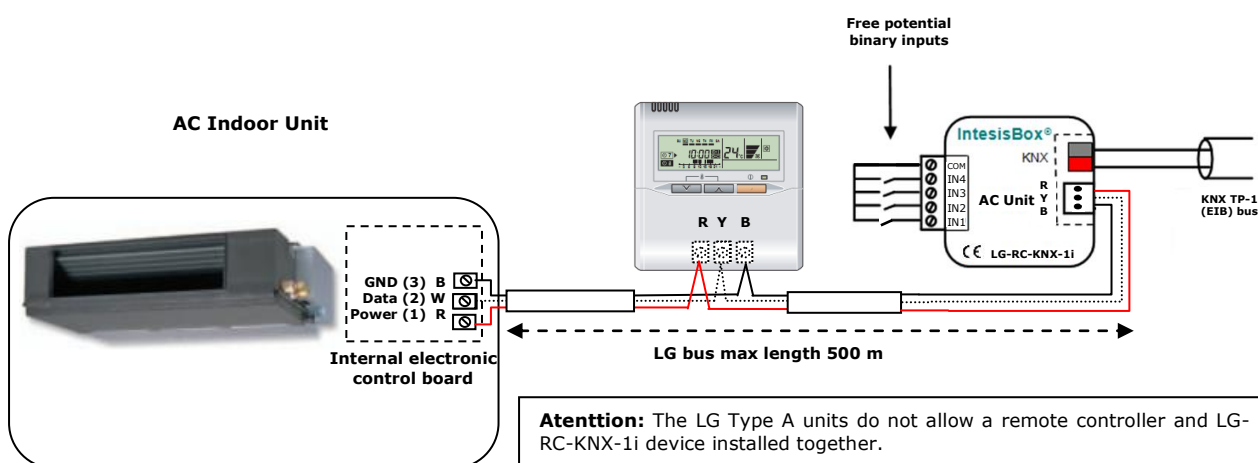




IntesisBox® LG-RC-KNX-1i

KNX interface for LG Air Conditioners VRF line



IntesisBox® LG-RC-KNX-1i allows monitoring and control, fully bi-directionally, all the functioning parameters of LG Air Conditioners from KNX installations. Compatible with VRF models commercialized by LG (see link to compatible models at the end of this document).

Small dimensions and easy installation. It can be connected directly to the LG bus from the AC indoor unit or in parallel with the wired Remote Controller, and in the other side it connects directly to the KNX TP-1 (EIB) bus. The maximum bus distance between the AC Indoor Unit, the Remote Controller and the Interface is 500 meters (see *Connections* section).

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 communication objects as for example save and execute scenes. Also allows the use of a KNX temperature sensor for the air conditioning control.

Four binary inputs for potential-free contacts 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.

IntesisBox® LG-RC-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.

- 1.1.1 LG RC interface, 4 binary inputs
 - 0: Control_On/Off [DPT_1.001 - 1bit] - 0-Off;1-On
 - 1: Control_Mode [DPT_20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
 - 11: Control_Fan Speed / 4 Speeds [DPT_5.001 - 1byte] - Thresholds: 38, 63 and 88%
 - 22: Control_Setpoint Temp [DPT_9.001 - 2byte] - °C
 - 50: Status_On/Off [DPT_1.001 - 1bit] - 0-Off;1-On
 - 51: Status_Mode [DPT_20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
 - 59: Status_Fan Speed / 4 Speeds [DPT_5.001 - 1byte] - 25, 50, 75 and 100%
 - 70: Status_AC Setpoint Temp [DPT_9.001 - 2byte] - °C
 - 71: Status_AC Ambient Ref Temp [DPT_9.001 - 2byte] - °C
 - 72: Status_Error/Alarm [DPT_1.005 - 1bit] - 0-No alarm;1-Alarm
 - 74: Status_Error Text Code [DPT_16.001 - 14byte] - 2-char LG Error; Empty-None

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 LG RC interface, 4 binary inputs

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

3. List of compatible AC indoor units.

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

http://intesis.com/pdf/IntesisBox_LG-RC-xxx-1_AC_Compatibility.pdf

4. Technical Specifications

Envelope	ABS (UL 94 HB). 2,5 mm thickness
Dimensions	70 x 70 x 28 mm
Weight	70g
Colour	Ivory white
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 binary inputs for potential-free contacts. 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	2500V
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 61000-6-1; EN 61000-6-3; EN 60950-1; EN 50491-3; EN 50090-2-2; EN 50428; EN 60669-1; EN 60669-2-1

