



Data sheet

KNX BAOS Module 840 RF

Serial Interface and ObjectServer for KNX RF



(Art. # 5209)

Application area

KNX BAOS Module RF 840 serves as a serial interface to wireless communication system KNX RF. It supports S Mode commissioning using ETS® Software.

BAOS stands for "Bus Access and Object Server". So the module allows the access to the KNX RF medium on telegram level (KNX Link Layer) as well as on data point level (KNX Application Layer). The connection between application and KNX BAOS Module is established via a UART connection with FT1.2 framing.

The module can be used to easily develop KNX RF devices (e.g. sensor, actuator or gateway) with low investment. It is also an option to add KNX RF connectivity to existing devices with limited development effort.

For a quick start a generic ETS entry with 1000 group objects is available. Individual ETS entries can be created as well.

Technical Specification

Electrical safety

Safety extra low voltage SELV 3.3 V--

Compliant with

- Low voltage directive 2014 / 35 / EU
- EMC directive 2014 / 30 / EU
- Radio equipment directive 2014 / 53 / EU
- RoHS directive 2011 / 65 / EU
- EN 63000: 2018

Environmental requirements

- Ambient temp. operating: 5 ... + 45 °C
- Ambient temp. non-op.: 25 ... + 70 °C
- Rel. humidity (non-condensing): 5 ... 93 %

Mechanical data

- Dimensions (L x W): 29 x 25 mm
- Height: 2 mm (without Pins), Board: 1 mm
- Weight: approx. 3 g

KNX

- Certified KNX Stack (System B)
- Support for KNX long frames
- Up to 1000 group objects
- Up to 70 kByte parameter space
- Generic ETS entry available with 1000 group objects and 250 parameter bytes

Power supply

■ External supply 3.3 V=, 25 mA

Host Interface

- UART (interface voltage 3.3 V)
- Baud rate 19.2/115 kBit/s, 8e1
- Serial frame format FT1.2
- KNX telegram format: common EMI (cEMI)
- Object server protocol: BAOS V2

RF Interface

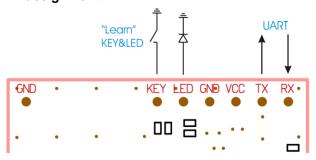
- KNX RF, ISM Band 868.3 MHz, FSK
- Max output power <10 dBm
- Sensitivity <-80 dBm
- Antenna: Not installed, whip antenna mountable; for antenna matching please contact Weinzierl

Documentation and Source Code

The complete KNX BAOS Starter Kit including documentation, ETS entries, source code of the demo application and Net'n Node Tool can be found on our BAOS download page at:

http://www.weinzierl.de

PIN assignment



- LED for KNX programming mode
- Key for KNX programming mode
- Host interface GND
- Host interface VCC
- Host interface UART TX (to host)
- Host interface UART RX (from host)

KNX

ETS6 Datenbank

www.weinzierl.de/de/products/840/ets6

WEINZIERL ENGINEERING GmbH

84508 Burgkirchen an der Alz GERMANY

Tel.: +49 8677 / 916 36 – 0 E-Mail: info@weinzierl.de Web: www.weinzierl.de