

thermokon®

HOME OF SENSOR TECHNOLOGY



EasySens®

THE SELF-POWERED INTELLIGENT WIRELESS SYSTEM



» Realisation of flexible and individual building automation for new buildings and retrofit projects

EasySens®

The Self-Powered, Intelligent Wireless System



ADVANTAGES

- Cost savings due to Energy Harvesting:
Producing energy from the sensor environment
- Flexibility with sensor location – quick and easy mounting and commissioning
- Reduction of fire load – no need for wires
- Easy integration into existing buildings – no wiring
- High-end designs and direct mounting to all surfaces
- Compatibility to other manufacturers:
International Standard (IEC 14543-3-10)

■ Discover **EasySens®** online!
www.thermokon.com/highlights/easysens



SYSTEM OVERVIEW



TRANSMITTERS

RECEIVERS (GATEWAYS AND ACTUATORS)



TOOLBOX

INTEROPERABLE SYSTEM INTEGRATION



EasySens®

The Self-Powered, Intelligent Wireless System



SELF-POWERED.

Thanks to the Energy Harvesting technology EasySens® enables a self-powered operation of products.

The necessary energy is harvested from the sensor environment by:

- Integrated solar cells
- Kinetic energy

INTELLIGENT.

EasySens® transmitters and receivers communicate autonomously.

- Device status can be synchronised periodically or through parameter configuration
- Bidirectional communication of self-powered devices using SmartACKNOWLEDGE))) Smart**ACK**

EnOcean ALLIANCE



In spring 2008, leading companies of the building technology industry formed the EnOcean Alliance.

As a founder member, Thermokon is able to keep up with the latest trends and developments with battery-less RF technology and to develop new and innovative products.

WIRELESS SYSTEM.

Thanks to EasySens® variable room layouts, reconstructions during running hotel operation or renovations in heritage-protected buildings are no challenges any more.

- No time-consuming installation – no wiring
- Low material costs enabling cost-effective system solutions

Examples



ROOM OPERATING UNITS
For temperature/humidity detection and integrated operation of HVAC, lighting and blinds.



AIR QUALITY
For measuring room CO2 levels. Available with traffic light indication and LCD.



HUMIDITY
For measurement of rel. humidity in rooms, ducts and outdoor areas. Also available with a combined temperature sensor.



TEMPERATURE
Temperature sensors for various applications in buildings (e.g. in rooms or heating, refrigeration and air conditioning systems).



LIGHT & MOTION
For detection of light and motion in rooms (ceiling or wall mounting) or in outdoor areas.



Examples



SWITCHES
For control of lights and blinds. Available in switch programmes of different manufacturers.



WINDOW/DOOR CONTACTS
For status monitoring of windows and doors.



GATEWAYS
E.g. bidirectional gateways with various protocol interfaces (BACnet, KNX, LON, RS485 Modbus...)



ACTUATORS
Flush-mounted actuators for different applications.



VALVE ACTUATORS
Heating valve actuators for bidirectional communication.

» Parameterisation without direct interaction of the corresponding EasySens® device (Remote Commissioning)


COMMISSIONING MADE EASY!



airConfig

airConfig uses EnOcean based RF telegrams to configure devices using special remote commissioning commands.

The airScan USB transceivers and the airConfig software tool allow communication and integration to other devices and networks.

ADVANTAGES

- Seamless learning-in and easy configuration (via RF)
- Saving of all configuration parameters
- Selectable configuration parameters such as telegram wake-up cycles, operating measuring ranges or control of inputs/outputs
- Clearly structured and centralised system information a one glance
- User-friendly maintenance and support

■ Discover **airConfig** online!
www.thermokon.com/highlights/airconfig



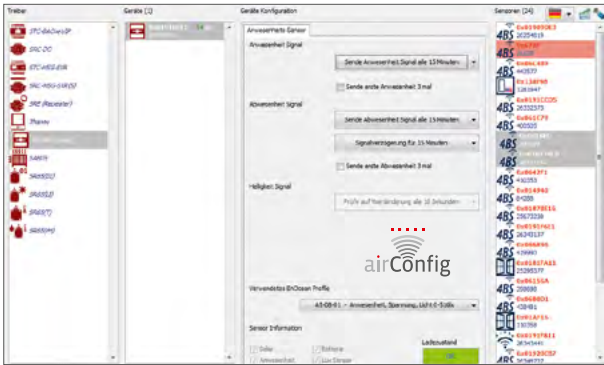


airConfig – Installation and Configuration

- Configuration of transmitted measured variables (EEP) and sensor parameters
- Learning-in of sensors by Drag & Drop via RF (Remote Management)
- Time saving (copy & paste configuration)
- Remote access to product and project information
- Selectable operating measuring ranges and individual naming of sensors
- Identification function via visual and acoustic feedback of selected sensors
- Possibility of parameterisation (timer, intervals, telegram repetition)

airConfig – Flexibility and Safety

- Change of product functions, ideal for inaccessible product installations
- Products using the device IDs
- On-site specification changes (changes of parameters) or via remote configuration
- Password protected configuration



Parameterisation of devices via Remote Commissioning



» Field strength measuring instrument for easy planning and realisation of EasySens® projects

airScan
MEASURING AND MONITORING



airScan

The airScan software is an EnOcean signal strength tool that helps to evaluate field strengths on site and monitors the local EnOcean radio traffic.

All telegrams transmitted (received) are clearly listed and can be easily attributed to the transmitting products. The strength of the signal gets highlighted by a traffic light indication (RSSI).

ADVANTAGES

- Range planning and determination of optimal mounting position of transmitters and receivers
- Monitoring function for easy evaluation of RF telegrams
- Data export for further processing/analysis in CSV, XML or XLS data formats
- Logging, repeater function, remote control
- Generation and transmission of EnOcean telegrams
- Status survey of product ID, field strength and manufacturer of integrated products
- Support of EEP 2.6.3-Standard

Discover **airScan** online!
www.thermokon.com/highlights/airscan





airScan – Generating Telegrams

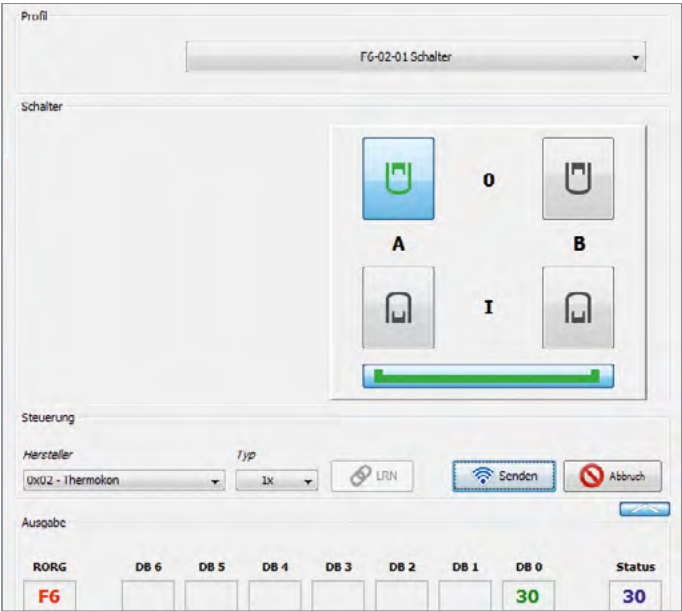
- Using the configurator the user can take all EnOcean profiles from a predefined EEP selection
- airScan telegrams can be easily generated and transmitted immediately

airScan – Visual Display

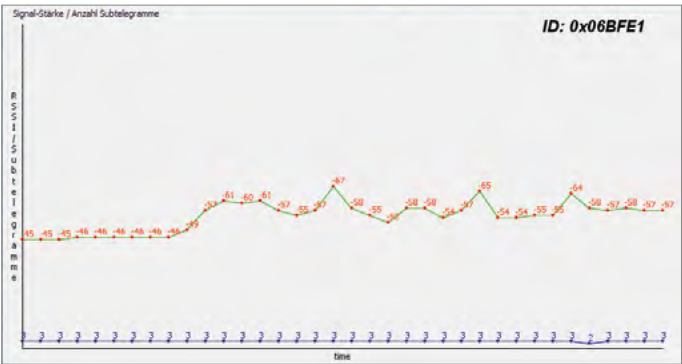
- Translation of all measured values
- Coloured symbols (traffic light system) or graphs indicate the signal quality or RSSI values of a telegram received

airScan – Professional Evaluation

- Telegrams can be evaluated in detail (data bytes, RSSI values, sub telegrams etc.)
- Decoding of the measured value
- airScan saves all telegrams received
- Automatic data recording to a FTP server or to an e-mail account and the possibility to export the data for evaluation



The content of a telegram can be defined via configurator



airScan shows the signal strength in chronological sequence



airScan illustrates signals in different presentations





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