

Gateway for integration of Toshiba Air Conditioners with KNX control systems.

### 1. Main Features

- Direct connection to KNX TP-1 (EIB) bus.
- Direct connection to Toshiba indoor unit's TCC-Link connector.
- Configuration is made directly from ETS. The database of the device comes with a
  complete set of communication objects allowing, from a simple and quick integration
  using the basic objects, to the most advanced integration with monitoring and control of
  all the AC unit's parameters.
- Model available:
  - o Ref. TO-AC-KNX-16, supporting up to 16 indoor units.
  - Ref. TO-AC-KNX-64, supporting up to 64 indoor units.

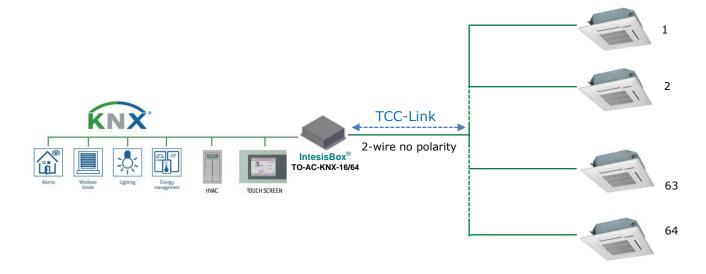


Figure 1.1 Typical System integration using the IntesisBox® KNX - Toshiba AC

# 2. Communication objects

The ETS database of the device comes with multiple communication objects allowing great flexibility of integration.

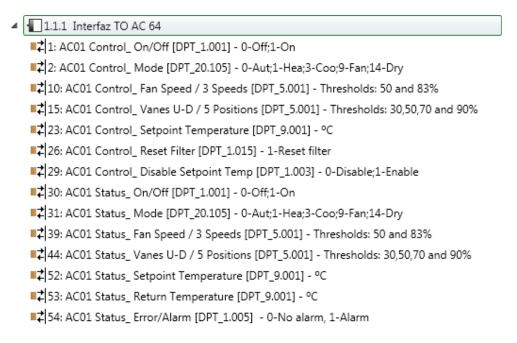


Figure 2.1 Communication objects example

#### 3. Parameters

Multiple parameters can be configured to ensure the maximum flexibility for the integration, not only in functionality of the device but in visibility of objects in ETS for a more comfortable integrator's work.

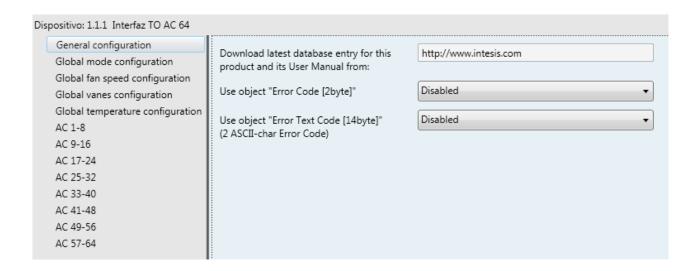


Figure 3.1 Parameters dialog

## 4. Technical features



Figure 4.1 IntesisBox® KNX – Toshiba AC perspective view

	Industrial sheet metal.
Enclosure	Size: 217mm x 147mm x 90mm.
	Weight: 2025gr
Color	Gray metalized.
Power	100 to 240VAC~
	50 to 60Hz
	5W max.
	Power connector: C14 (male) <sup>1</sup>
Fuse	250 V
	1.5A
	Dimensions: 20x5mm
	Per terminal: solid wires or stranded wires (twisted or with ferrule)
Terminal wiring (for	1 core: 0.75mm <sup>2</sup> 1.25mm <sup>2</sup>
low-voltage signals)	2 cores: 0.75mm <sup>2</sup> 1.25mm <sup>2</sup>
	3 cores: not permitted
Mounting	Wall (see Figure 5.2)
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 "A" "B"). 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 programmation button
Operational	0°C to +40°C
temperature range	
Operational humidity	5% to 95%, non condensing
range	
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

**Intesis** 

 $<sup>^{\</sup>rm I}$  A power cable with conector C14 male 1,6 meters long is supplied with the device.

## 5. Dimensions



Figure 5.1 External dimensions (mm) - Perspective view



Figure 5.2 Screw holes size and spacers (mm) – Top view