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## 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 (internal antenna), supply: internal batteries, 2x AA, 36 mm x 37 mm x 80 mm

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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 dBμV/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 |
|---------|-------------------------------|

### Power supply

|              |                        |
|--------------|------------------------|
| Power supply | 2x AA batteries, 1,5 V |
|--------------|------------------------|

### 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 |
|-----------|-----|-------------|
| -         | -   | -           |

**MSC data structure**

| Data field      | People        | Data field      | Voltage        | Data field      | Switch   | Data field      | Error    |
|-----------------|---------------|-----------------|----------------|-----------------|----------|-----------------|----------|
| Offset          | 40            | Offset          | 16             | Offset          | 24       | Offset          | 32       |
| Size            | 8             | Size            | 8              | Size            | 8        | Size            | 8        |
| Range min / max | 0 / 255       | Range min / max | 0 / 255        | Range min / max | 0 / 255  | Range min / max | 0 / 255  |
| Scale min / max | 0 / 255       | Scale min / max | 0 / 5.1        | Scale min / max | 0 / 255  | Scale min / max | 0 / 255  |
| Unit            | -             | Unit            | V              | Unit            | -        | Unit            | -        |
| Meaning         | Counter value | Meaning         | Supply voltage | Meaning         | Reserved | Meaning         | Reserved |

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## 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

The sensor works on the basis of two PIR sensors, which, depending on the signal, evaluate a counting pulse in the positive or negative direction.

Each time motion is detected, the counter value changes accordingly.  
The changed counter value (+/-) is immediately sent via EnOcean.

### Power supply voltage monitoring

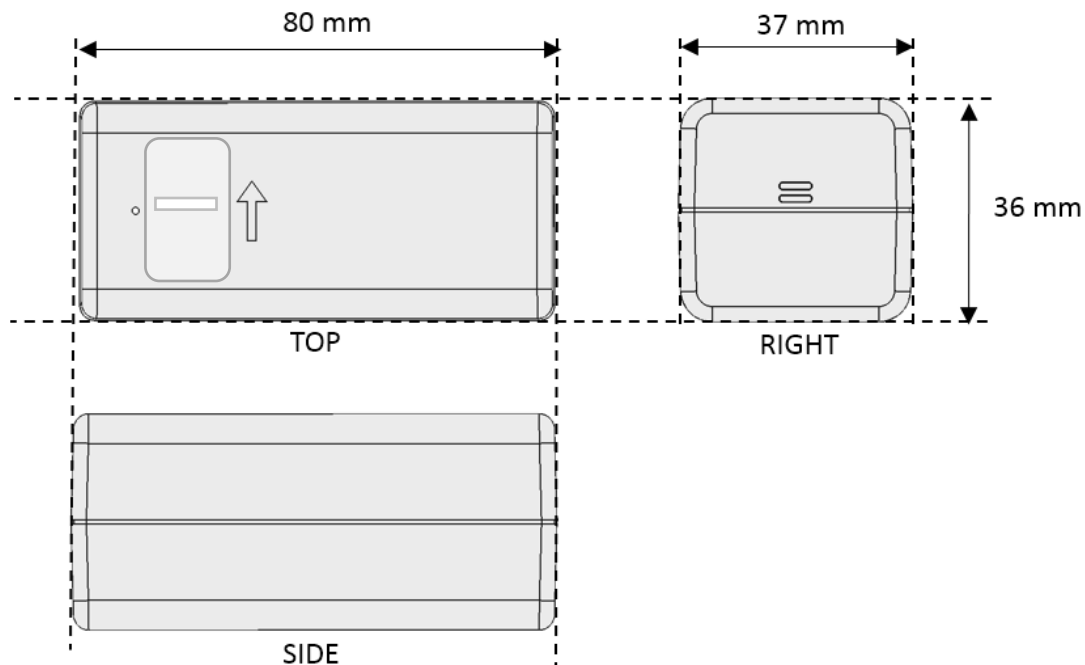
For support remote maintenance, the power supply voltage is monitored and send via EnOcean included in each message.

### Transmit a Learn Telegram

The EnoSense® People Counter sends a teach-in telegram as soon as you press the internal service button briefly (< 1 second) with a suitable tool (typical paper clip).



**Dimensions:** 36 mm x 37 mm x 80 mm



## Ordering information

| Part name                                                               | Part nr. | Description                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AL-436-00-902 EnOcean sensor<br>„EnoSense People Counter“ / beige / FCC | 12466    | Sensor EnOcean “EnoSense 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<br>„EnoSense People Counter“ / black / FCC | 12467    | Sensor EnOcean “EnoSense 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<br>„EnoSense People Counter“ / white / FCC | 12468    | Sensor EnOcean “EnoSense 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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