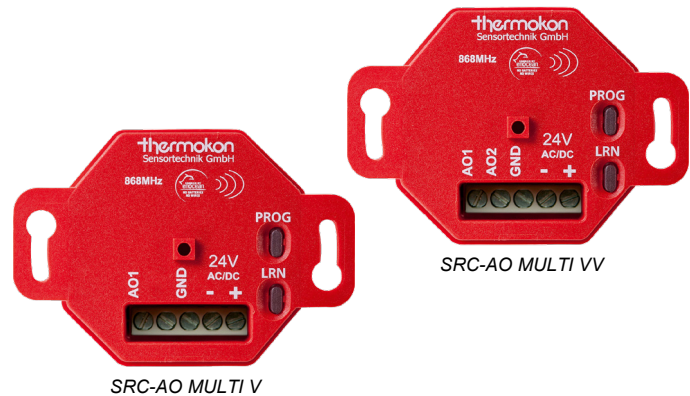# » SRC-AO MULTI V | VV

EnOcean Wireless Receiver with 1 / 2 analog outputs

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
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SRC-AO MULTI VV

SRC-AO MULTI V

»APPLICATION

Unidirectional flush-mounted receiving actuator with two proportional 0..10 V outputs for converting EasySens® wireless sensors such as temperature, temperature setpoint, humidity, etc. into 0..10 V signals.

»TYPES AVAILABLE

Wireless receiver - 1x analog 0..10 V output
SRC-AO MULTI V

Wireless receiver - 2x analog 0..10 V outputs
SRC-AO MULTI VV

»SECURITY ADVICE – CAUTION

The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with
- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

»NOTES ON DISPOSAL

As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

» PRODUCT TESTING AND CERTIFICATION

Declaration of conformity

The declaration of conformity of the products can be found on our website https://www.thermokon.de/.

» INFORMATION ABOUT EASYSENS® (RADIO) / AIRCONFIG GENERAL USAGE

EasySens® - airConfig

Basic information about EasySens® radio and about general usage of our airConfig software, please download from our website.

## » OVERVIEW OF THE RADIO TELEGRAMS

EEP

The structure of the data contained in the telegram can be found in the EEP (EnOcean equipment profile) list provided by the EnOcean Alliance.

» TECHNICAL DATA

Output voltage	V: 1x 0..10 V, min. load 5 kΩ VV: 2x 0..10 V, min. load 5 kΩ
Radio technology	EnOcean (IEC 14543-3-10), transmission power <10 mW
Frequency	902 MHz, optional 315 MHz
Antenna	internal receiving antenna
Data transmission	Receiver unidirectional
Receiving channels	per channel 1 (Rx)
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 1 W (24 V =)	1,5 VA (24 V ~)
Functions	per output 1 sensor value (e.g. temperature, setpoint, humidity, actuating variable, dimming value)
Enclosure	ABS, red
Protection	IP20 according to EN 60529
Electrical connection	terminal block, max. 16AWG
Ambient condition	-4..+140 °F, max. 85% rH non-condensing
Weight	1.94 oz.
Mounting	flush-mounted in standard EU box (Ø=2.36 in., min. depth=1.77 in.)

» ELECTRICAL CONNECTION

The devices are constructed for the operation of 24V AC/DC (SELV). For the electrical connection, the technical data of the corresponding device are valid. The devices must be operated at a constant supply voltage. When switching the supply voltage on/off, power surges must be avoided on site.
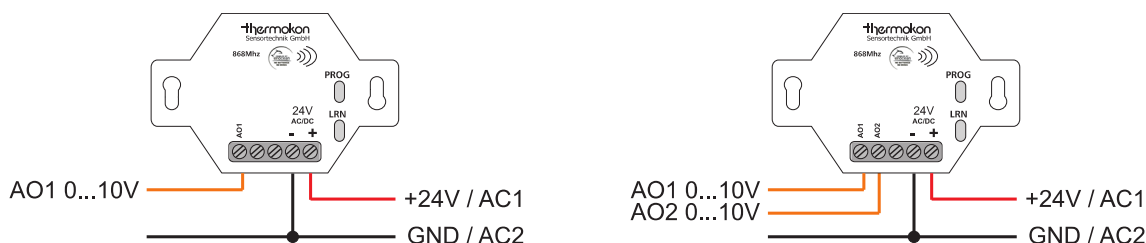
»MONTAGE

The module enclosure is prepared for mounting in a standard flush-mounted box with blind cover and cable outlet. No separate external antenna is required for operation. During installation, please ensure that a distance of at least 0.3 m to metallic objects (radiators) is maintained to prevent the radio waves from being cut off and to avoid excessive heat exposure.

»FUNCTION DESCRIPTION

The SRC-AO MULTI converts the values of a data byte from an EnOcean telegram proportionally to the analogue 0..10 V output. Thus EnOcean sensors can be easily evaluated and integrated into existing systems. Any 4-byte (A5) EnOcean telegram can be taught in per output.

If sensor monitoring is active and no valid telegram from the taught-in sensor has been received within 60 minutes, this is indicated by the LRN LED flashing continuously. As soon as a valid telegram is received again, the LRN LED goes out.

»COMMISSIONING

1. **Set Receiver in Learn Mode:**

   Actuate the LRN-button on the receiver and keep it pressed. After 2 seconds the receiver automatically switches in the learn mode. Visually this procedure is shown by the flashing of the LRN-LED.

2. **Selection of the designated output channel (typeVV only).**

   By pressing the LRN-button the designated output channel can be selected. The LRN-LED shows the selected channel (1 blink cycle=channel 1, 2 blink cycles=channel 2).

3. **Learning-in of Wireless Sensor:**

   Actuate the button on the wireless sensor (transmitter). The transmitter allocation in the receiver is shown for 2 seconds by means of the permanently burning of the LRN-LED.

4. **Leave Learn Mode:**

   The learn mode of the receiver is left after push LRN-button longer than 2 sec or if no button on the transmitter is actuated within 60 seconds. Afterwards, the receiver is ready for operation and uses the measuring values supplied by the transmitter.

5. **Clearing of Transmitters (if required)**

   Learned-in transmitters can be cleared. The receiver must be put in the learn mode (see point 1). If the button is actuated on the sensor learned-in, the transmitter will be learned-off, accordingly. The clearing of the sensor is shown for 2 times 4 seconds by means of the permanently burning of the LRN-LED.

6. **Restore of Delivery Mode (if required)**

   Actuate LRN button and PROG button on the receiver and keep them pressed. After approx. 5 seconds, all transmitters learned-in are cleared in the memory. The clearing of the memory is indicated by flashing of LRN-LED and PROG-LED.

» CHANGING THE RECEIVER PARAMETERS

The standard parameters can be changed by pressing the PROG-button in the "Learn mode".

	Parameter	Description	Factory default
Monitoring of communication	1	Monitoring of communication	active
	2	No monitoring of communication	inactive
Selection of the EnOcean data byte which has to be connected to the outputs (Databyte X: 0...255 -> Output: 0...10V)	3	Data byte 1	active
	4	Data byte 2	inactive
	5	Data byte 3	inactive
Invert Output (0...10V -> 10...0V)	6	not inverted	active
	7	Invert output	inactive

Example:

1. **Set receiver in "learning mode:**

   Press the LRN button for longer than 2 seconds.
   The receiver switches to the "learning mode". The LRN LED flashes.

2. **Select the channel to be parameterised (only for type VV).**

   The channel to be parameterised can be selected by briefly pressing the LRN button. The LRN LED indicates which channel is selected (1x blinking=channel 1, 2x blinking=channel 2).

3. **Activate the conversion of the output:**

   Press the PROG button 7 times
   Receiver acknowledges parameter selection by 7x flashing of the PROG LED.

4. **Exit "learning mode":**

   Press the LRN button for longer than 2 seconds.
   The receiver switches to the standard mode. LRN LED off.

5. **The changed unit parameters are stored in the unit and are retained even in the event of a power failure.**

» DIMENSIONS (IN.)