

## LoRa™ PULSE SENS'O

### 1. GENERAL FEATURES

Pulse Sens'O is a LoRa™ sensor designed to be operated with any device that delivers a pulse output (water, gas, electricity or energy meters).

It communicates over LoRa™ secured, long range and bidirectional radio network.

It incorporates inside a plastic housing the following functions:

- LoRa™ radio transceiver, with integrated antenna.
- A Lithium battery (3.6V; 3.6Ah) and 12 years autonomy for one radio transmission per day.
- 3 Pulse Inputs.
- Plastic housing, 85x82x55mm. This package exists in two versions:
  - IP 55 or
  - IP68 1m, 48 hours.



Pulse Sens'O operation is straightforward. Just connect the 3 Pulse inputs to the correct connector:

- Input 1: Pulse1 input
- Input 2: Pulse2 input
- Input 3: Pulse3 input

Pulse Sens'O transmits regularly, according to configuration, meter index and alarms.



It operates with most commercial meter products.

Pulse Sens'O can handle 3 meters simultaneously.

Practical use cases are:

- Water meter with positive, negative and alarm outputs.
- 3 Water meters with positive pulse output.
- 3 Meters with positive pulse output (Water, gas and electricity).

## 2. TECHNICAL SPECIFICATIONS

Parameters	Min.	Typical	Max.	Unit	Comments
<b>RADIO</b>					
Frequency	868		870	MHz	25°C
Tx power			14	dBm	25°C
Rx sensitivity			-128	dBm	25°C
Modulation	LORAWAN				
MAC layer					
Network layer					
Application layer					
<b>INPUTS</b>					
Impedance	1			M Ohm	
Capacitance		1		nF	
Voltage	0		30	V	
Frequency		1	500	Hz	Battery autonomy is reduced at 500Hz
Battery (3,6V; 3,6Ah)		3,6		V	Lithium battery
Battery Autonomy		12		Year	(1 measurement +1 Tx)/day
<b>TEMPERATURE</b>					
Operation	-20		50	°C	
Storage	-10		60	°C	
<b>PLASTIC HOUSING</b>					
		84x82x55		mm	UL-V0 HB IP55 or IP68
<b>APPLICABLE NORMS</b>					
EN 61000-4-2		 			
EN 300-220-1 V2-4-1					
EN 301 489 V1-6-1					
CE & RoHS					

## 3. ORDERING INFORMATION

Product	Package	Reference
Pulse Sens'O Outdoor	IP55	50-70-014
Pulse Sens'O Waterproof	IP68 (48hours/1m water) and factory mounted 1,50m cable	50-70-039