

## AL-436-00-902 EnOcean sensor - “EnoSense People Counter”

**People passage counter, batteries 2x AA, EnOcean 902 MHz**

**Part no. 12466 (beige) / 12467 (black) / 12468 (white)**

Interfaces:

Integrated sensors for people passing by detection (incoming/outgoing)

1x EnOcean bi-directional (internal antenna), supply: internal batteries, 2x AA, 36 mm x 37 mm x 80 mm



The people counting sensor of the type **AL-436-00-902 EnoSense People Counter** is used to count the number of people passing by the sensor.

The **AL-436-00-902** will detect the direction of movement, and will increase / decrease the internal counter value (8 bit).

The counter value (1 byte) will be transmitted as described further below. The counter is implemented as auto roll-over. So it will increment from 255 to 0, and decrement from 0 to 255.

The **EnoSense People Counter** is supplied by two internal 1.5 V AA batteries.

The innovative power saving technology will allow the AL-436-00-902 to work at least **5 years** without any maintenance / changing the batteries.

## Technical data

### Interfaces

Type	EnOcean
Number	1
Transmit / receive center frequency	902.875 MHz
Frequency range used	902.875 – 902.875 MHz
Maximum transmission power	+99 dB $\mu$ V/m

### Sensor: Motion detection (bi-directional)

Measuring range	0,5 – 2,0 m
Accuracy	Up to 100 %

### User interfaces

Service button	Yes
Service LED	-

### Housing

Housing	Plastic, PC, different colors
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### Power supply

Power supply	2x AA batteries, 1,5 V
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### Environmental conditions

Operating temp.	+15..40 °C
Storage temp.	-20..+70 °C
Rel. humidity	0..99 % rel. humidity, non-condensing
Protection class	IP20

### Dimensions and weight

Weight	87 g
Dimensions	Approx. 36 x 37 x 80 mm

### Tests / approvals

FCC Rule parts	15.231
Equipment class	Part 15 Security / Remote control

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**Table of supported EEP (EnOcean Equipment Profile)**
**Transmit / TX**

Cons. nr.	EEP	Description	Tx-ID
1	47-D1-07-10 (MSC)	Counting value, bit (BYTE 0)+ Power supply voltage, 8 bit (BYTE 3)	Base-ID

**Receive/ RX**

Cons. nr.	EEP	Description
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**Short description**
**Power supply**

The **EnoSense People Counter** is supplied by 2 internal batteries of Type AA, 1.5 V each. Batteries lifetime will be at least **5 years** without maintenance.

**EnOcean**

The integrated EnOcean transceiver enables bi-directional communication with a building management system or EnOcean actuators.

**Functions of the EnoSense People Counter**
**Operational description of People counting / data transmission rules**

In general, the lens in the front of the **EnoSense People Counter** forms two detection zones B1 and B2. Depending on the sequence of triggering these two areas, the counter value will be increased or decreased.

As long as no motion is detected by the sensor element, no message will be transmitted by the EnoSense People Counter. The wireless transmitter will not be activated.

In the moment when a motion (people passing by) will be detected, the wireless transmitter will be

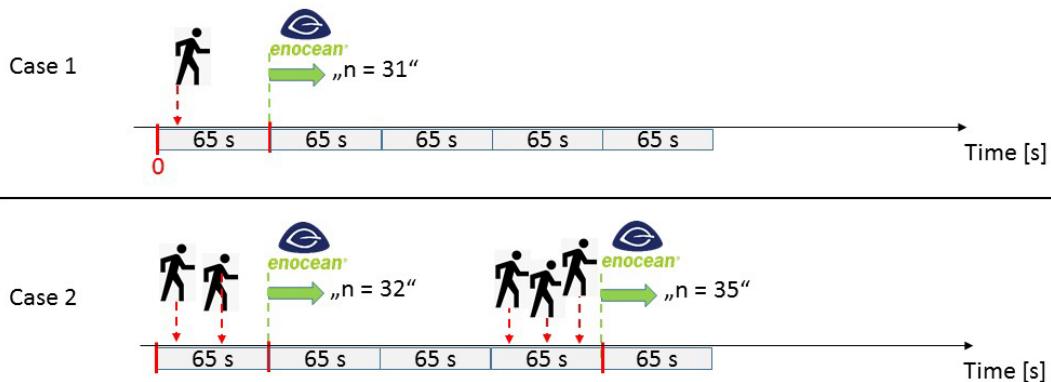
activated and a data message will be transmitted by the People Counter immediately. A second message (sub telegram) will be send after 25 ms with the same data contents.

If no further motion is detected, the People Counter will not send any further message.

If more people are counted in the following time period, the People Counter will send the new accumulated counter value after 65 seconds (and the second message again after 25 ms).

This behavior is also shown in the following picture:

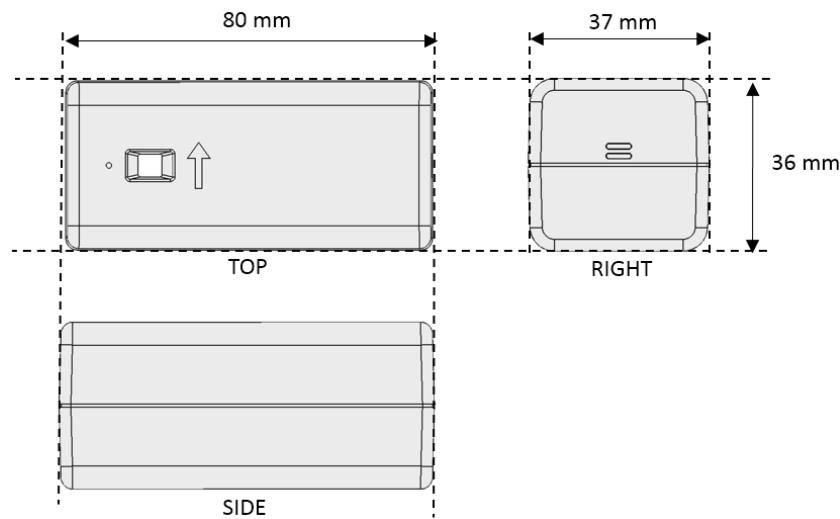
„EnoSense People Counter; Example with counter start value  $n = 30$ “



### Power supply voltage monitoring

For support remote maintenance, the power supply voltage is monitored and send via EnOcean included in each message.

### Dimensions: 36 mm x 37 mm x 80 mm



## Ordering information

Part name	Part nr.	Description
AL-436-00-902 EnOcean sensor „EnSense People Counter“ / beige / FCC	12466	Sensor EnOcean “EnSense People Counter”, for counting people passing by (bi-directional); for mounting on smooth surfaces; EEP: 47-D1-07-10; Supply voltage 2x AA 1.5 V internal, Dimensions 36 x 37 x 80 mm, EnOcean 902 MHz, FCC, Housing: PC, beige (similar to RAL 9010 / pure white); incl. adhesive pad
AL-436-00-902 EnOcean sensor „EnSense People Counter“ / black / FCC	12467	Sensor EnOcean “EnSense People Counter”, for counting people passing by (bi-directional); for mounting on smooth surfaces; EEP: 47-D1-07-10; Supply voltage 2x AA 1.5 V internal, Dimensions 36 x 37 x 80 mm, EnOcean 902 MHz, FCC, housing: PC, Signal black (RAL 9004); incl. adhesive pad;
AL-436-00-902 EnOcean sensor „EnSense People Counter“ / white / FCC	12468	Sensor EnOcean “EnSense People Counter”, for counting people passing by (bi-directional); for mounting on smooth surfaces; EEP: 47-D1-07-10; Supply voltage 2x AA 1.5 V internal, Dimensions 36 x 37 x 80 mm, EnOcean 902 MHz, FCC, housing: PC, Signal white (RAL 9003); incl. adhesive pad;

## FCC (United States) Regulatory Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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