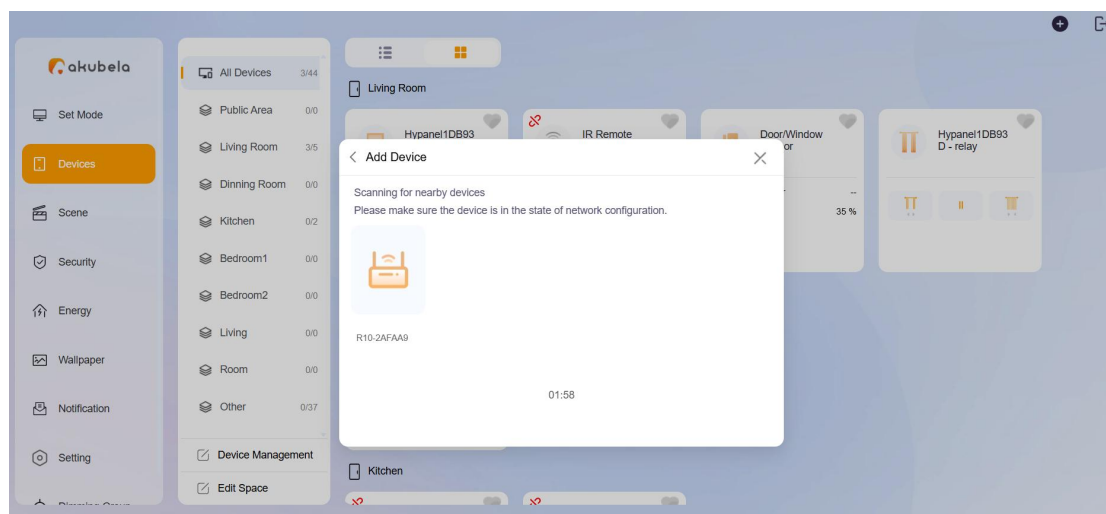**TIP:**
See here for detailed instructions.

(2) Go to **Devices >** **> Add Device > Gateway Scan to add**, and select the home center device.
(3) Wait for the gateway to be detected.
(4) Click the detected gateway, then name it and assign its location.

Once added, the gateway will appear in the akubela system, and its PWR/NET LED will turn solid green.

Access the Gateway Web Portal

You can go to the gateway's web portal to view basic and network information, manage connected devices, and perform operations such as factory reset, reboot, or firmware upgrade.
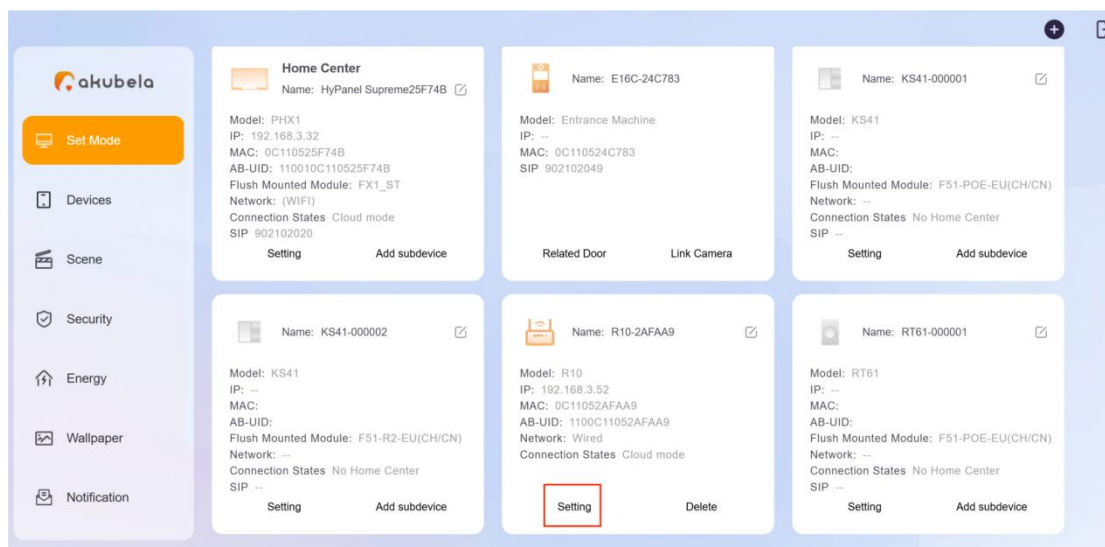
From the Home Center Device Web Portal

1. Enter the home center's IP address in a browser to open its device web portal.
TIP:
The default login credentials are *admin/admin*.

2. Click the **Setting** button at the bottom of the gateway card.

3. The gateway's web portal will open in a new tab.

Directly via Gateway's IP Address

1. Obtain the gateway's IP address.
   - If the gateway has been added to a family: On the home center device, go to **Gateway > *[R10 gateway card]* > ⚙ > IP address.**
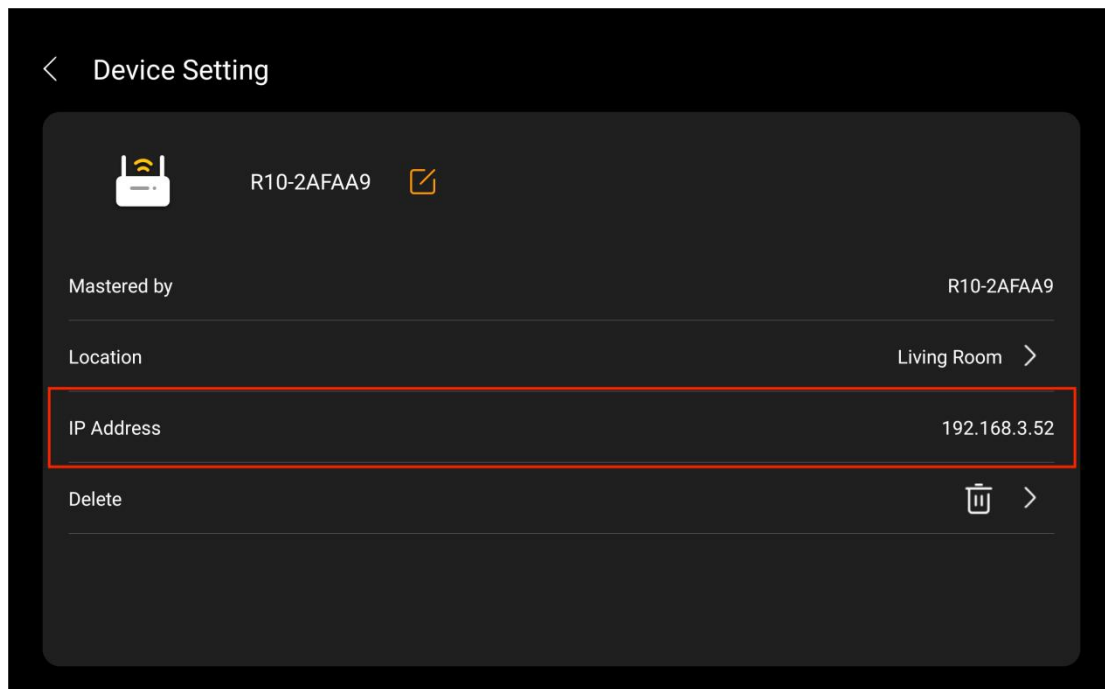
   - If not added: Check its IP address on the router's management page.

2. Enter the gateway's IP address in a browser.
3. Log in using one of the following:
   - If the gateway has been added to a family: Use the same credentials as

the home center.
- If not added: The default username and password are *admin/admin*.
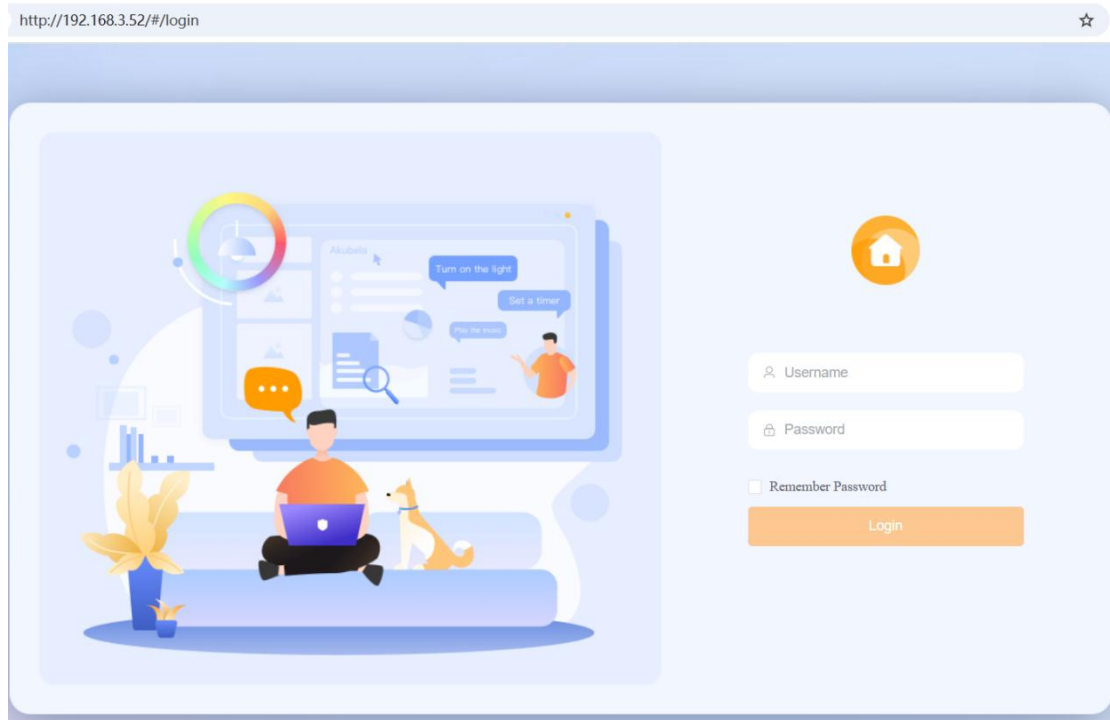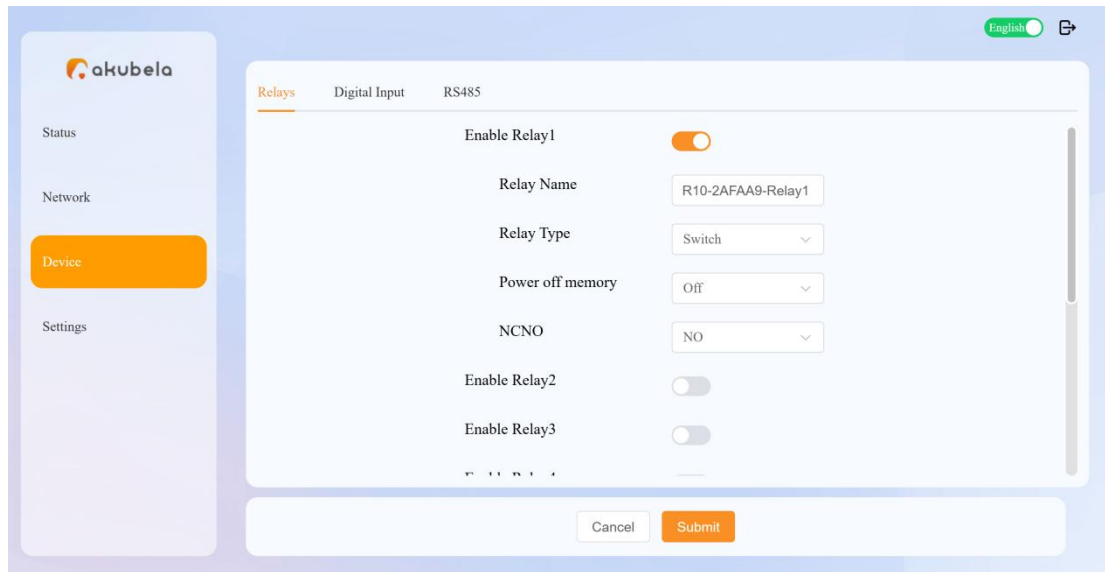

Configure Devices

NOTE:
- Any relays, inputs, or RS485 devices configured before the gateway is added to a family will be retained automatically, so you don't need to reconfigure them.
- Removing the gateway from the family will restore all its configurations to factory settings.

Configure Relays

1. Log into the gateway's device web portal.
2. Go to **Device > Relays**.
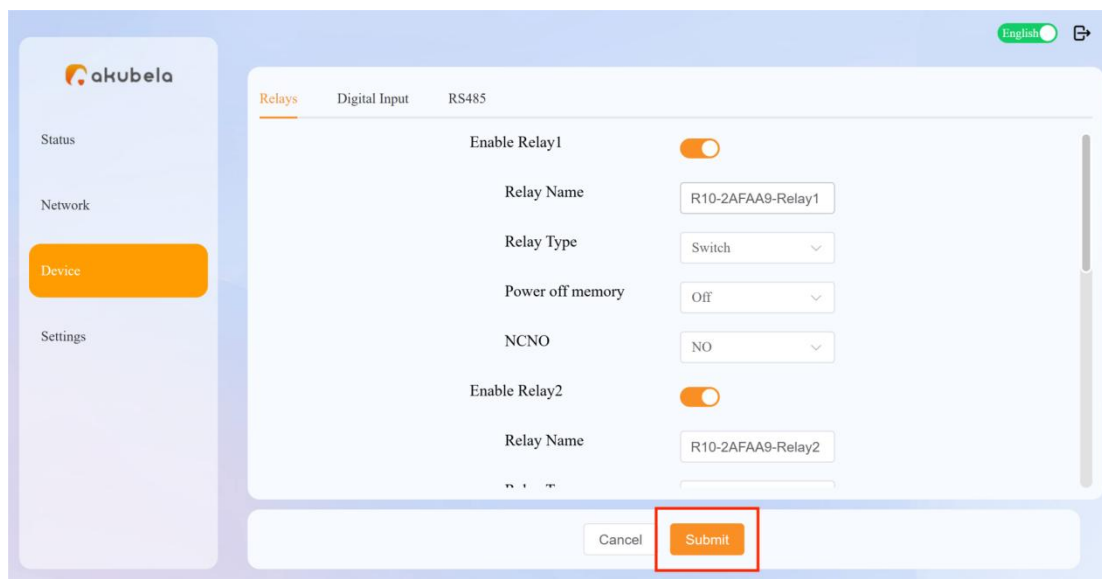3. Enable the desired relay and configure its settings.
NOTE:
The configuration options vary by relay type.

Setting	Description
Relay Name	Assign a name to identify the relay.
Relay Type	Select the type.
Power Off Memory	Choose whether the relay retains its state after a power outage.
NCNO	Select the contact type based on wiring: ● NO (Normally Open) ● NC (Normally Closed)
Combination *(Available when the relay type is **Shade-open, Shade-close, Heating, or Cooling**)*	● For **Shades**: Must link one shade-open and one shade-close relay to enable full shade control. ● For **Heating/Cooling**: Optionally link a heating relay and a cooling relay, depending on the HVAC type.
Upper Hysteresis Value *(Available when the relay type is **Heating** or **Cooling**)*	Set the upper temperature difference for hysteresis control.
Lower Hysteresis Value *(Available when the relay type is **Heating** or **Cooling**)*	Set the lower temperature difference for hysteresis control.
Temperature Source *(Available when the relay type is **Heating** or **Cooling**)*	Select the temperature sensor to use for control.

4. Click **Submit** to save the settings.
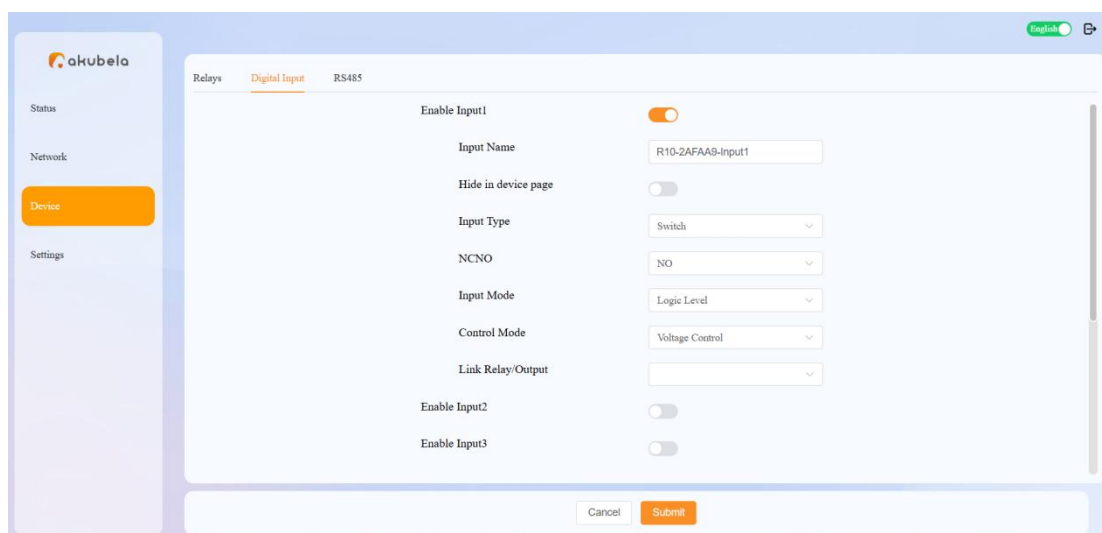
Once added, the relays will appear in the family system.
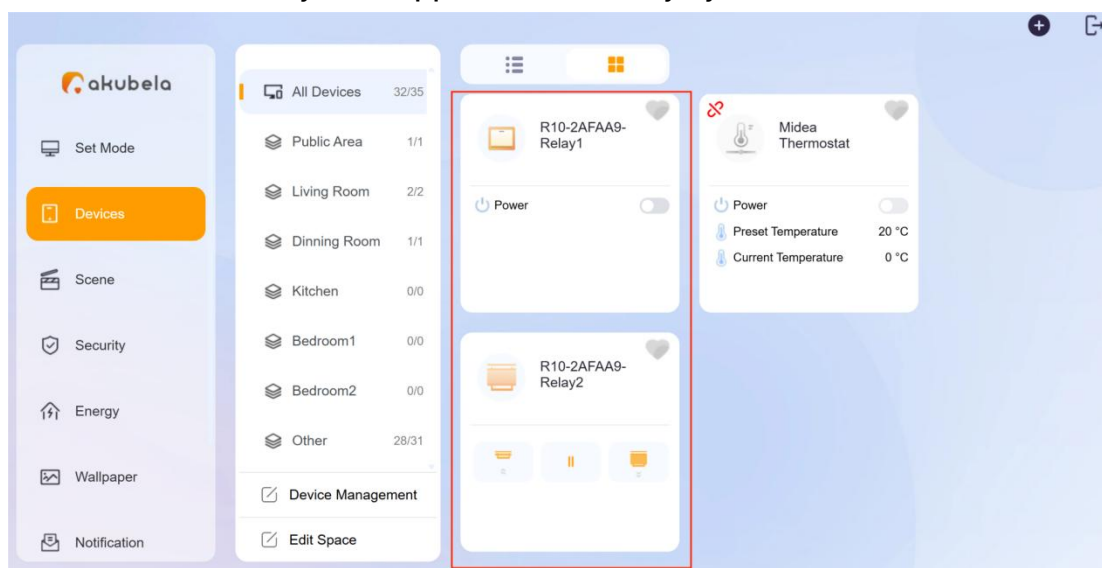
Configure Digital Inputs

1. Go to **Device > Digital Inputs**.
2. Enable the desired input and configure as follows:

Setting	Description	Remark
Input Name	Assign a name to identify the input.	
Hide in Device Page	Choose whether to hide this input on the akubela system.	Enabled by default for Shade types.
Input Type	Select the type.	
NCNO	Select the contact type based on wiring: ● NO (Normally Open) ● NC (Normally Closed)	
Input Mode *(Available when the input type is Shade-open, Shade-close, or Switch)*	Choose: ● **Logic Level**: High/low voltage control. ● **Pulse**: Trigger-based control.	
Control Mode *(Available when the input mode is Logic Level)*	Choose: ● **Voltage Control**: High/low voltage toggles on/off (High = On, Low = Off). ● **State Toggle**: Each press reverses the device state.	
Click Duration *(Available when the input mode is Pulse)*	Set the duration of a short click.	
Long Click Duration *(Available when the input mode is Pulse)*	Set the duration of a long click.	

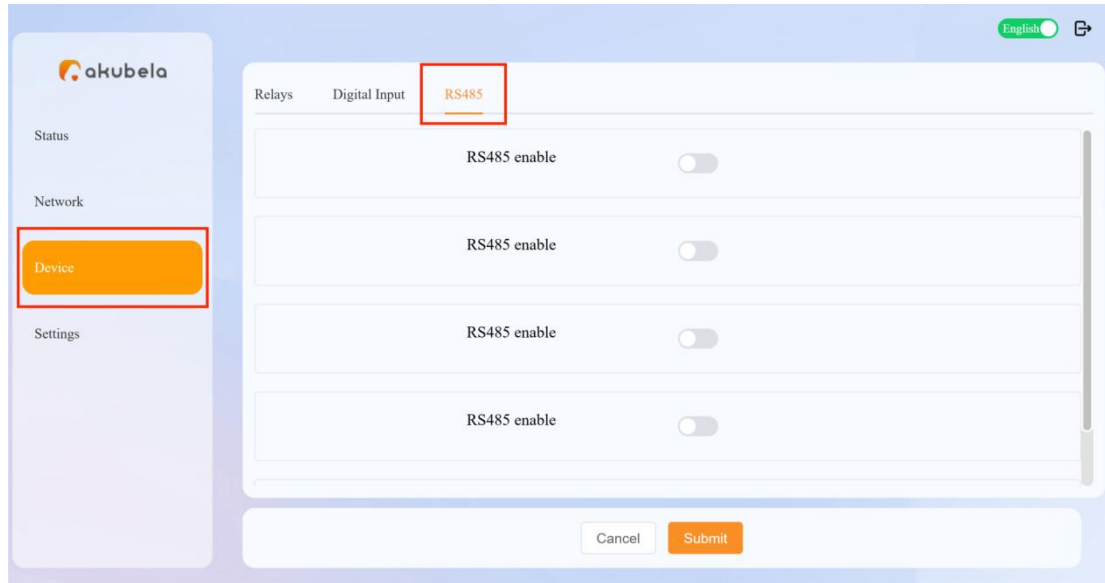| Link Relay/Output	Link this input to trigger a specific relay or output (shade type excluded) on the same gateway.	
Combination Input *(Available when the relay type is **Shade-open** or **Shade-close**)*	Link another shade input to form a complete open/close pair.	

3. Click **Submit** to save the settings.

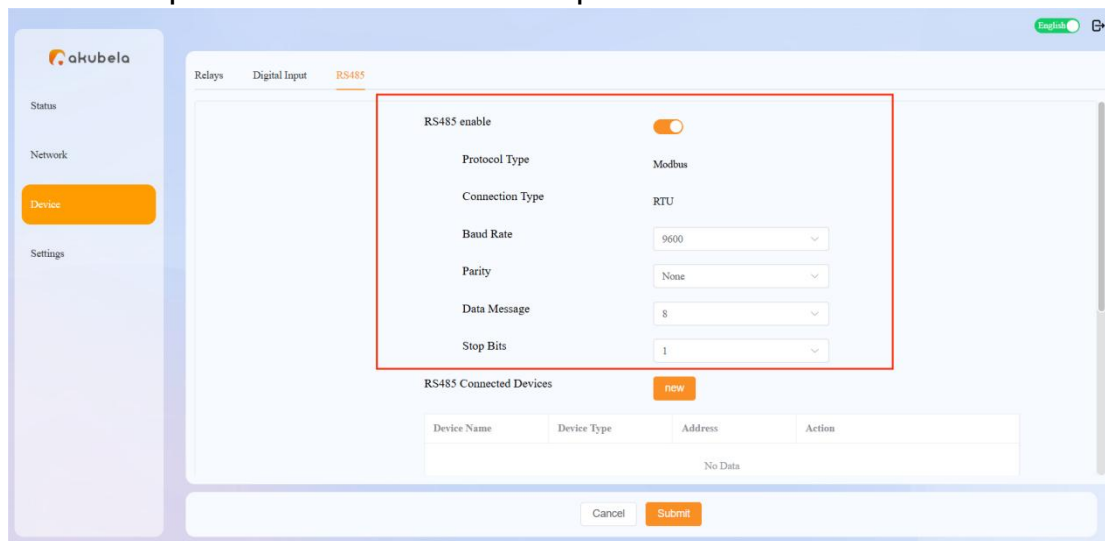Once added, inputs that are not set to hidden will appear in the family system.
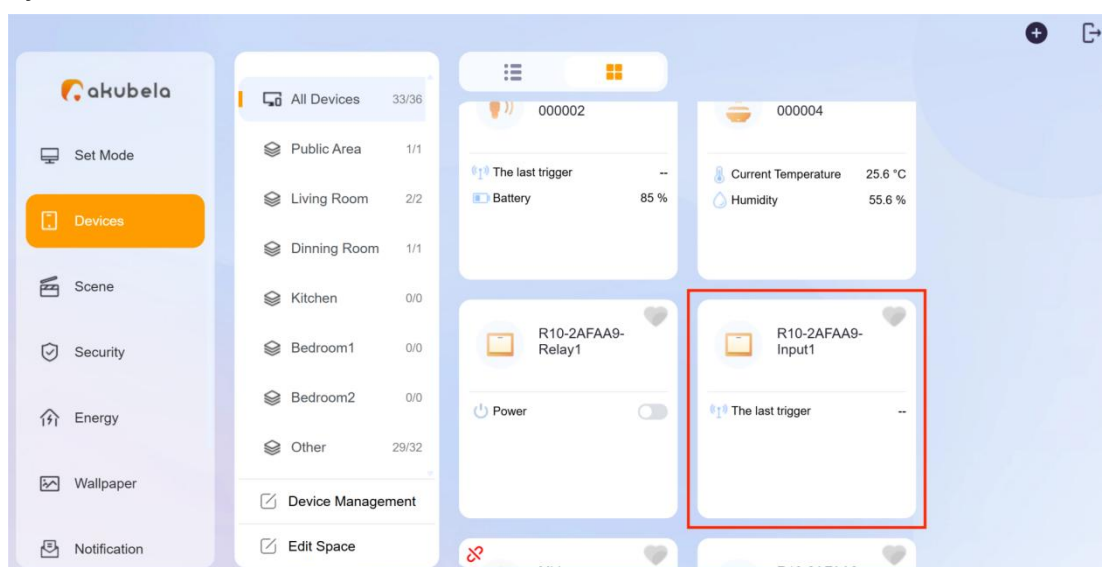

Configure RS485 Devices

1. Go to **Device > RS485**.

2. Toggle the specific **RS485 enable** button to **On**.
3. (Optional) Configure the parameters based on the connected RS485 device:
   - Baud Rate: Set the data transmission speed.
   - Parity: Choose the error checking method.
   - Data Message: Select the number of data bits in a byte.
   - Stop Bits: Set the number of stop bits.

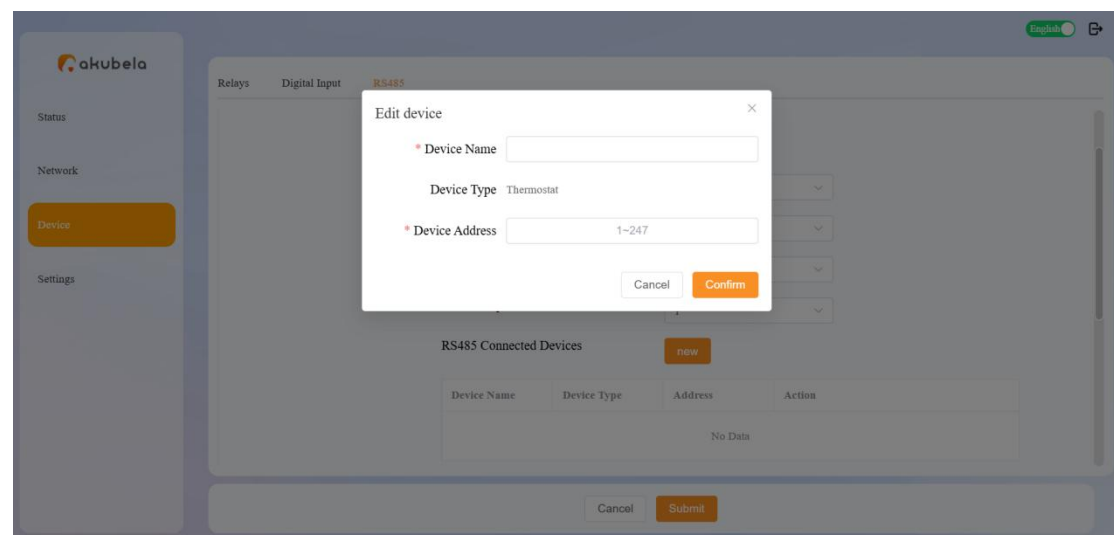4. Click **New** to add an RS485 device.

NOTE:

Currently supports Midea thermostats only.
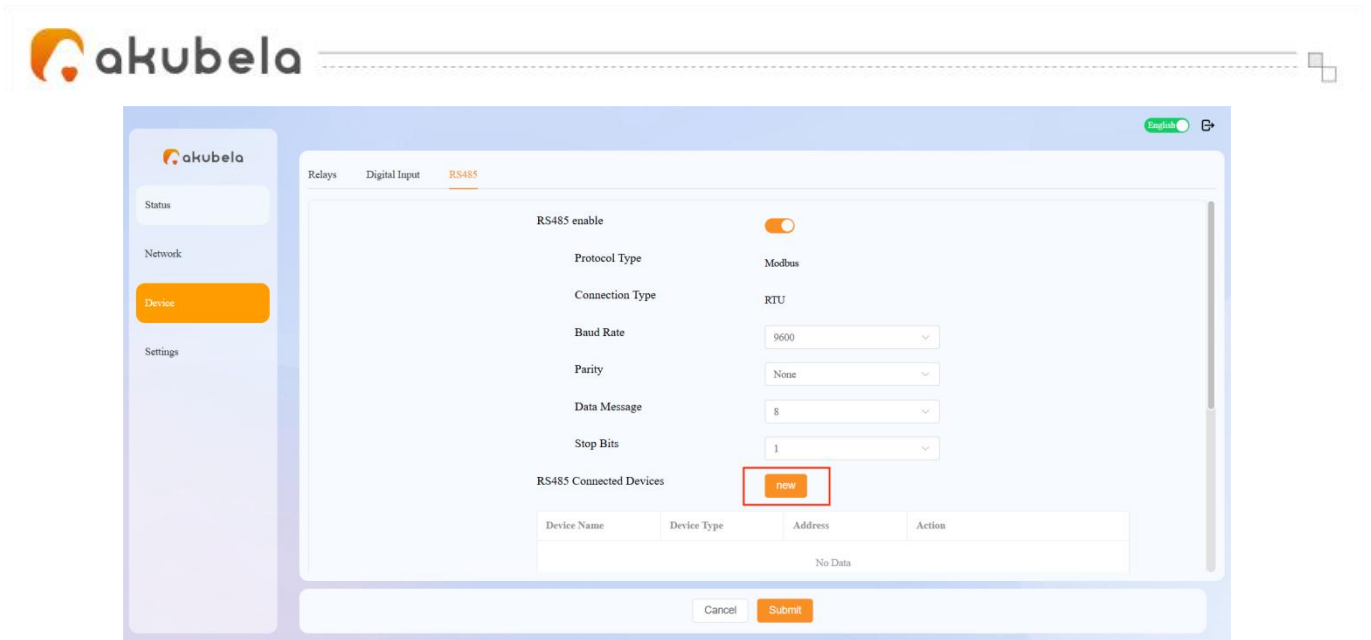
5. Enter the device name and device address.
NOTE:
The entered address must match the address set on the device.

6. Click **Confirm**, and the device will appear in the list.

7. (Optional) Click **Configuration** to open the device settings.

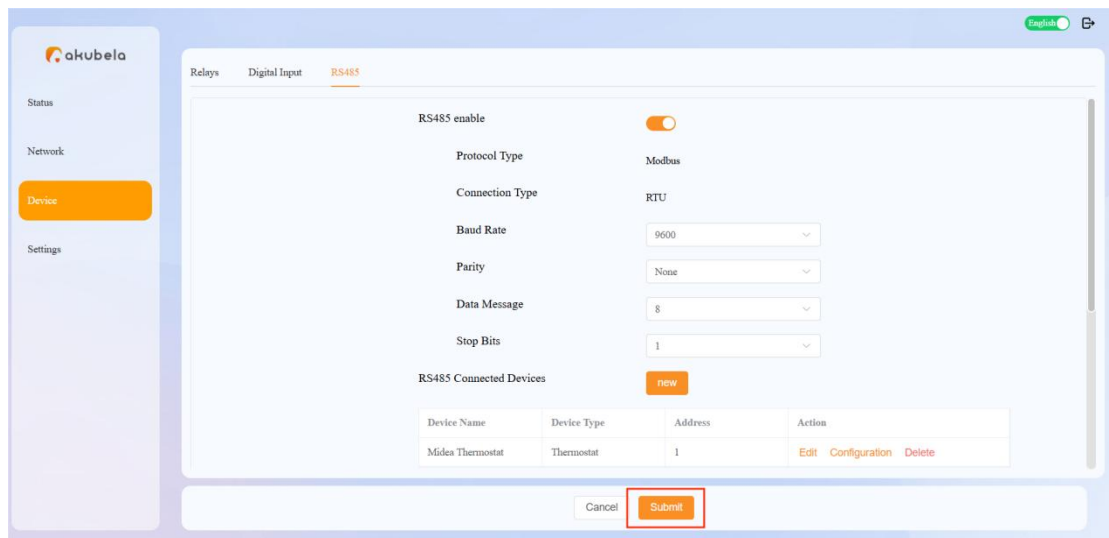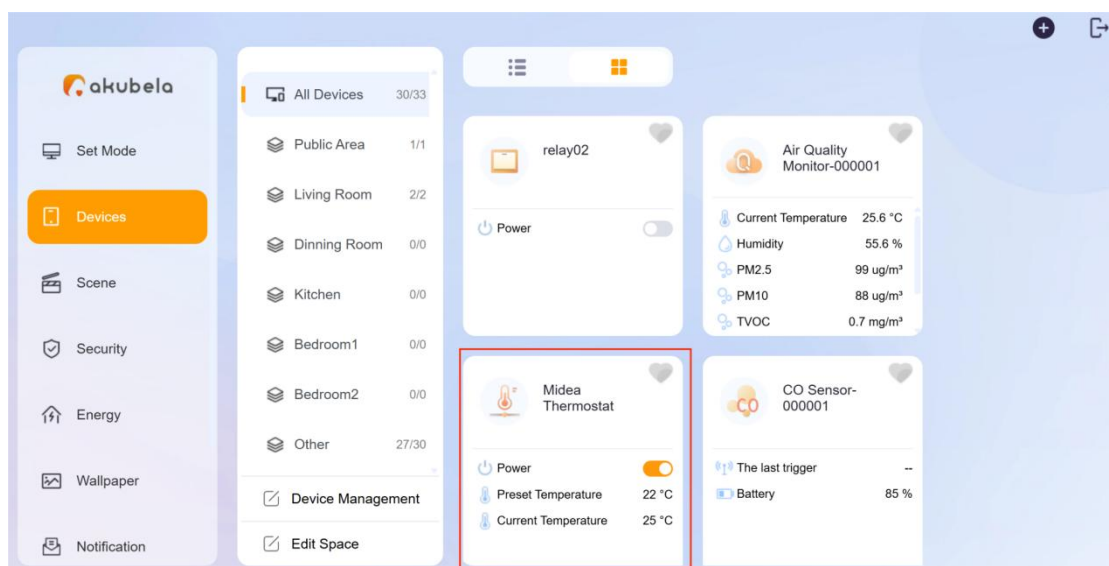**NOTE:**

For Midea thermostats, set the **Register Address** in **Set Temperature** to **3**.
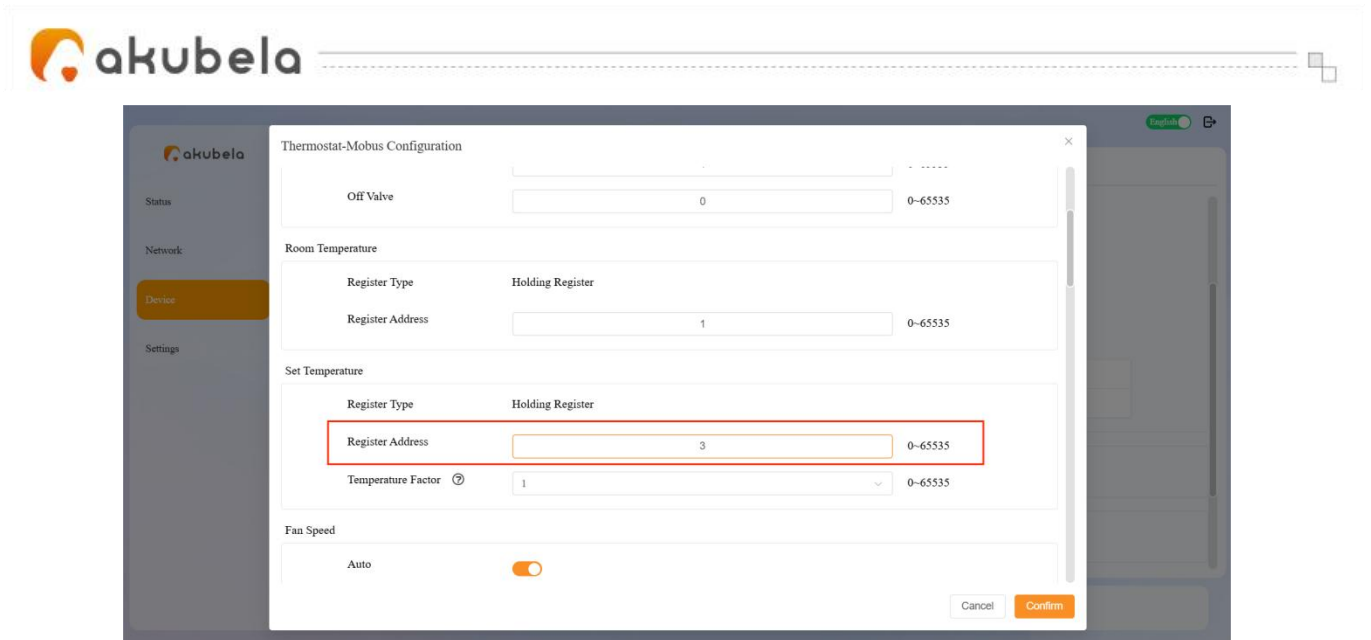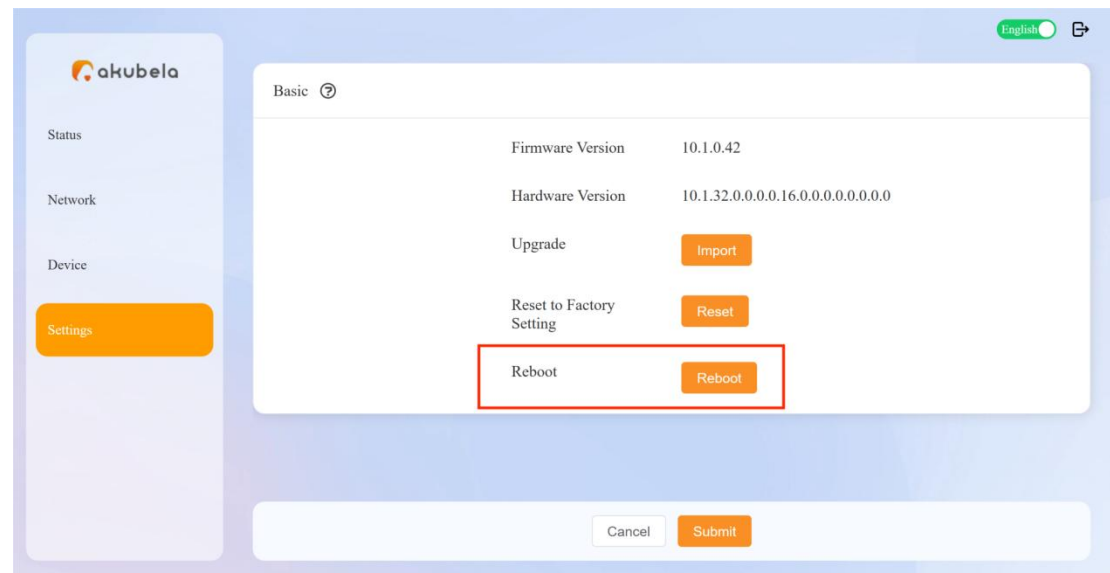
8. Click **Submit** to save.

Once added, the device will appear in the family system.
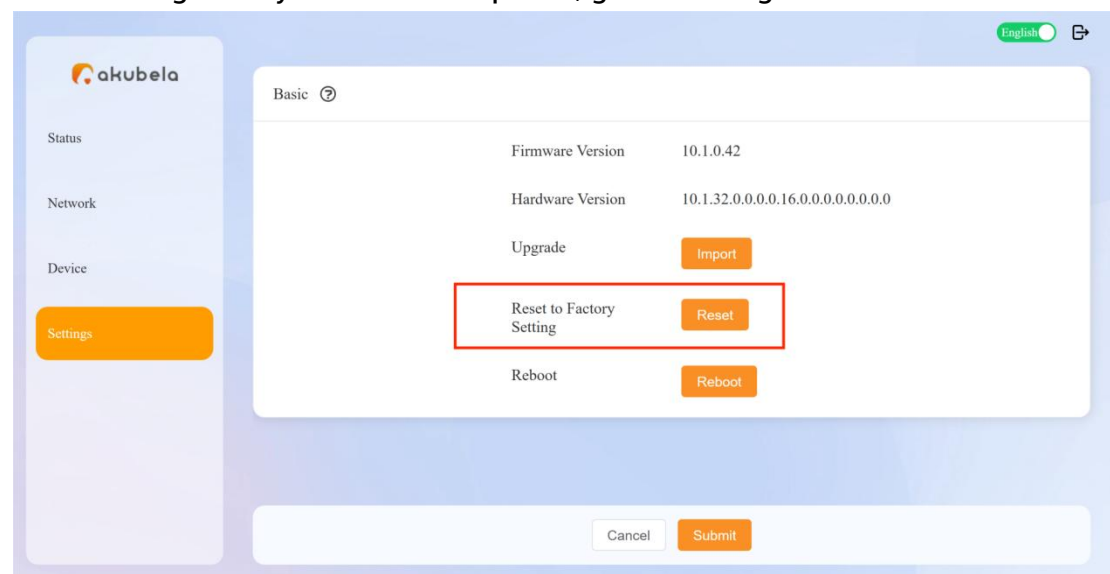
Maintenance

Restart the Gateway

- Press the physical RESET button once to reboot the gateway.
- On the gateway's device web portal, go to **Settings > Reboot**.

Restore Factory Settings

To reset the gateway to factory settings, do any of the following:
- Press the physical RESET button for about 10 seconds.
- On the gateway's device web portal, go to Settings > Reset.

Upgrade Firmware

To upgrade the gateway firmware:
1. Contact akubela technical support to obtain the latest firmware file.
2. Log in to the gateway's device web portal.
3. Go to **Settings > Upgrade**, then upload the firmware file.