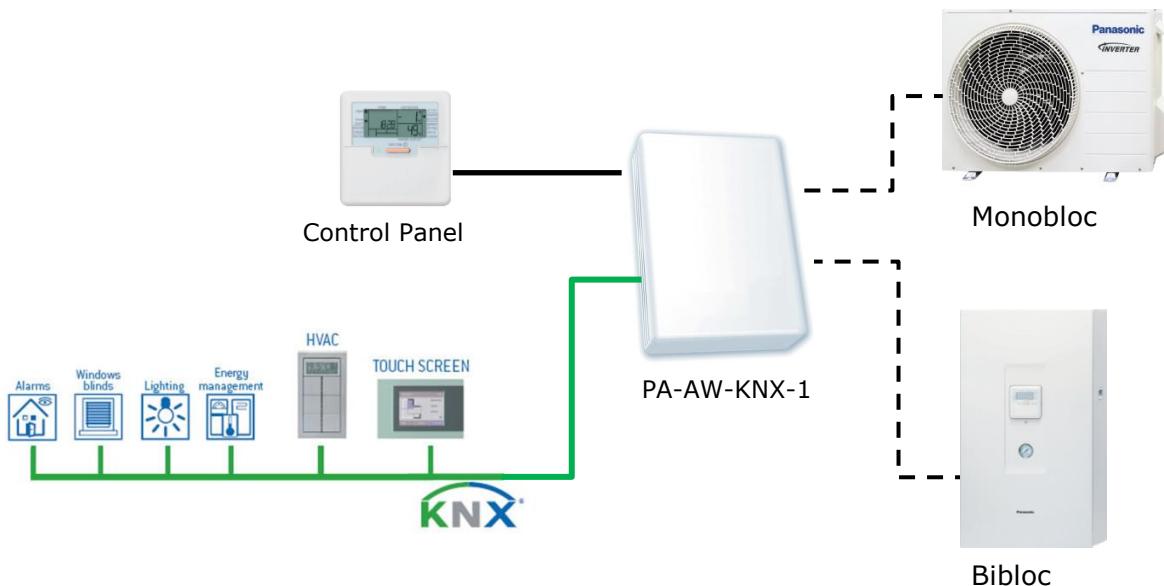


# IntesisBox®

## PA-AW-KNX-1

### KNX Interface for PANASONIC Air-to-Water Systems (Aquarea Line)



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

Simple installation. It connects one side directly to the electronic circuit of the AW system and to the remote controller. On the other side, it connects 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.

IntesisBox® PA-AW-KNX-1 will allow you offering a full integration of the air to water system 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.

PA AW interface	
0: Control_On/Off [DPT_1.001]	- 0-Off;1-On
1: Control_Quiet [DPT_1.001]	- 0-Off;1-On
2: Control_Mode Heat [DPT_1.002]	- 1-Set/0-Clear HEAT Mode
8: Control_Outd. temp for Low water temp [DPT_9.001]	- °C
9: Control_Outd. temp for High water temp [DPT_9.001]	- °C
10: Control_Water temp at Low outd. temp [DPT_9.001]	- °C
11: Control_Water temp at High outd. temp [DPT_9.001]	- °C
12: Control_Water Current Thermoshift [DPT_9.001]	- °C
13: Control_Reset Comp Operating Hours [DPT_1.015]	- 1-Reset
14: Control_Reset Current Error [DPT_1.015]	- 1-Reset
15: Control_Reset Error History [DPT_1.015]	- 1-Reset
16: Control_Back to Factory Settings [DPT_1.015]	- 1-Reset
17: Status_On/Off [DPT_1.001]	- 0-Off;1-On
18: Status_Quiet [DPT_1.001]	- 0-Off;1-On
19: Status_Mode Heat [DPT_1.002]	- 1-Mode in HEAT
22: Status_Heating Setpoint Temperature [DPT_9.001]	- °C
30: Status_Outlet Water Temp [DPT_9.001]	- °C
31: Status_Inlet Water Temp [DPT_9.001]	- °C
32: Status_Outdoor Temperature [DPT_9.001]	- °C
33: Status_Outd. temp for Low water temp [DPT_9.001]	- °C
34: Status_Outd. temp for High water temp [DPT_9.001]	- °C
35: Status_Water temp at Low outd. temp [DPT_9.001]	- °C
36: Status_Water temp at High outd. temp [DPT_9.001]	- °C
37: Status_Water Current Thermoshift [DPT_9.001]	- °C
38: Status_Compressor Frequency [DPT_14.033]	- Hz
39: Status_Compressor Operating Hours [DPT_7.007]	- h
40: Status_Error/Alarm [DPT_1.005]	- 0-No alarm;1-Alarm
41: Status_Current Error Code [2byte]	- 0-No error/Any other see man.
42: Status_Current Error Code Text [DPT_16.001]	- 3-char PA Error;Empty=None
43: Status_Error Code History [2byte]	- 0-No error/Any other see man.
44: Status_Error Code History Text [DPT_16.001]	- 3-char PA Error;Empty=None

## 2. Parameters

Different 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.

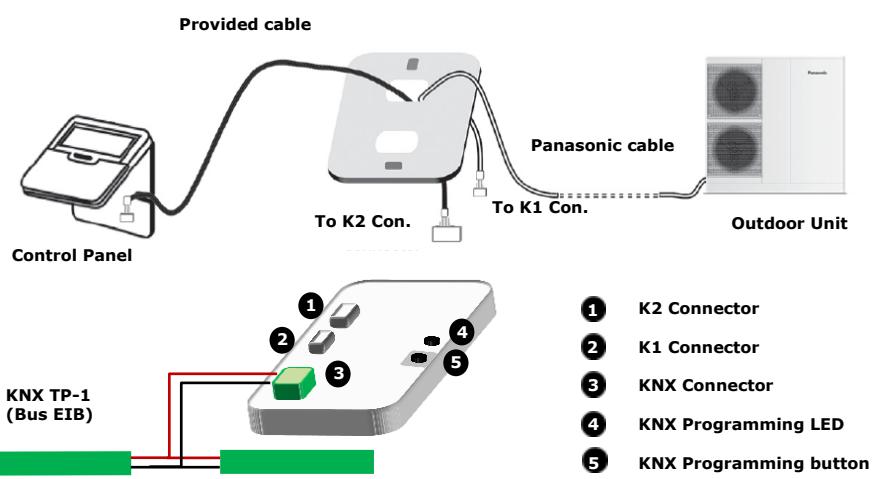
Device: --- PA AW interface	
Configuration	Download latest database entry for this product and its User Manual from: <a href="http://www.intesis.com">http://www.intesis.com</a>
	AW system has COOL mode
	<input type="text" value="No"/>
	AW system has TANK
	<input type="text" value="No"/>
	AW system has SOLAR PANEL
	<input type="text" value="No"/>

### 3. Connections

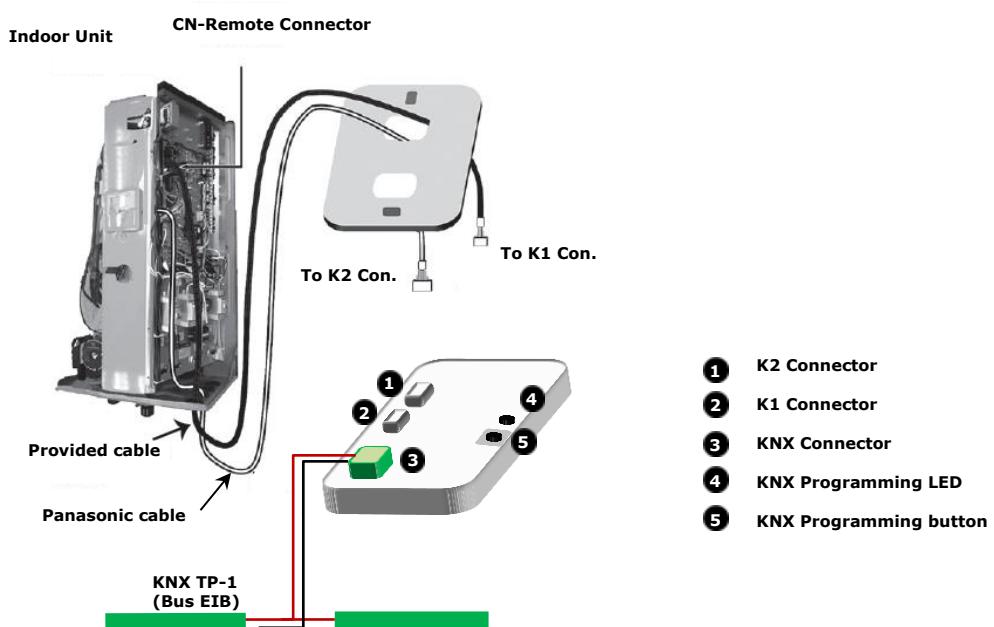
Connection of the interface to the Aquarea system may vary depending on the different available models. Below you will find a sketch for the Monobloc system and after that an example for the Bibloc system.

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

Connections diagram for Aquarea Monobloc systems:



Connections diagram for Aquarea Bibloc systems:



## 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-AW-xxx-1\\_AW\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_PA-AW-xxx-1_AW_Compatibility.pdf)

## 5. Technical Specifications

<b>Enclosure</b>	ABS (UL 94 HB) de 2,5 mm thick
<b>Dimensions</b>	100 X 70 X 28 mm
<b>Weight</b>	70g
<b>Color</b>	Ivory White
<b>Power supply</b>	Power is supplied by: 1.- Aquarea bus 2.- KNX bus (29V DC, 6mA)
<b>Terminal wiring (for power supply and low-voltage signals)</b>	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5mm <sup>2</sup> ... 2.5mm <sup>2</sup> 2 cores: 0.5mm <sup>2</sup> ... 1.5mm <sup>2</sup> 3 cores: not permitted
<b>KNX port</b>	1 x KNX TP1 (EIB) port opto-isolated. Plug-in terminal block (2 poles). TNV-1
<b>AW connection</b>	K1 (Aquarea unit) (4 x 0.22 - Shielded) K2 (Remote controller) (4 x 0.22 - Shielded)
<b>LED indicators</b>	1 x KNX programming.
<b>Push buttons</b>	1 x KNX programming.
<b>Configuration</b>	Configuration with ETS.
<b>Op. Temperature</b>	From 0°C to 40°C
<b>Storage Temperature</b>	From 0°C to 40°C
<b>Operating Humidity</b>	25-90% at 50°C, non-condensing
<b>RoHS conformity</b>	Compliant with RoHS directive (2002/95/CE).
<b>Certifications</b>	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;

