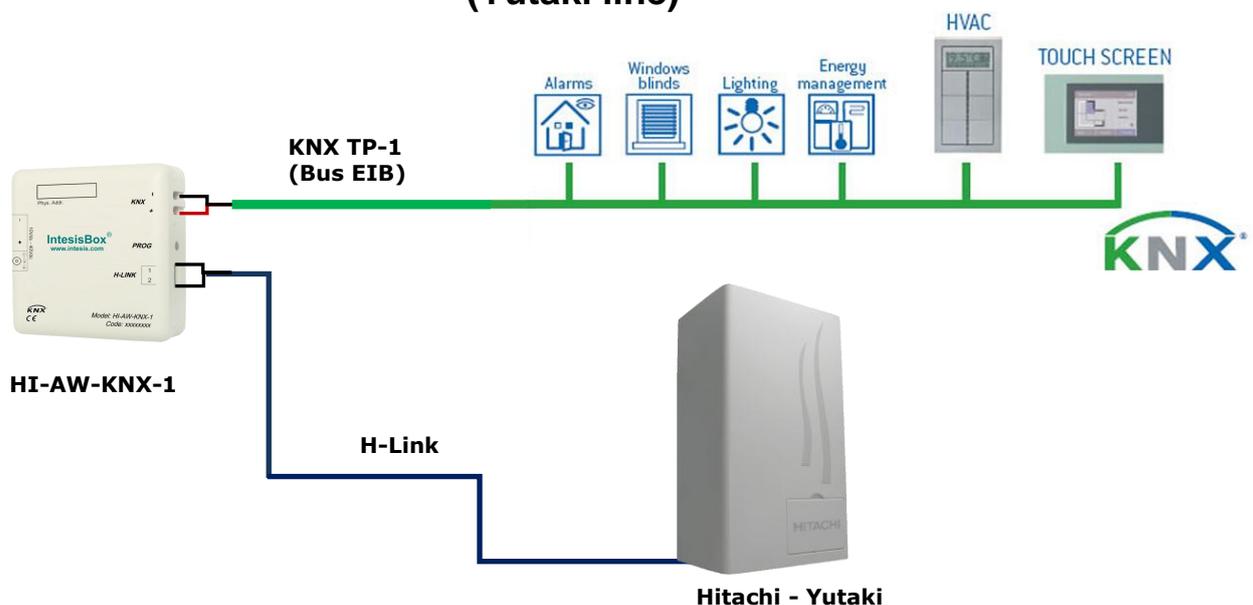




IntesisBox®

HI-AW-KNX-1

Interface KNX for Hitachi Air-to-Water (Yutaki line)



IntesisBox® HI-AW-KNX-1 allows fully bidirectional monitoring and control of the Hitachi Air-to-Water systems from KNX installations. The interface is compatible with all the models of the Yutaki line commercialised by Hitachi.

Simple installation. The interface can be installed inside the AW indoor unit itself. It connects one side directly to the H-Link of the Hitachi AW unit 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 AW unit's parameters. Also available specific device's communication objects as for example save and execute scenes.

IntesisBox® HI-AW-KNX-1 allows you 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.

| -.- HI AW Interface | |
|---------------------|---|
| 0: | Control_ Unit Run/Stop [DPT_1.010] - 0-Stop;1-Run |
| 1: | Control_ Unit Mode [DPT_1.100] - 0-Cool;1-Heat |
| 2: | Control_ C1 Run/Stop [DPT_1.010] - 0-Stop;1-Run |
| 10: | Control_ C1 Thermo Setpoint [DPT_9.001] - °C |
| 11: | Control_ C1 Ambient Temp [DPT_9.001] - °C |
| 30: | Control_ AntiLeg Run/Stop [DPT_1.010] - 0-Stop;1-Run |
| 31: | Control_ AntiLeg Setpoint [DPT_9.001] - °C |
| 32: | Control_ KNX Blocks/Enables Menu [DPT_1.003] - 0-Enable;1-Block |
| 33: | Control_ KNX Alarm Bit [DPT_1.005] - 0-No alarm;1-Alarm |
| 34: | Status_ Unit Mode [DPT_1.100] - 0-Cool;1-Heat |
| 35: | Status_ C1 Run/Stop [DPT_1.010] - 0-Stop;1-Run |
| 43: | Status_ C1 Thermo Setpoint [DPT_9.001] - °C |
| 45: | Status_ C1 Ambient Temp [DPT_9.001] - °C |
| 69: | Status_ AntiLeg Run/Stop [DPT_1.010] - 0-Stop;1-Run |
| 70: | Status_ AntiLeg Setpoint [DPT_9.001] - °C |
| 71: | Status_ KNX Blocks/Enables Menu [DPT_1.003] - 0-Enable;1-Block |
| 72: | Status_ KNX Alarm Bit [DPT_1.005] - 0-No alarm;1-Alarm |
| 73: | Status_ Error/Alarm [DPT_1.005] - 0-No alarm;1-Alarm |
| 74: | Status_ Error Code [2byte] - 0-No error/Any other see man. |

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: -.- HI AW Interface

Settings

| | |
|---|---|
| Download latest database entry for this product and its User Manual from: | <input type="text" value="http://www.intesis.com"/> |
| System working mode: | <input type="text" value="Full"/> |
| 2nd circuit (C2) is available | <input type="text" value="No"/> |
| DHW is available (Domestic Hot Water) | <input type="text" value="No"/> |
| Swimming pool is available | <input type="text" value="No"/> |
| Enable use of extra information objects (for status) | <input type="text" value="No"/> |

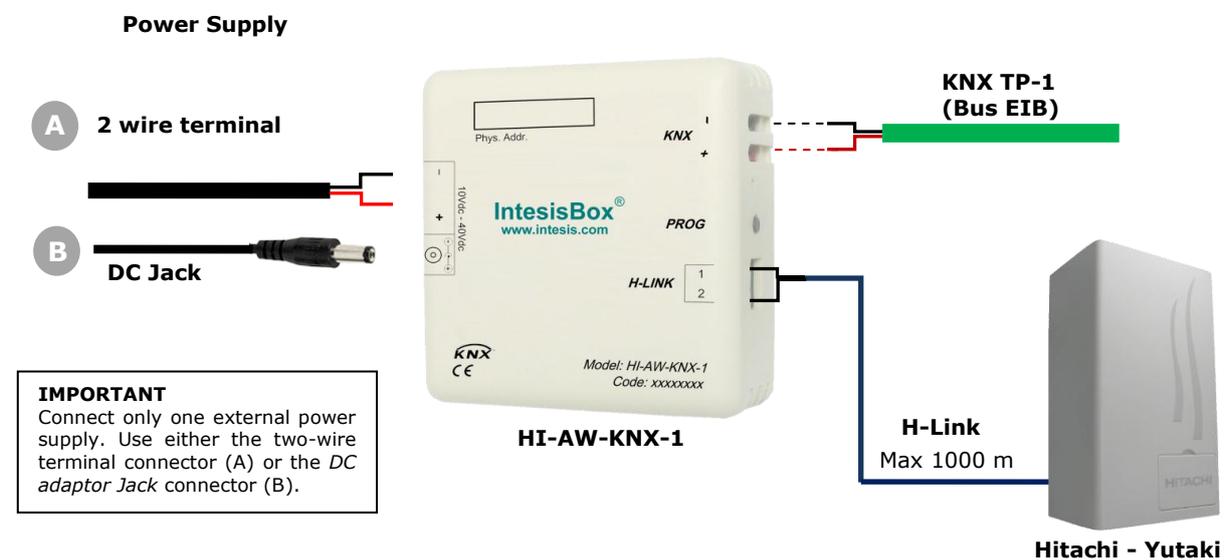
3. Connections

Connection of the interface to the AW indoor unit is by means of the cable supplied with the indoor unit to connect the remote controller. It must be connected to the interface in one side (connector H-Link) and to the internal electronic board of the Air-to-Water indoor unit in the other side.

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

In order to plug the interface to the external power supply, two different methods are available. First one is using the external power supply provided with the interface using the DC JACK connector

Connections diagram:



4. AC Unit Types compatibility.

A list of Hitachi unit model references compatible with HI-AW-KNX-1 and their available features can be found in:

http://www.intesis.com/pdf/IntesisBox_HI-AW-xxx-1_AC_Compatibility.pdf

5. Technical Specifications

| | |
|---|--|
| Enclosure | ABS (UL 94 HB) de 2,5 mm thick |
| Dimensions | 70 X 70 X 28 mm |
| Weight | 70g |
| Color | Ivory White |
| Power supply | 29V DC, 6mA (KNX bus) |
| External Power Supply | 10-40V DC, 100mA (Recommended: 12V DC, 100 mA) Must use a NEC Class 2 or Limited Power Source (LPS) and SELV rated power supply. Plug-in terminal block for power connection (2 poles). |
| Terminal wiring (for power supply and low-voltage signals) | Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5mm ² ... 2.5mm ² 2 cores: 0.5mm ² ... 1.5mm ² 3 cores: not permitted |
| KNX port | 1 x KNX TP1 (EIB) port opto-isolated. Plug-in terminal block (2 poles). TNV-1 |
| H-Link port | Plug-in terminal block for H-Link bus connection (2 poles) with no polarity. |
| LED indicators | 1 x KNX programming. |
| Push buttons | 1 x KNX programming. |
| Configuration | Configuration with ETS. |
| Operating Temperature | From 0°C to 40°C |
| Storage Temperature | From 0°C to 40°C |
| Operating Humidity | 25-90% at 50°C, non condensing |
| Isolation voltage | External Power Supply – KNX: 2500V External Power Supply – H-Link: 1500V |
| 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 |

External Power Supply connection

