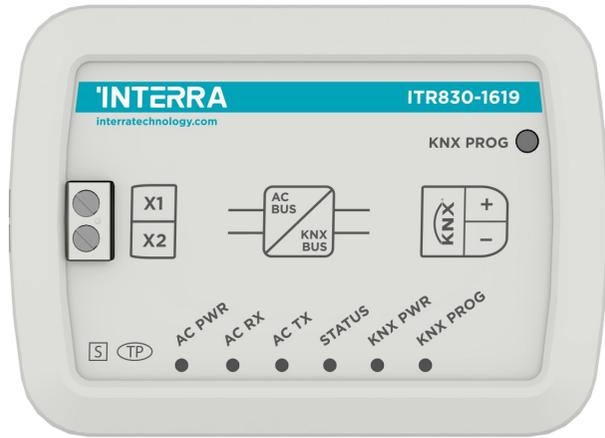


## Carrier VRF AC - KNX Gateway



<b>Product Code</b>	ITR830-XX19
<b>Power Supply</b>	KNX Power Supply
<b>Power Consumption</b>	5 mA
<b>Push Buttons</b>	1 x KNX Programming Button
<b>LED Indicators</b>	1 x KNX Programming LED
<b>Type of Protection</b>	IP 20
<b>Cable Distance</b>	Max 200 m
<b>Mode of Commissioning</b>	S-Mode
<b>Maximum Air Humidity</b>	< 90 RH
<b>Temperature Range</b>	Operation (-10°C...70°C) Storage (-25°C...100°C)
<b>Colour</b>	Light Grey
<b>Dimensions</b>	88 x 62 x 27 mm (W x H x D)
<b>Certification</b>	KNX Certified
<b>Configuration</b>	Configuration with ETS

XX | 01: 1 Channel / 04: 4 Channel / 08: Channel / 16: Channel

### DESCRIPTION

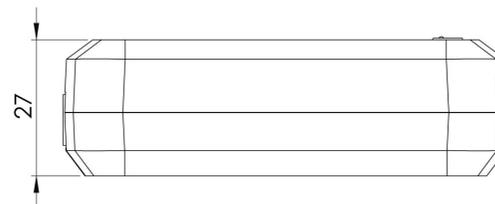
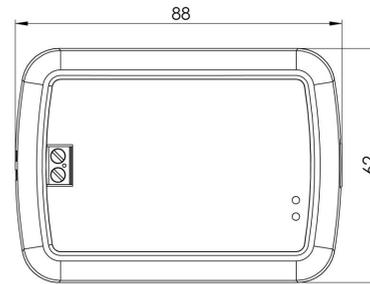
ITR830-XX19 is an air conditioner gateway used for monitoring and controlling all the functioning parameters of Carrier air conditioners via the KNX bus line. Carrier VRF AC - KNX Gateway is compatible with models in VRF types categorized on the compatibility list published by Interra.

Carrier VRF AC - KNX Gateway has an easy installation feature and can be installed inside the own AC indoor unit or a proper location away from the air conditioner, it connects one side directly to the electronic circuit of the AC indoor unit and in the other side directly to the KNX bus.

**Note :** Existing commands may vary according to indoor unit model. Please refer to relevant technical documents.

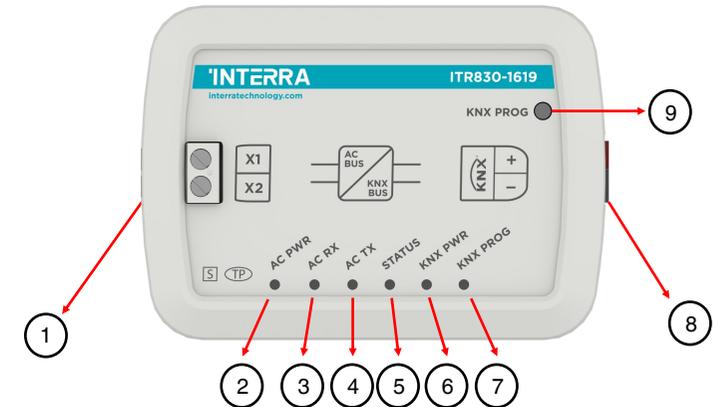
### DIMENSIONS & CONNECTION DIAGRAM

- All values given in the device dimensions are millimetres.



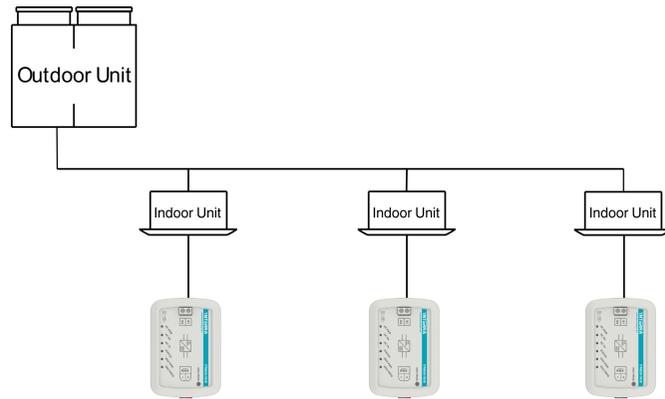
### FUNCTIONS

- ITR830-XX19 device provides complete bi-directional integration of VRF type air conditioners with KNX bus.
- Includes 4 logical advanced parameters, each logical parameter have up to 4 inputs and can be configured as AND, OR & XOR.
- Includes 8 advanced converter parameters, each converter has four operations math calculations according to input type.
- Logic and converter parameters can be used for energy savings, configurable scenes, temperature limits etc.
- The Carrier air conditioner unit provides error notifications for errors that may occur in exceptional cases.



- |                              |                           |
|------------------------------|---------------------------|
| 1. AC Indoor Unit Connection | 6. KNX Power LED          |
| 2. AC Power LED              | 7. KNX Programming LED    |
| 3. AC Receive Signal LED     | 8. KNX Connector          |
| 4. AC Transmit Signal LED    | 9. KNX Programming Button |
| 5. Status LED                |                           |

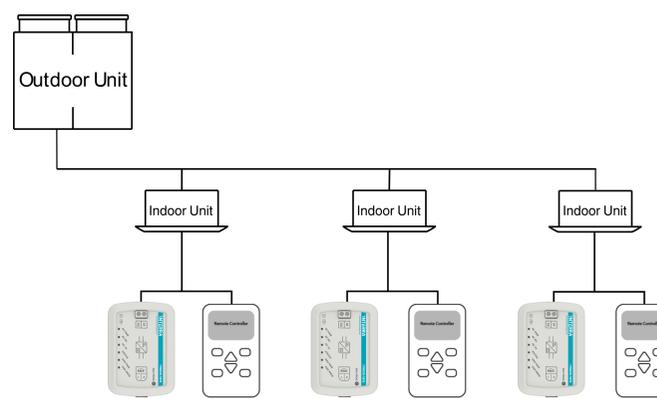
**Gateway - Single Indoor Unit:**



**Figure 1**

- Carrier VRF AC - KNX Gateway can be connected directly to the wired remote communication bus terminal of the AC indoor unit. Nothing that needs to do in ETS software. The following figure shows the Carrier VRF AC - KNX Gateway connection without the remote controller. At this case the gateway's role must be master

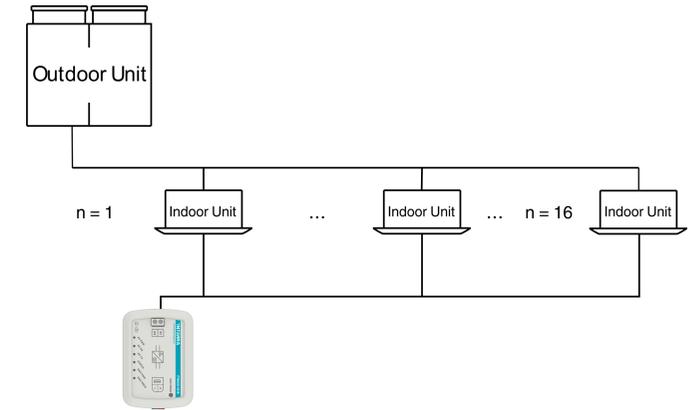
**Gateway-Single Indoor Unit + Remote Controller:**



**Figure 2**

- The wired remote controller is optional in this configuration.
- Either one of wired controllers can be set as the master wired controller and the other as the slave wired controller
- If gateway is master, the wired remote must be slave.
- If the wired remote is master, gateway must be slave. At this case ambient temperature reference can not selected from "KNX Bus".

**Gateway-Multi Indoor Unit:**



**Figure 3**

- The device can control all of connected indoor units individually.
- The device can not work as Slave and the wired remote and gateway can not work together.
- Wired remote communication port must be used to connect the wired controller and the master unit and other units (the indoor unit connected with wire controller directly).
- Indoor unit address of air conditioners should be different from each other.
- After address setting don't forget the configure addresses in ETS.

Error Code	Error Description
E0	Mode conflict error
E1	Communication error between indoor and outdoor units
E2	T1 sensor error
E3	T2 sensor error
E4	T2B sensor error
E5	T2A sensor error (Reserved)
E6	Fan error in indoor unit
E7	EEPROM error fault
E9	Wired controller and IDU communication fault
EB	Electronic expansion valve of indoor unit has error
ED	Outdoor unit error
EE	Water level alarm error
FE	Indoor unit has no address
4096	Communication Error
4097	Transmit Error
4098	Receive Error
4101	No ambient temperature error