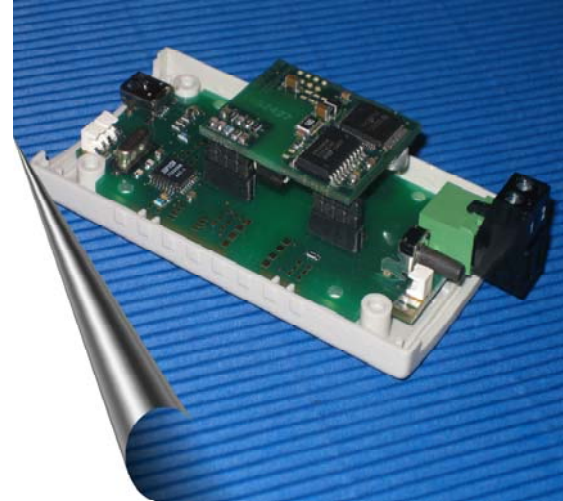


# SIM – KNX

## Evaluation board

Quick start with SIM - KNX



## Evaluation board

Our evaluation board for the SIM – KNX module is intended for getting started fast and easy with our SIM – KNX module.

It provides all components necessary to directly connect to the EIB/KNX bus and a PC.

The evaluation board comes in two different editions:

- either with USB interface
- or with standard RS232 interface

With this option a PC or standard industrial controller may be connected. The SIM-KNX evaluation board gives you the possibility to make fast reliable solutions in connecting any controller, CPU or PC to the EIB/KNX bus and decide later if an integration of the SIM – KNX module into your device is desired. Anyway, you will know how your device performs on the EIB/KNX bus in almost no time.

## EMC

The SIM – KNX module fulfils the following EMC requirements:

KONNEX Standard: Volume 4; Part 2: 2002, EN 50090-2-2:1966 + Corrigendum 1997, EN 55022:1998 +A1:2000 +A2:2003, EN 55022:1998 +A1:2000 +A2:2003, EN 61000-3-2: 2000, EN 61000-3-3: 1995 +A1: 2001, EN 50090-2-2: 1996 + Corrigendum 1997, EN 61000-4-2: 1995 +A1:1998 + A2:2001, EN 61000-4-3: 2002 +A1:2002, EN 61000-4-4: 1995 +A1:2001 +A2:2001, EN 61000-4-5: 1995 +A1:2001, EN 61000-4-6: 1996 +A1:2001, EN 61000-4-8: 1993 EN 61000-4-11: 1994

It is thus fully compliant with the EMC requirements for CE marking.

## Benefits

One benefit of the SIM – KNX solution is:

- no need for any cost intensive investment into training
- no need for new development tools
- fast results with immediate testing functionality

## Use as easy as one - two – three...

The following example shows the usage of the SIM – KNX module.

Adding a sending group address (0/0/1) to the object 0:

*ogs(0) \$0001*

Sending temperature of 21°C through the first communication object ( datapoint):  
The value itself is coded in 1/100 [°C].

*ovs(0) 2100*

The two lines above (in italics) may be sent with a simple terminal program.

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**TAPKO**  
TECHNOLOGIES GMBH

## Technical Informations

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### Application Interface

- serial asynchronous interface
- 3V to 5V interface
- 3- wire interface
- ASCII protocol
- Configurable baud rate and transmission parameter
- Access to KNX group communication objects (runtime communication)
- Access to KNX interface objects (configuration)
- Configurable indication when group communication value was received

### KNX features (general)

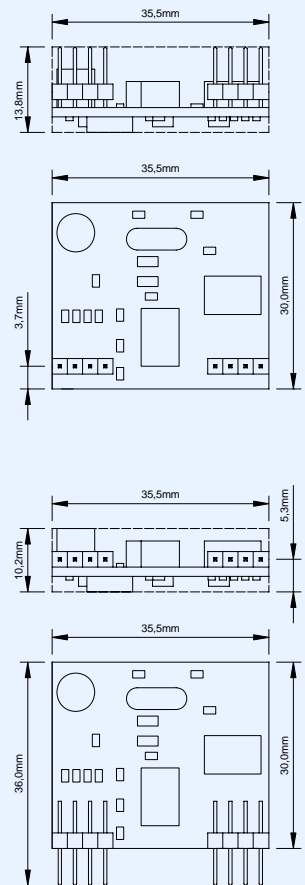
- device model 0701
- mechanism for configuration via KNX integrated
- read requests from KNX serviced internally in the module
- Two different numbers of group objects: 128 or 252

### KNX group communication objects (raw mode)

- transparent transmission of the group communication object data
- data conversion not active
- telegram generation triggered via serial interface
- configuration via serial interface

### KNX group communication objects (interoperability mode)

- support of KNX data types (EIS / DPT)
- data conversion for group object values (e.g. temperature -> EIS5)
- configurable send conditions for all group communication objects
- configuration via ETS database entry or serial interface
- indication when data received, value changed, positive/negative edges (EIS 1)
- cyclic (time configurable between 3 to 255 sec, 3 to 255 minutes)
- advanced transmit conditions
  - send on value difference
  - receive timeout on received telegrams
  - integrated threshold switch
  - triggers another group communication object when threshold value was passed



Distribution:

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