

## ITR230-0001 - Iconnect



Device	ITR230-0001
Power Supply	230 V AC 50Hz $\pm 5\%$
CPU	ARM Cortex A7 Dual-Core 1.2 GHz
Memory	512 MB DDR3
Storage	8 GB EMMC SD Card up to 16gb
OS	Ubuntu (16.04)
USB	1x USB2.0
KNX	1x KNX Connector, 1x Internal KNX power supply, Rated Current $\approx 50$ mA
Button	1 x Smart Button
Network	100Mbps Ethernet
RTC	System includes RTC with battery backup
Inputs	16 Digital Input
Temperature Range	Operation (0°C...40°C) Storage (0°C...50°C)
Maximum Air Humidity	< 90 RH
Colour	Light Grey
Dimensions	105x90x64mm(WxHxD)
Type of Protection	IP 20
Flammability	Non-flammable product
Mounting	DIN Rail
Configuration	Via Web Browser

### DESCRIPTION

The Interra ITR230-0001 Iconnect is a versatile and diverse smart building automation device. Depending on the need Iconnect can be used such as room control unit, energy saver, IoT interface etc. By flexibility of the Iconnect device, users will be able to activate the scenarios they want to realize according to their special wishes. Scenarios that can be realized with limited flexibility with KNX devices in the building automation sector will have high flexibility thanks to Iconnect. For instance, when a message is received and the presence sensor detects something, scenarios such as switch the building to comfort mode can be realized. As another scenario: when a customer checks-in at a hotel, he/she can switch to the corresponding room preparation mode, for instance, to warm the room up to 23 degrees, the corridor lights can be turned on after the customer enters the door, the temperature can be reduced to the desired level and the lights can be turned off each time when he/she leave from the room.

Iconnect device can be programmed without the need for extra software on computers, mobile phones or devices that can access any internet browser. Iconnect is able to automate and manage the related place that has a KNX automation infrastructure without the need for an external power supply for communication.

Moreover, Iconnect enables communication with MODBUS and KNX protocol, as well as other devices on the IoT platform, and the devices can be controlled by Iconnect. In this way, it is possible to communicate with IoT devices via different protocols and to integrate them into the building automation infrastructure with Iconnect.

### SMART BUTTON

When you hold down the Smart button for 7 seconds, the device switches to special mode for 5 seconds. In this special mode, the LED on the smart button starts blinking red and grey for 5 seconds.

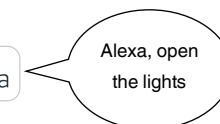
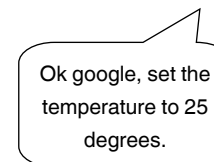
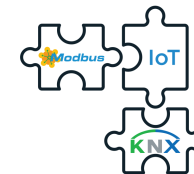
During this period, various changes can be made to the device according to the number of button presses. These changes that can be made for troubleshooting purposes are shown in the table below.

1 times press	Return IP settings to factory default
2 times press	Return to the previous app
3 times press	Return Interra Node-red to factory setting
4 times press	Return to complete factory settings

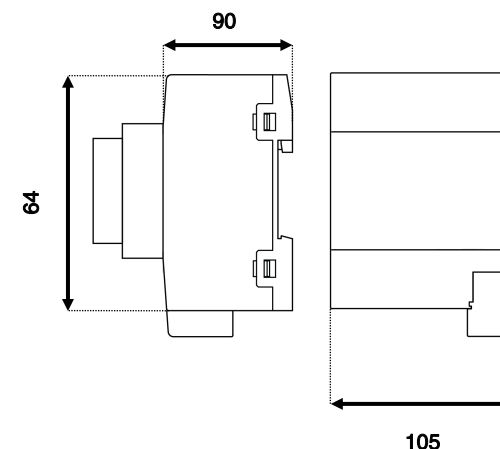
### GENERAL FEATURES



- Energy savings of such as lightings, air conditioning units etc. can be done via thanks to central management feature.
- Flexible architecture, which can be monitored remotely, controlled and offers solutions to needs.
- Data types in different formats can be integrated with each other over KNX, Modbus and Ethernet layers.
- Numerous scenario realization via Interra node-red visual programming interface.
- Voice control with Amazon alexa and google assistant.



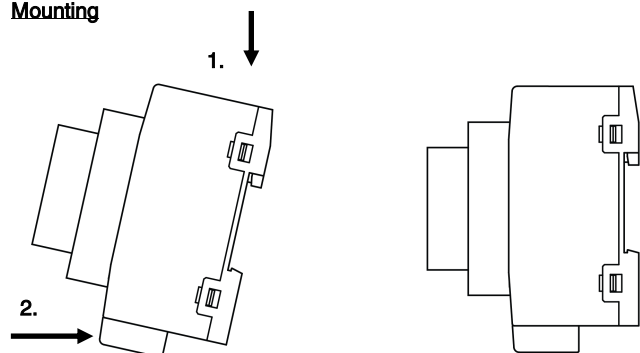
### DIMENSIONS



- All values given in the device dimensions are in millimeters. The device can be used in an area with 6 modules.

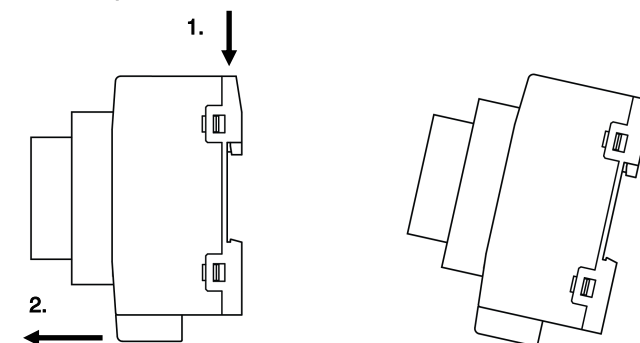
## MOUNTING & DEMOUNTING

### Mounting



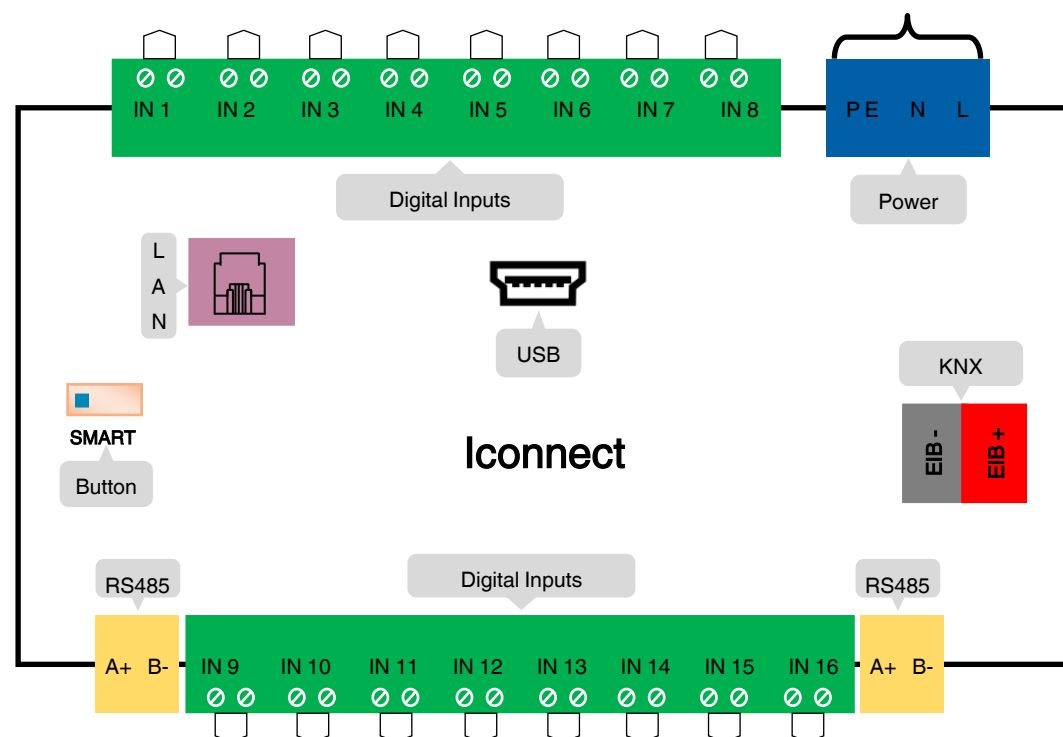
- First, the device is contacted to the DIN rail by holding it at an oblique angle.
- Then, it is pushed slightly from above in the direction of 1st numbered arrow.
- Finally, the device is pushed slightly in the direction of 2nd arrow and placed on the DIN rail to finish the mounting.

### Demounting:



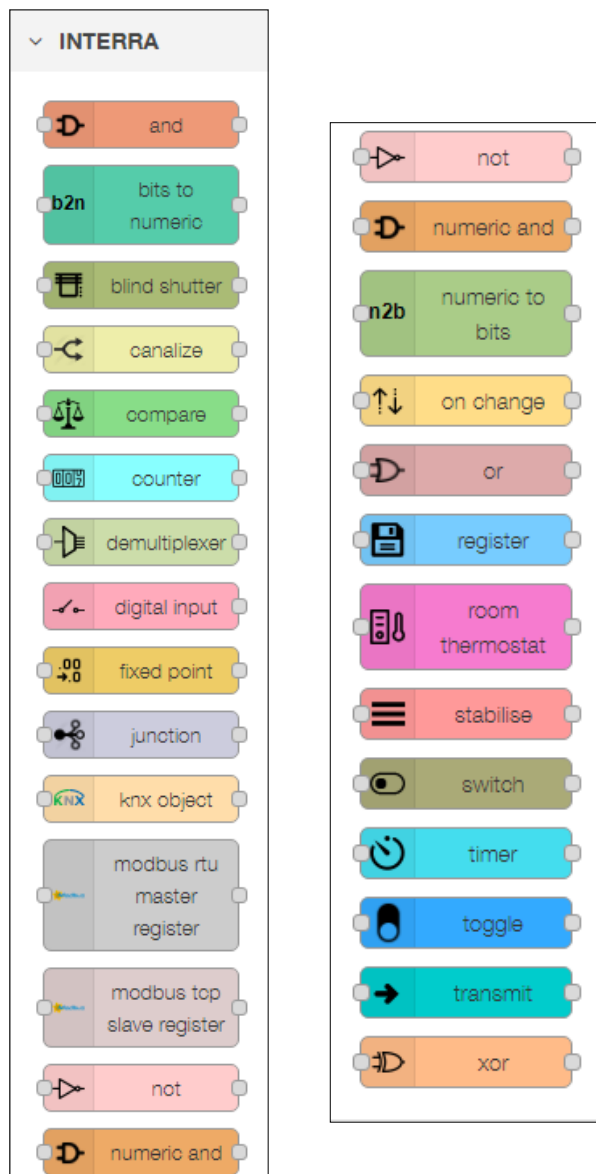
- First, the device is pushed slightly from above in the direction of 1st numbered arrow.
- Then, the device is pulled slightly in the direction of 2nd arrow.
- Finally, when the device is at a sufficient oblique angle, it is completely withdrawn from the DIN rail and the demounting is finished.

## CONNECTION DIAGRAM & IMPORTANT NOTES

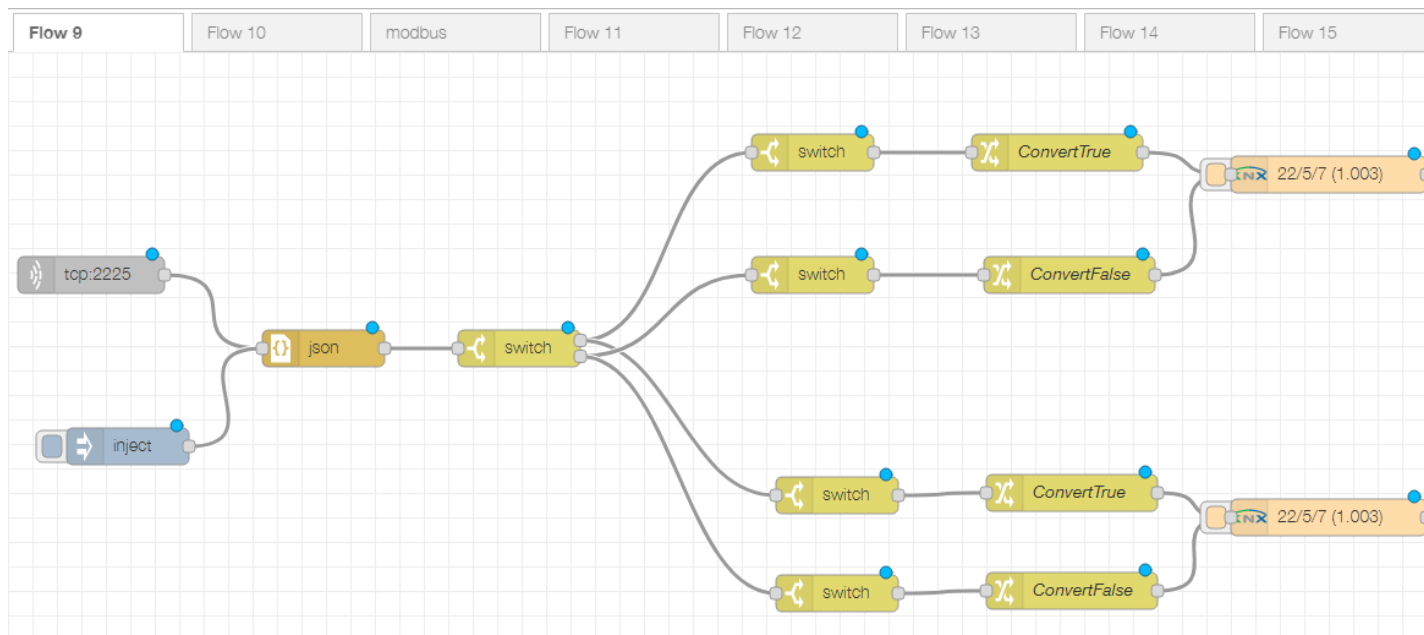


- The device may only be installed and put into operation by a qualified electrician or authorized personnel.
- For planning and construction of electric installations the appropriate specifications, guidelines and regulations in force of the respective country have to be complied.
- For mounting only use an appropriate equipment according to IEC 60715.
- Installation should be only in dry locations and on a 35 mm DIN rail (TH 35).
- Screw down strength is less than 0.4Nm.
- Input Voltage: The input voltage shall be 230 V AC 50Hz  $\pm$ 5%.
- Connect KNX bus line to the bus connecting terminal.
- Do not connect the AC 240V voltage into the bus lines, it can damage the all of devices in the infrastructure.
- The device supply must be connected to the power terminal in accordance with its polarity.
- There are two RS485 connections parallel to each other on the device. Connections can be easily achieved by jumping.
- The device heats up naturally during operation and therefore the maximum operating temperature must be observed. Adequate heat dissipation should be provided where the device is mounted.

## Interra Logic Operations Components :



## Logic Operations User Interface :



## Components Features :

- The Interra Node-red user interface is programmed with drag and drop method.
- These components must be associated with each other in order to perform logic operations and realize scenarios. The components that are used must be linked to each other's inputs and outputs.
- Program snippets on Interra node-red can be implemented as separate flows.
- For the programming, all the special configurations of the components to be used on the interface must be made. Otherwise, logical errors will occur in the programs written.
- Besides the components of automation protocols such as KNX and Modbus, there are also components to perform basic automation functions. In addition, 3rd party components can be accessed online and used for logical operations.

