

# 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](http://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**

## 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

## 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.



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](http://www.thermokon.com/highlights/airconfig)





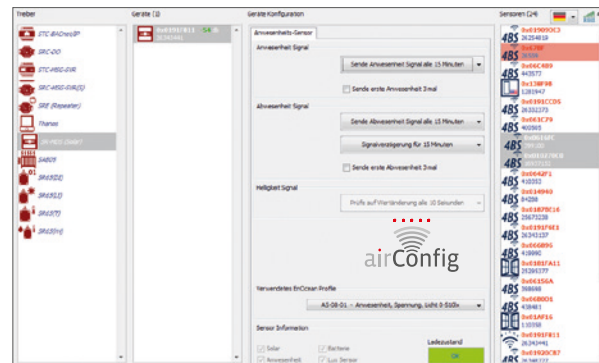


**airConfig – Installation and Configuration**

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

**airConfig – Flexibility and Safety**

- » Change of product functions, ideal for inaccessible product installations
- » On-site specification changes (changes of parameters) or via remote configuration
- » Products using the device IDs
- » 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 values are a great help to determine proper mounting positions for devices.

## 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](http://www.thermokon.com/highlights/airscan)







**airScan – Generation of Telegrams**

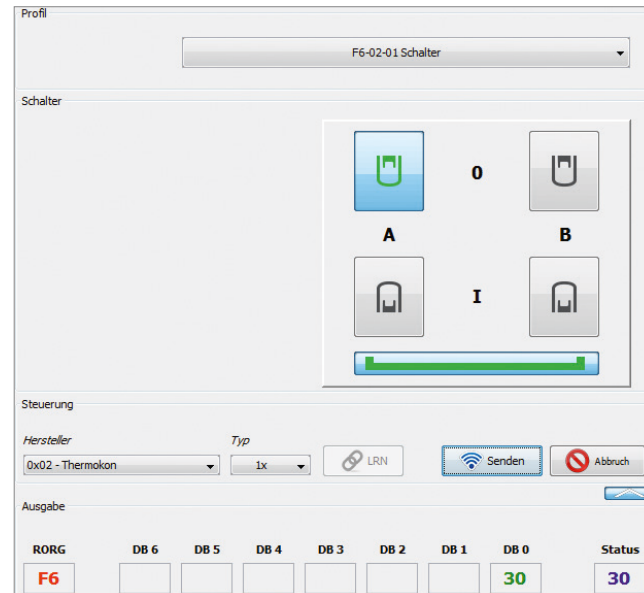
- » Using the configurator the user can take all EnOcean profiles from a predefined EEP selection
- » airScan telegrams can be easily generated and transmitted immediately

**airScan – Visual Display**

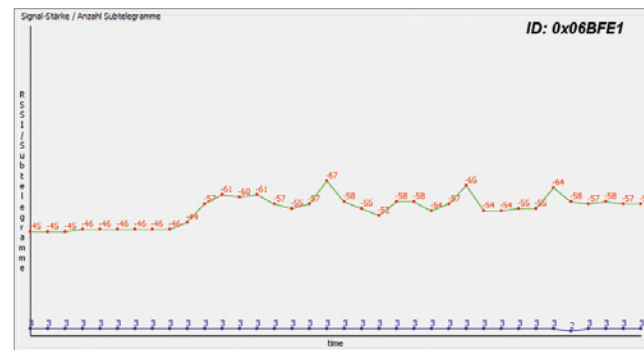
- » Translation of all measured values
- » Coloured symbols (traffic light system) or graphs indicate the signal quality or RSSI values of a telegram received

**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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