

# QUICKSTART GUIDE

**LoRaWAN™ Radar People Counter Outdoor AC**

**PCR2-EU868-ODA**





Please visit [www.parametric.ch](http://www.parametric.ch) for the latest documentation.

## Preparing the device

### 1 Opening the Enclosure



Remove the four screws from the casing to gain access to the device.

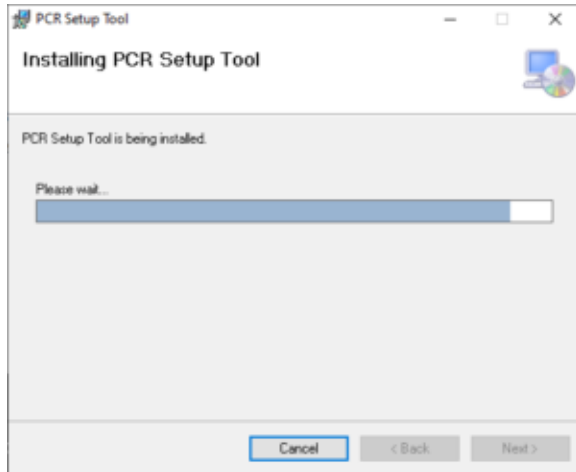
### 2 Connecting the Programming Cable



Connect the sensor to your Computer using a USB Cable.

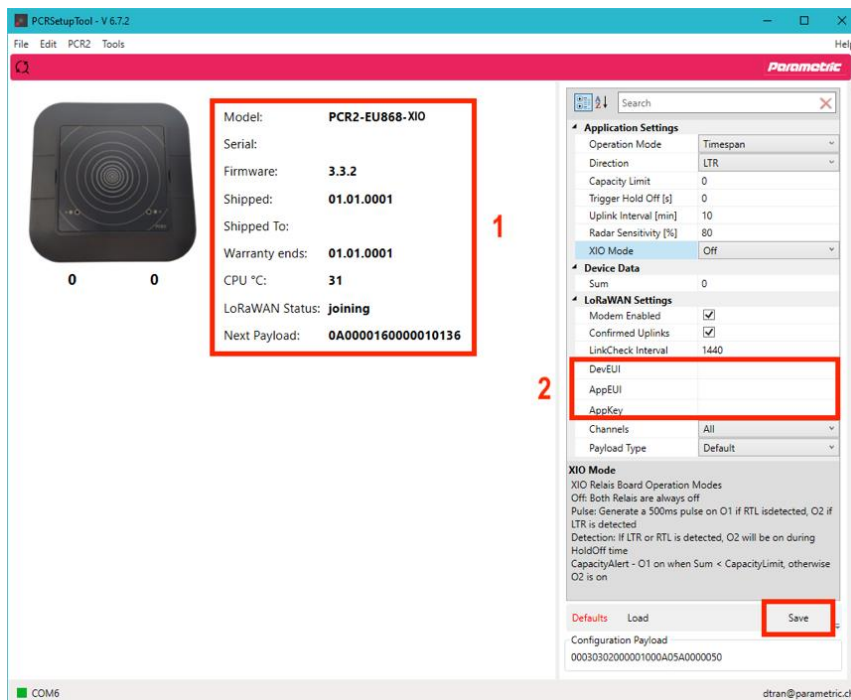
### 3 Install PCR Setup Tool

Download the free PCR Setup Tool by opening the following URL:  
<https://www.parametric.ch/downloads/>



Download PCRSetupTool\_Setup.exe and follow the instructions of the installer. Ignore all security warnings.

### 4 Set LoRaWAN Keys



Start the PCR Configurator tool.

After some seconds you will see the device information (1).  
Enter your LoRaWAN Keys (2).

Re-Power the device to start the Join procedure. After a successful connection the sensor LED will stop blinking.

Always press 'Save' after changing settings.

## 5 Set TX Interval

Application Settings	
Operation Mode	Timespan
Payload Type	Default
Uplink Interval [min]	10
Trigger Hold Off [s]	30
Radar Sensitivity [%]	80

### Uplink Interval [min]

Set the sending interval in minutes (1...1440 minutes). During this time, all persons will be counted and sums are transferred. After transfer counters will be reset.

## 6 Overview of Application Settings

Application Settings	
Operation Mode	Timespan
Payload Type	Default
Uplink Interval [min]	10
Trigger Hold Off [s]	30
Radar Sensitivity [%]	80

### Operation Mode

Timespan - count objects and send sum after interval.  
NotZero - Same as Timespan but does not send if counters are 0 (zero)  
Trigger - Send on every detection. Use Hold Off Time to prevent sending on every event

### Payload Type

Choose between Parametric and Cayenne LPP compatible payload formats

### Trigger Hold Off [s]

Time to re-arm trigger  
0...600s (0 = no suppression)

### Radar Sensitivity [%]

You can set the radar module from 10% (fairly sensitive) to 100% (very sensitive)

## 7 Overview of LoRaWAN Settings

LoRaWAN Settings	
DevEUI	3737333161378408
AppEUI	3737333161378408
AppKey	37373331613784083737333161378408
Channels	All
Confirmed Uplinks	<input checked="" type="checkbox"/>
LinkCheck Interval	1440

### Channels

US915 and AU915 Types only. This let you choose between all and blocks of 8 channels

### Confirmed Uplinks

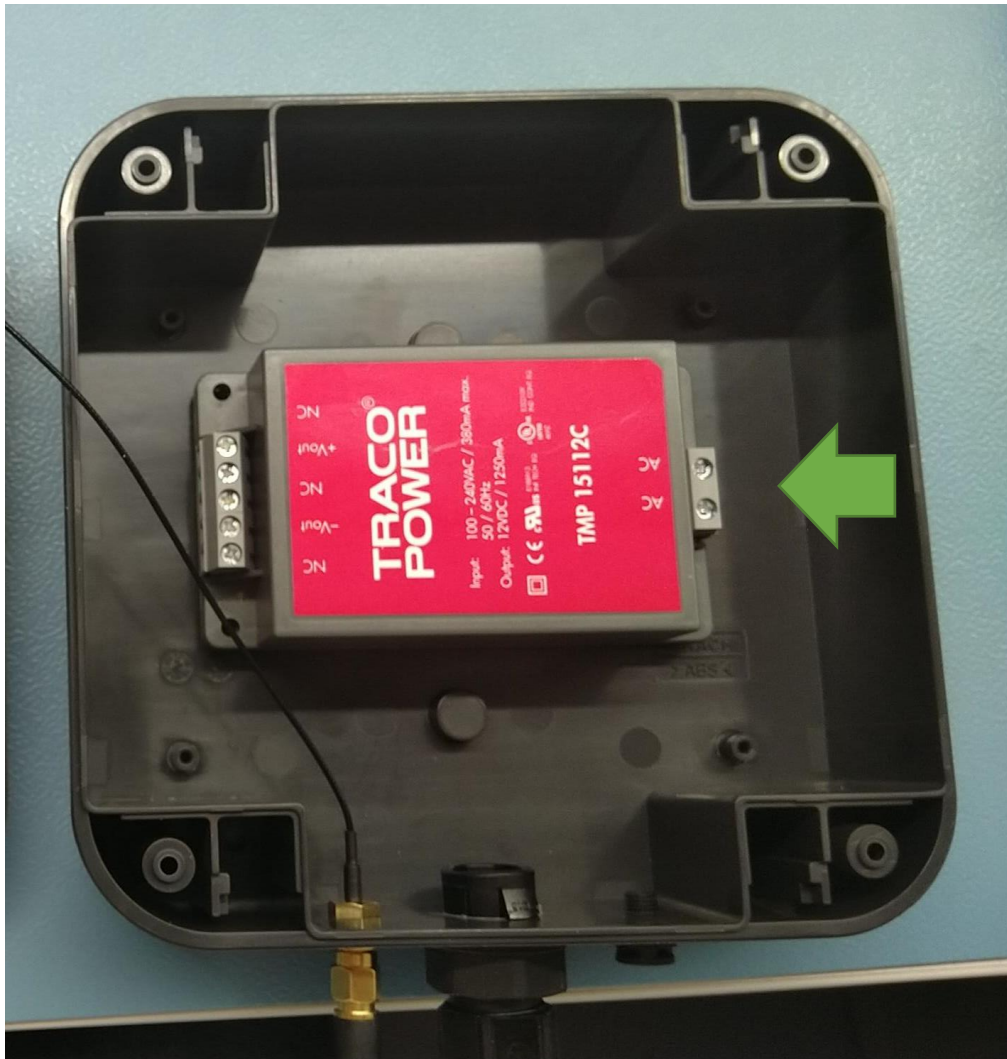
Send uplinks with ACK requests

### LinkCheck Interval

After this interval send LinkCheckReq with next uplink. Set to zero for disabling LinkCheck completely

# Installation Instructions

## 1 Electrical Installation



Connect the mains (AC) supply in compliance with national regulations (VDE0100 and EN50178)

Before closing the casing, make sure that the two components are aligned as depicted.

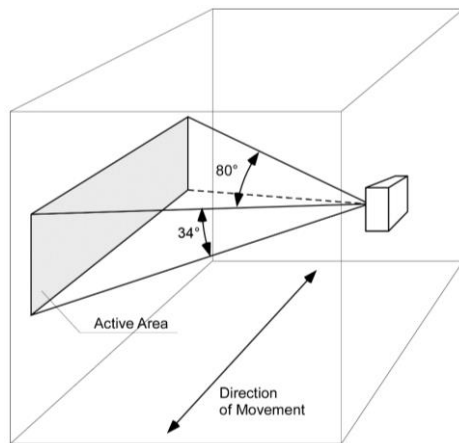
The cable gland and the antenna are pointing downwards.

Ensure that the cable gland is fully tightened.

## 2 Field of view and optimal placement

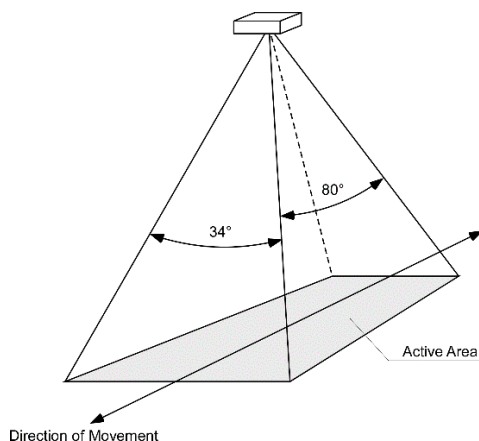
PCR2-OD are 1D sensors measuring Peopleflow walking along a virtual line. The device can be mounted on walls, door frames or over-head.

### Wall mounting (recommended)



Installation height:	1.2...1.4m (4...5 feet) above floor
Installation direction:	Device surface parallel to peopleflow
Detection range:	6...10m depending on object size
Separation angle:	40° (Distance between persons)
Avoid:	<ul style="list-style-type: none"><li>- Side-by-side walking</li><li>- Groups</li><li>- Too close to each other</li></ul>

### Ceiling mounting



Installation height:	0.5...4m above peoples heads
Installation direction:	Heading down, LEDs in line with direction of movement
Separation angle:	40° (Distance between persons)
Avoid:	<ul style="list-style-type: none"><li>- Side-by-side walking</li><li>- Groups</li><li>- Too close to each other</li><li>- Too wide entries (detection angle is 34°)</li></ul>





### **Disclaimer**

In the interest of continuous further development of our equipment, we have to make changes to the scope of delivery in form, technology and equipment reserved.

We also ask for your understanding that no claim can be derived from data and illustrations of this manual.

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