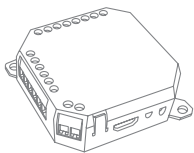
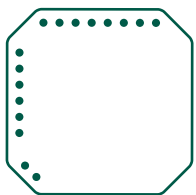


## IO Module



## INSTALLATION MANUAL

Version 1.0



### Product description

With the IO Module, you can connect wired devices to a Zigbee network. Providing four inputs and two outputs, the IO Module works as a bridge between wired devices and a control system over Zigbee networks.

### Disclaimers

#### CAUTION:

- Choking hazard! Keep away from children. Contains small parts.
- Please follow the guidelines thoroughly. The IO Module is a preventive, informing device, not a guarantee or insurance that sufficient warning or protection will be provided, or that no property damage, theft, injury, or any similar situation will take place. friend cannot be held responsible in case any of the above-mentioned situations occur.

### Precautions

- **WARNING:** For safety reasons, always disconnect power from the IO module, before connecting wires to inputs and outputs.
- Do not remove the product label as it contains important information.
- Do not open the IO Module.
- Do not paint the device.

### Placement

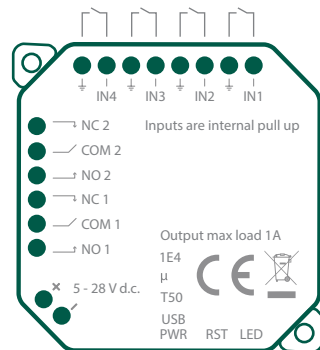
Connect the IO Module to a device that is located at a temperature between 0-50°C.

### Connecting to wired device

You can connect the IO Module to different wired devices: doorbells, window blinds, wired security devices, heat pumps and more.

The connection of the different devices follows the same principle, using the different inputs and outputs:

a.



IN1	Inputs with internal Pull Up. Must be shorted to IO Module GND for signal IO Module GND
IN2	
IN3	
IN4	
NC2	Normally Closed for Relay Output 2
COM2	Common for Relay Output 2
NO2	Normally Open for Relay Output 2
NC1	Normally Closed for Relay Output 1
COM1	Common for Relay Output 1
NO1	Normally Open for Relay Output 1

5-28 V d.c. Power Supply  
**NOTE:** Use "5-28 V" or "USB PWR". If both are connected "5-28V" is the primary Power Supply.

USB Power Supply  
**NOTE:** USB PWR is then used as fall back in case "5-28 V" is disconnected.

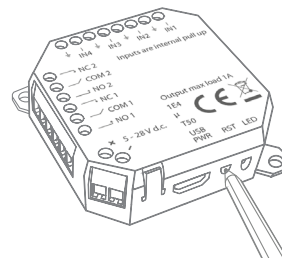
RST Reset

LED User Feedback

### Getting started

1. When the device is connected and powered up, the IO Module will start searching (up to 15 minutes) for a Zigbee network to join. While the IO Module is searching for a Zigbee network to join, the yellow LED flashes.
2. Make sure that the Zigbee network is open for joining devices and will accept the IO Module.
3. When the LED stops flashing, the device has successfully joined the Zigbee network.
4. If the scanning has timed out, a short press on the reset button will restart it.

b.



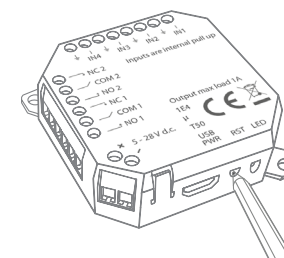
### Resetting

Resetting is needed if you want to connect your IO Module to another gateway or if you need to perform a factory reset to avoid abnormal behavior.

### STEPS FOR RESETTING

1. Connect the IO Module to a power outlet.
2. Press and hold the reset button with a pen (see illustration b).

3. While you are holding the button down, the yellow LED first flashes once, then two times in a row, and finally numerous times in a row.



4. Release the button while the LED is flashing numerous times in a row.
5. After you release the button, the LED shows one long flash, and the reset is completed.

### Modes

#### SEARCHING GATEWAY MODE

The yellow LED flashes.

### Fault finding

- In case of a bad or weak wireless signal, change the location of the IO Module. Otherwise, you can relocate your gateway or strengthen the signal with a range extender.
- If the search for a gateway has timed out, a short press on the button will restart it.

### Disposal

Dispose the product properly at the end of its life. This is electronic waste which should be recycled.

### FCC statement

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** 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 device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

### IC statement

#### English

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause

undesired operation of the device.

This equipment complies with IC RSS-102 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.

### Français

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

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

Cet équipement est conforme aux limites d'exposition aux radiations IC CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

### ISED statement

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B).

### CE certification

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product and, in particular, its compliance with the harmonized standards and specifications.



### IN ACCORDANCE WITH THE DIRECTIVES

- Radio Equipment Directive (RED) 2014/53/EU
- RoHS Directive 2015/863/EU amending 2011/65/EU
- REACH 1907/2006/EU + 2016/1688

### Other certifications

Zigbee 3.0 certified



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