EN

QUICKSTART GUIDE

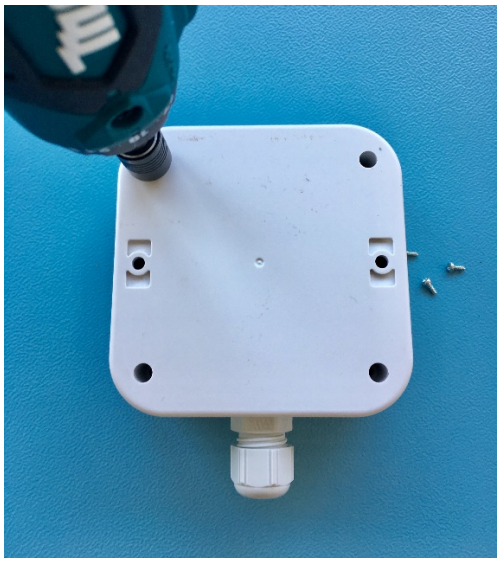
LoRaWAN™ Radar People Counter Outdoor

PCR2-EU868-OD
PCR2-US915-OD
PCR2-AU915-OD

Please visit www.parametric.ch for the latest documentation.

Preparing the device

1 Opening the Enclosure



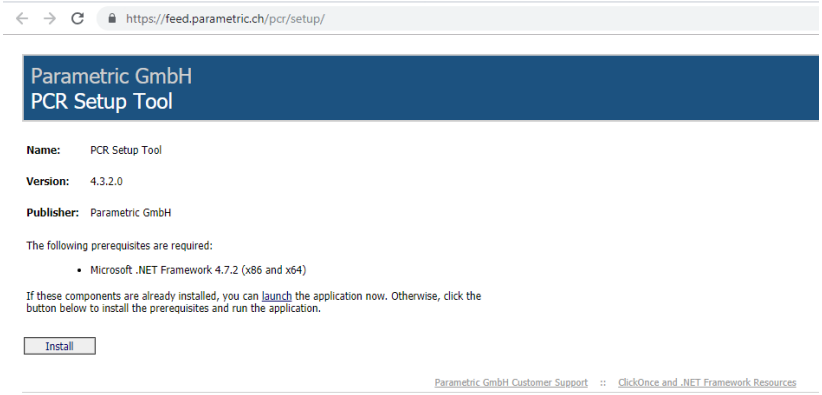
Remove the four screws from the casing to gain access to the device.

2 Connecting the Programming Cable

Connect the sensor to your Computer using a USB Cable.

3 Install PCR Setup Tool

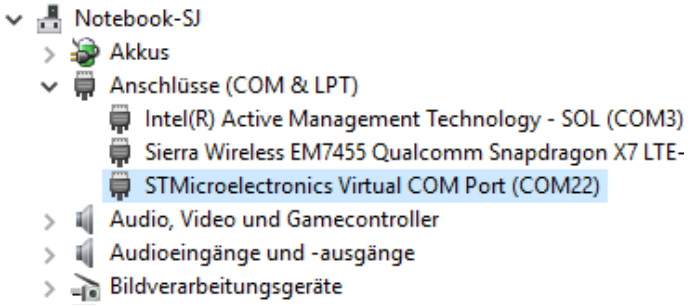
Download the free PCR Setup Tool by opening the following URL:
https://feed.parametric.ch/pcr/setup/



Click 'Install' to start the installation process.
Note: This is a .Net Application. You may need to install additional software from Microsoft.

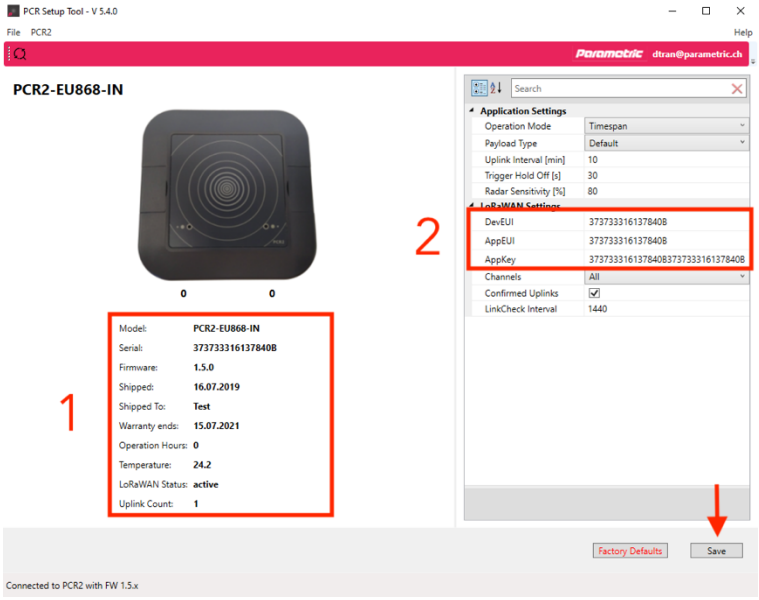
https://www.microsoft.com/net/download/dotnet-framework-runtime

4 Check COM Port



After connecting the PCR2 to your PC, you should see a new device appearing in Windows Device Manager.
Note the port number e.g. COM22.

5 Set LoRaWAN Keys

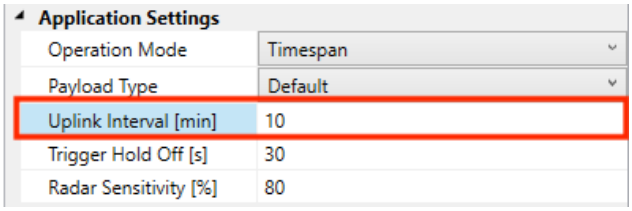


Start the PCR Configurator tool.
After some seconds you will see the following device information (1):

- Model
- Serial
- Firmware
- Shipped To
- Warranty End
- Operation Hours
- Temperature
- LoRaWAN Status
- Uplink Count

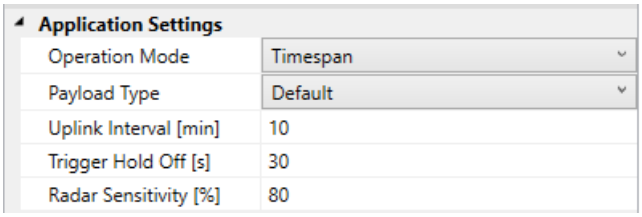
Enter your LoRaWAN Keys (2) and press 'Save' to save it.
After a successful connection the sensor LED will stop blinking.

6 Set TX Interval



Uplink Interval [min]
Set the sending interval in minutes (1...1440 minutes).
During this time, alle persons will be counted and sums are transfered.
After transfer counters will be reset.

7 Overview of Application Settings



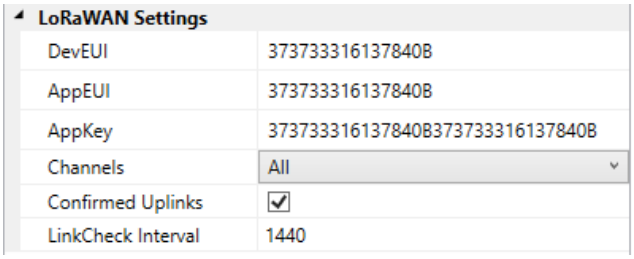
Operation Mode
Timespan - count objects and send sum after interval.
NotZero - Same as Timespan but does not send if counters are 0 (zero)
Trigger - Send on every detection. Use Hold Off Time to prevent sending on every event

Payload Type
Choose between Parametric and Cayenne LPP compatible payload formats

Trigger Hold Off [s]
Time to re-arm trigger
0...600s (0 = no supression

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

8 Overview of LoRaWAN Settings



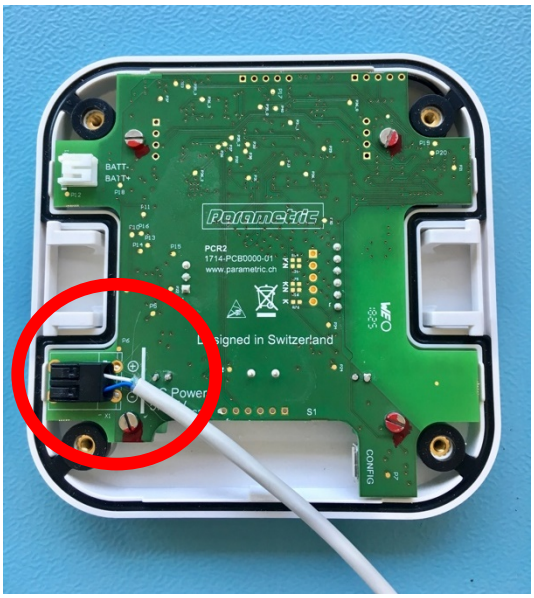
Channels
US915 and AU915 Types only. This let you choose between all and blocks of 8 channels

Confirmed Uplinks
Send uplinks with ACK requests

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

Installation Instructions

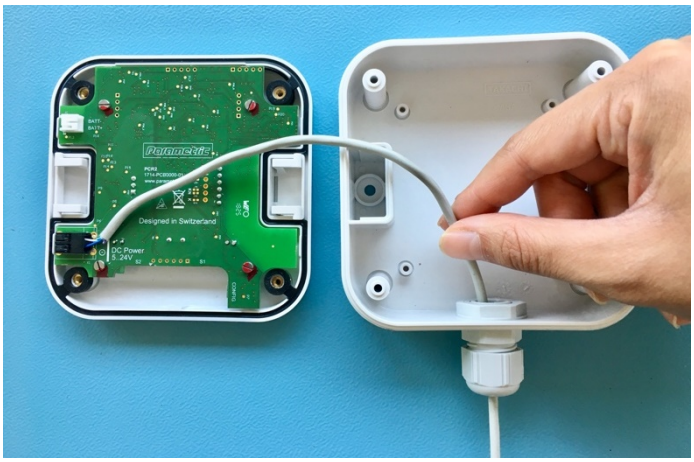
1 Electrical Installation



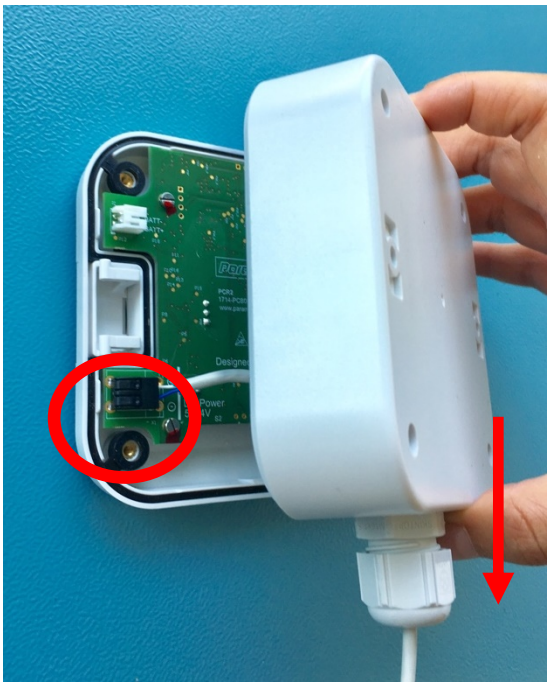
Use DC-Power Supply 5…12V.

Cable diameter should not exceed 11mm.

Wires should be 22 – 18 AWG (0.2 – 0.75mm^2).



Guide the cable through the cable gland.



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

The power supply is located on the bottom.

The cable gland is pointing downwards.

Mounting

Open the hatches on the front of the casing and drill two screws into the wall.

Payload

PCR2 Default Sensor Payload			
Syntax	**0a<ltr>16<rtl>01<tmp>**		
Object	**Type**	**Range**	**Example**
0a	Key ‘LTR Counter’	-	-
<count>	Persons counted from left to right	`0000…ffff`	0010 = 16 persons from left to right since last uplink transmit
16	Key ‘RTL Counter’	-	-
<count>	Persons counted from right to left	`0000…ffff`	0014 = 20 persons from right to left since last uplink transmit
01	Key ‘Temperature	-	-
<tmp>	Internal Temperature in 1/10 °C	`0000…ffff`	ff9a = -10.2 °C internal Temperature

Payload example

0a0010160013 01ff9a


```
{
   "pulse1": 16,
   "pulse2": 19,
   "temperature": -10.2
}
```

EU Declaration of Conformity

CE

Parametric GmbH declares that the following equipment is compliant to the RoHS (2015/863/EU) and Radio Equipment Directive (2014/53/EU)

Model: PCR2
Product Description: LoRaWAN™ Radar People Counter bidirectional

Conformity is assured by compliance to the following Standards:

EN 60950-1: 2006+A11: 2009+A1:2010+A12:2011+A2:2013 (2014-01-02)
EN 55032:2012+AC:2013 (2017-03-05); CISPR32:2012 (2012-1-30) AS/NZS CISPR32:2013 (2013-6-20)
EN 61000-3-2: 2014 (2015-03-30)
EN 61000-3-3: 2013 (2014-3-18)
EN 55024:2010 (2011-09-01)
IEC 61000-4-2:2008 (2008-12-09)
IEC 61000-4-3:2006+A1:2007+A2:2010 (2010-04-27)
IEC 61000-4-4:2012 (2012-04-30)
IEC 61000-4-5:2014 (2014-05-15)
IEC 61000-4-6:2013 (2013-10-23)
IEC 61000-4-8:2009 (2013-10-23)
IEC 61000-4-11:2004 (2004-03-24)
EN 301 489-1 V2.2.1 (2017- 02)
EN 301 489-17 V2.2.1 (2017-02)
EN 300 328 V2.1.1 (2016-11)

Signature:

Andreas Koschak, CEO

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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