

## Safety Instructions

### **WARNING**

Follow carefully this safety and installation instructions. Improper work may lead to serious harmful for your health and also may damage seriously the IntesisBox and/or any other equipment connected to it.

- IntesisBox must be installed by accredited electrician or similar technical personnel, following all the safety instructions given here, and in accordance always with the country legislation for installation of electric equipment.
- IntesisBox can not be installed outdoors or exposed to direct solar radiation, water, high relative humidity or dust.
- IntesisBox must only be installed in a restricted access location
- In wall mount, fix firmly IntesisBox on a not vibrating surface following the instructions below.
- Mounting inside a metallic cabinet properly connected to earth is recommended.
- Disconnect always power of any wires before manipulating and connecting them to IntesisBox.
- Respect always the expected polarity of power and communication cables when connecting them to IntesisBox.
- Supply always a correct voltage to power IntesisBox, see details of voltage range admitted by the device in the technical characteristics below.
- This device was designed for installation in an enclosure. To avoid electrostatic discharge to the unit in environments with static levels above 4 kV precautions should be taken when the device is mounted outside an enclosure. When working in an enclosure (ex. making adjustments, setting switches, etc.) typical anti-static precautions should be observed before touching the unit.

## Installation instructions

- Disconnect the mains power and power of any bus or communication cable before connecting it to IntesisBox.
- Mount IntesisBox following the instructions given below, respecting the safety instructions given above.
- Connect the mains power cable to the supply voltage terminal block of IntesisBox.
- Circuit-breaker must be used before the mains power cable. Rating 250V-6A
- Connect the communication cables to IntesisBox, see details on the user's manual.
- Power IntesisBox and the rest of devices connected to it.

## Configuration and setup

Use the software ETS and follow the instructions of the user's manual for more details.

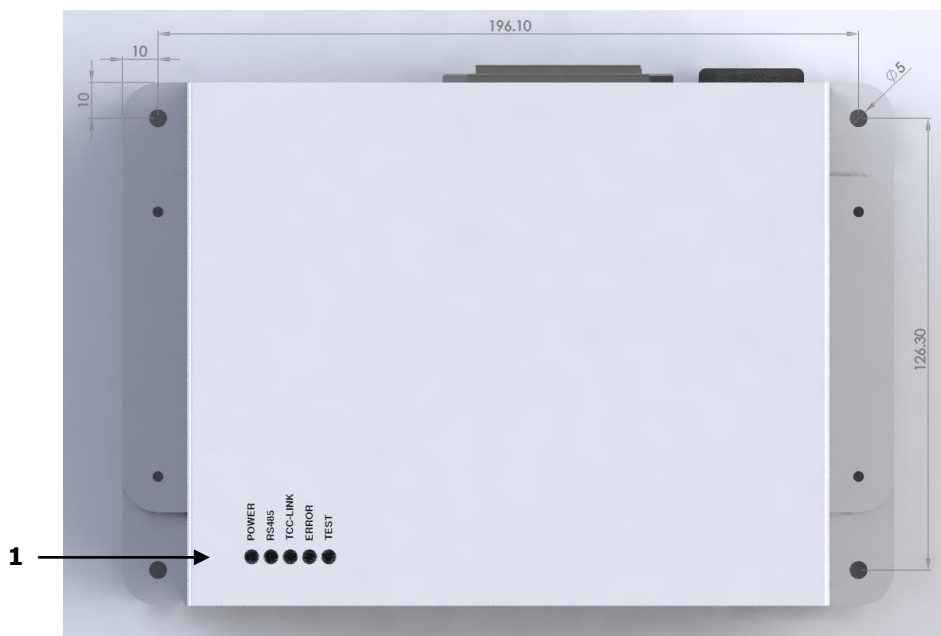
**See instructions to download and install the latest version of the ETS database for this product and the user's manual at**

[http://www.intesis.com/pdf/IntesisBox\\_TO-AC-KNX-16-64\\_manual\\_esp.pdf](http://www.intesis.com/pdf/IntesisBox_TO-AC-KNX-16-64_manual_esp.pdf)

<http://www.intesis.com/down/eib/TO-AC-KNX.zip>

## Wall mount

Use the holes to fix the box in the wall using screws. Use the template below for the wall holes:

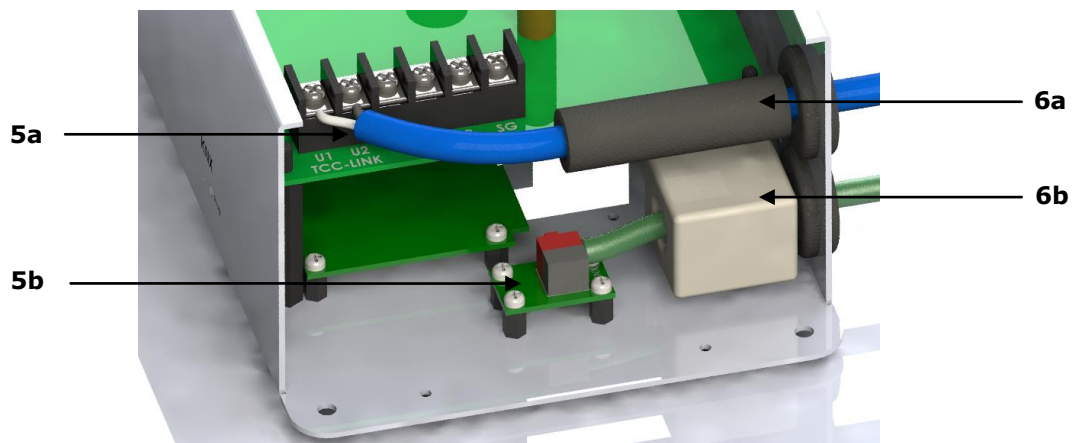
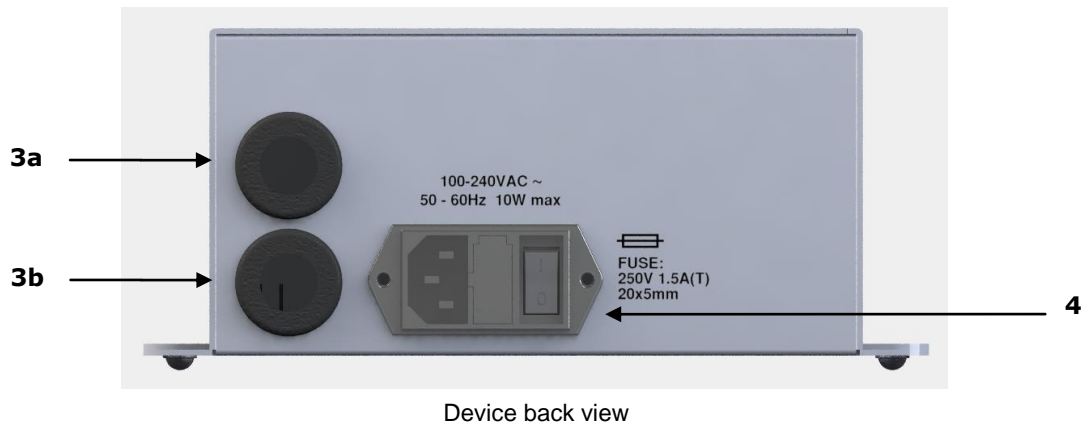


## Dimensions

External dimensions.



## Connections and indications



## Notes:

1. IntesisBox has different LED which indicate:
  - **Power LED:** On steady when device is powered.
  - **RS485 LED:** Blinking when there is activity in the EIA485 bus, this is when there is communication between the IntesisBox and the AC units.
  - **TCC-LINK LED:** Blinking when there is activity in the Toshiba bus, this is when there is communication with the AC units.
  - **ERROR LED:** On steady when there is a communication error.
  - **TEST LED:** Blinking when the gateway is on test mode.
2. IntesisBox has a programming button "Prog" and an associated LED for indication of KNX programming ongoing.
3. Connection slots for the **TCC-Link bus (3a)** and the **KNX bus (3b)**.
4. Mains power connection: 230VAC (see section Technical Characteristics). The device provides switch and a protection fuse. Use the supplied cable with IntesisBox (1,6m).
5. **TCC-Link connection:** Connect the TCC-Link bus coming from the Toshiba AC to the U1-U2 connector of IntesisBox. Respect the polarity, and consult your distributor for more details. **KNX connection:** Connect the KNX bus to the KNX connector of IntesisBox (C1). Respect the polarity.
6. Use the ferrites supplied with the device to protect the TCC bus (6a) and the KNX bus (6b) from electromagnetic interferences.

## Technical characteristics

Enclosure	Industrial sheet metal. Size: 217mm x 147mm x 90mm. Weight: 1.500 Kg
Color	Gray metalized.
Power	100 to 240VAC~ 50 to 60Hz 5W max. Power connector: C14 (male) <sup>1</sup>
Fuse	250V 1.5A Dimensions: 20x5mm
Terminal wiring (for low-voltage signals)	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.75mm <sup>2</sup> ... 1.25mm <sup>2</sup> 2 cores: 0.75mm <sup>2</sup> ... 1.25mm <sup>2</sup> 3 cores: not permitted
Mounting	Wall
KNX port	1 x KNX TP1 (EIB) opto-isolated (Plug-in screw terminal block 2 poles)
TCC-LINK port	1 x TCC-LINK connector (Plug-in screw terminal block 2 poles "U1" "U2"). SELV
LED indicators	5 x Toshiba Interface (POWER, RS485, TCC-LINK, ERROR, TEST) 1 x KNX port link and activity
Push buttons	1 x KNX programming button
Operational temperature range	0°C to +40°C
Operational humidity range	5% to 95%, non condensing
Protection	IP20 (IEC60529).
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Norms and standards	CE conformity to EMC directive (2004/108/EC) and Low-voltage directive (2006/95/EC)  EN 61000-6-2 EN 61000-6-3 EN 60950-1 EN 50491-3

<sup>1</sup> A power cable with connector C14 male 1.6 meters long is supplied with the device.