

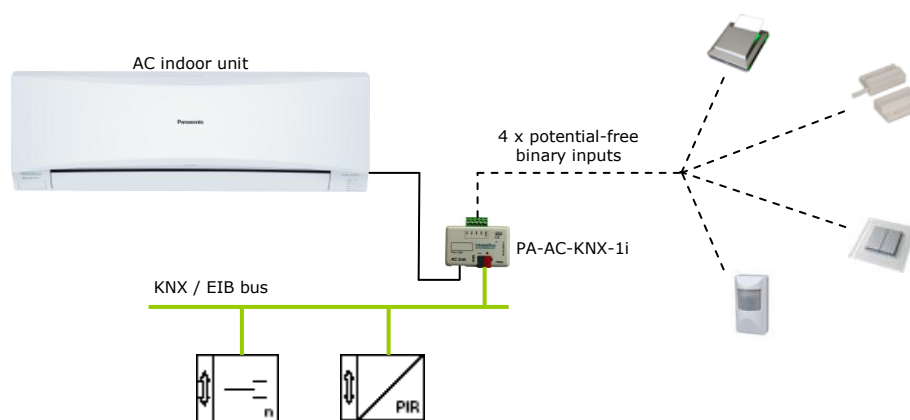


IntesisBox®

PA-AC-KNX-1i



Interface KNX for PANASONIC Air Conditioners (Etherea Line)



IntesisBox® PA-AC-KNX-1i allows monitoring and control, fully bi-directionally, all the functioning parameters of PANASONIC Air Conditioners from KNX installations. Compatible with all the models of the Etherea MKE line commercialised by PANASONIC.

Simple installation. Can be install inside the own AC indoor unit, it connects one side directly to the electronic circuit of the AC indoor unit (cable supplied), and in the other side directly to the KNX TP-1 (EIB) bus.

Great flexibility of integration into your KNX projects. 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 all the AC unit's parameters. Also available specific device's communication objects, as for example save and execute scenes.

Four potential-free binary inputs provide the possibility to integrate many types of external devices. Also configurable from ETS, they can be used for switching, dimming, shutter/blind control, and more.

Allows the use of a KNX temperature sensor for the air conditioning control.

IntesisBox® PA-AC-KNX-1i will allow you offering a full integration of the air conditioning in your KNX projects at a very affordable cost.

1. Communication objects

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

1.1.10 PA AC Interface	
0:	Control_ On/Off [1.001 - 1bit] - 0-Off;1-On
1:	Control_ Powerful [1.001 - 1bit] - 0-Off;1-On
2:	Control_ Quiet [1.001 - 1bit] - 0-Off;1-On
3:	Control_ Mode [20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
7:	Control_ Mode Auto [1.002 - 1bit] - 1-Set AUTO operating mode
8:	Control_ Mode Heat [1.002 - 1bit] - 1-Set HEAT operating mode
9:	Control_ Mode Cool [1.002 - 1bit] - 1-Set COOL operating mode
10:	Control_ Mode Fan [1.002 - 1bit] - 1-Set FAN operating mode
11:	Control_ Mode Dry [1.002 - 1bit] - 1-Set DRY operating mode
13:	Control_ Fan Speed / 5 Speeds [5.010 - 1byte] - Speed values 1,2,3,4,5
61:	Status_ On/Off [1.001 - 1bit] - 0-Off;1-On
62:	Status_ Powerful [1.001 - 1bit] - 0-Off;1-On
63:	Status_ Quiet [1.001 - 1bit] - 0-Off;1-On
64:	Status_ Mode [20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
66:	Status_ Mode Auto [1.002 - 1bit] - 1-AUTO is active
67:	Status_ Mode Heat [1.002 - 1bit] - 1-HEAT is active
68:	Status_ Mode Cool [1.002 - 1bit] - 1-COOL is active
69:	Status_ Mode Fan [1.002 - 1bit] - 1-FAN is active
70:	Status_ Mode Dry [1.002 - 1bit] - 1-DRY is active
71:	Status_ Mode Text [16.001 - 14byte] - ascii string
109:	Status_ Input 1 - Switching [DPT_1.001 - 1bit] - 0-Off;1-On

2. 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.

Device: 1.1.1 PA AC Interface

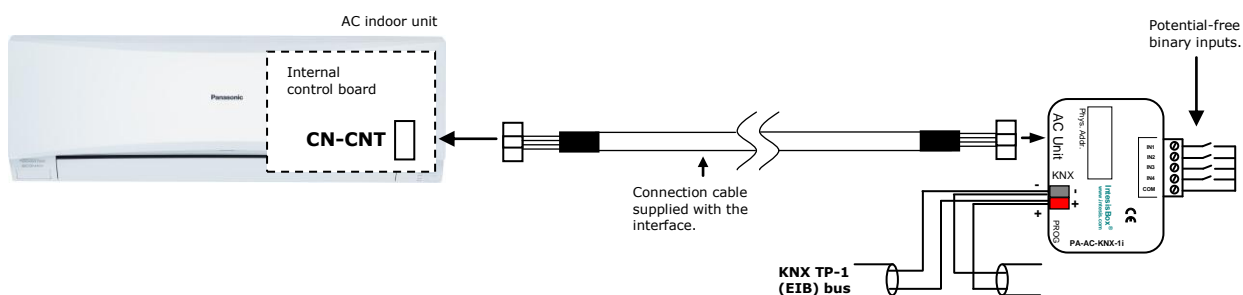
General		
Mode Configuration	Download latest database entry for this product and its User Manual from:	<input type="text" value="http://www.intesis.com"/>
Special Modes Configuration	Send READs for Control_ objects on bus recovery (T and U flags must be active)	<input type="text" value="No"/>
Fan Speed Configuration	Scene to load on bus recovery / startup (needs to define vals for that scene)	<input type="text" value="(none)"/>
Vanes Up-Down Configuration	Disallow control from remote controller	<input type="text" value="No"/>
Vanes Left-Right Configuration	> Enable comm obj "Ctrl_ Remote Lock"	<input type="text" value="No"/>
Temperature Configuration	Enable func "Control_ Lock Control Obj"	<input type="text" value="No"/>
Scene Configuration	Enable func "Operating Hours Counter"	<input type="text" value="No"/>
Switch-Off Timeouts Configuration	Enable object "Error Code [2byte]"	<input type="text" value="No"/>
Binary Input 1 Configuration	Enable object "Error Text Code [14byte]" (3 ASCII-char Error Code)	<input type="text" value="Yes"/>
Binary Input 2 Configuration		
Binary Input 3 Configuration		
Binary Input 4 Configuration		

3. Connections

Connection of the interface to the AC indoor unit is by means of the cable supplied with the interface which must be connected to the interface in one side (connector AC unit), and to the internal electronic board of the Air Conditioner in the other side (connector **CN-CNT** in Etherea line units).

Connection of the interface to the KNX bus is by means of the standard KNX bus connector also supplied with the interface.

Connections diagram:



4. AC Unit Types compatibility.

A list of Panasonic indoor unit model references compatible with PA-AC-KNX-1i and their available features can be found in:

http://www.intesis.com/pdf/IntesisBox_PA-AC-xxx-1_AC_Compatibility.pdf

5. Technical Specifications

Envelope	ABS (UL 94 HB). 2,5 mm thickness
Dimensions	59 x 45 x 21 mm
Weight	35g
Colour	Light Grey
Power supply	29V DC, 7mA Supplied through KNX bus.
LED indicators	1 x KNX programming.
Push buttons	1 x KNX programming.
Binary inputs	4 x Potential-free binary inputs. Signal cable length: 5m unshielded, may be extended up to 20m with twisted. Compliant with the following standards: IEC61000-4-2 : level 4 - 15kV (air discharge) - 8kV (contact discharge) MIL STD 883E-Method 3015-7 : class3B
Configuration	Configuration with ETS.
Operating Temperature	From -25°C to 85°C
Storage Temperature	From -40°C to 85°C
Isolation Voltage	4000V
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	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; EN 50090-2-2; EN 50428; EN 60669-1; EN 60669-2-1

