



POLAAR
— ENERGY —



Measure what matters for
YOUR business & the
environment



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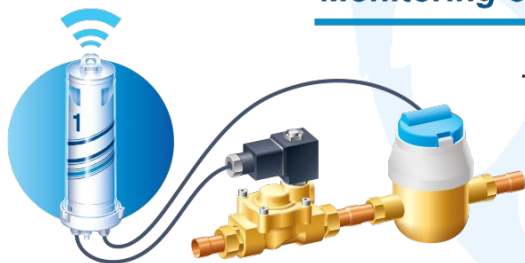
Water device

A single autonomous product driven by SMS

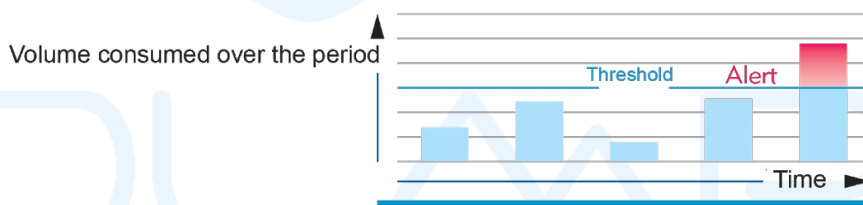
The innovation comes from its SMS communication mode which allows to use it worldwide. Coupled with any type of pulsed meter, transmits the data consumption and SMS alarms. It allows the start-up and modification of remote settings with SMS security without app or software.

The functions

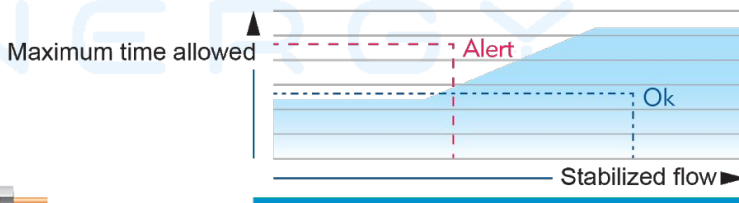
Monitoring of consumption by SMS and / or application



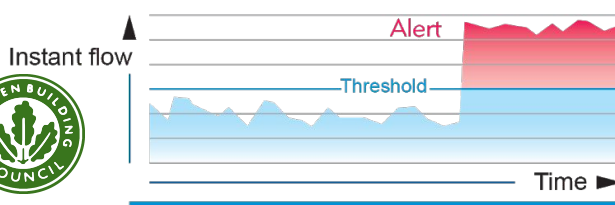
Daily, weekly, over-consumption alerts monthly, by SMS and / or by email



Leakage alerts by SMS and / or email



Line breaks via SMS and / or email



The most frequent incident in companies and individuals

37%

claims relate to water damage

2850 €

The average cost of a claim

Some leaks can cost hundreds of thousands of euros



Leakage on joints, water pipes and faucets



Leak on pipelines



Remote meter monitoring



An external pipe break



Leak in case of frost



Steam trap blocked

Cracked pipe

2248 €

Flush flush

876 €

Flowing tap

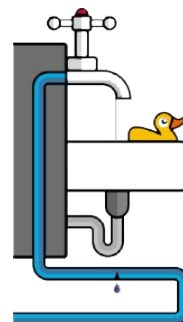
560 €

Flood cleaning

400 €

Drop by drop

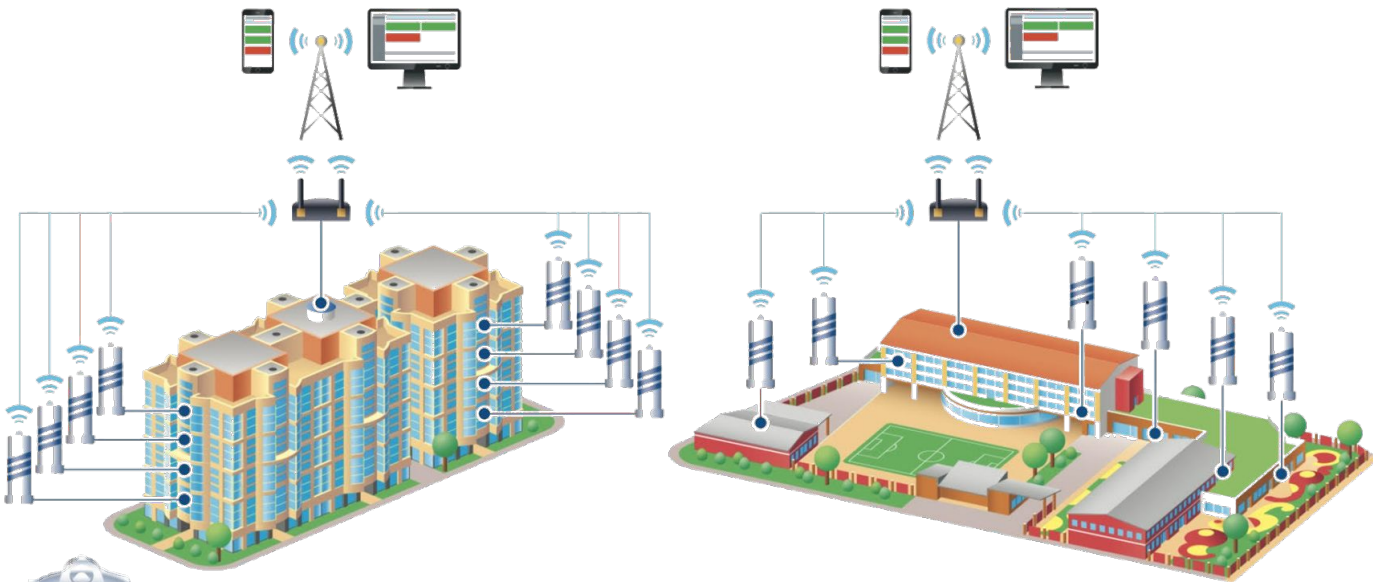
140 €





Technical sheet

- ▶ The models 2G and LoRa data SPs are a very complementary range.
- ▶ Blue Whale Company technology allows the two models to be combined as required.
- ▶ The data are processed in the same way in the supervision.



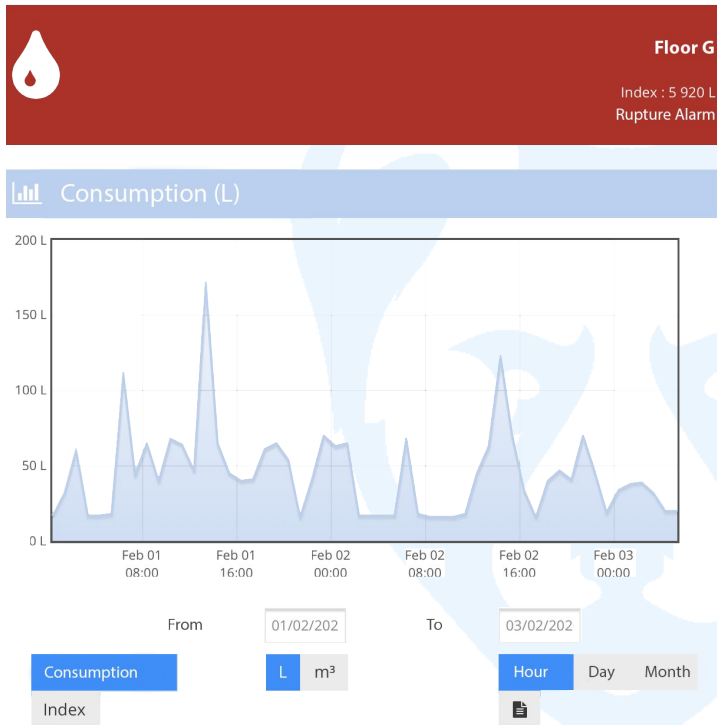
LoRa offers an easy solution for urban implementation when sensors are grouped in a close area.

- ▶ It is the ideal product for counting in buildings.
- ▶ The data are grouped on a gateway preferably installed at a height.
- ▶ The operating cost is extremely low.
- ▶ The gateway can be remotely controlled to allow new sensors to be added at any time.
- ▶ LoRa has 3 inputs to optimize the installation cost when several meters are next to each other.





Example of consumption reduction



- Applications



- ▶ Office buildings
- ▶ Tertiary business parks



- ▶ Administrations
- ▶ Public buildings
- ▶ Education



- ▶ Residential sites



- ▶ Watering
- ▶ Public gardens



- ▶ Industry

- Operational specification



- ▶ Allows remote monitoring of a network's or user's water consumption



- ▶ Leak detection
- ▶ Detection of very low flow leaks
- ▶ Pipe break detection



- ▶ Daily consumption monitoring
- ▶ Weekly consumption monitoring
- ▶ Monthly consumption monitoring



- ▶ Adaptable to any type of meter equipped with a pulse device



- ▶ Remotely configurable

Event

N°	Event	Date	Remarks
142347	Rupture Alarm	02/02/20 13:22	1335L/H
142314	Rupture Alarm	01/02/20 12:22	1314L/H
142288	Rupture Alarm	31/01/20 11:22	501L
142287	Rupture Alarm	31/01/20 11:22	3633L/H
142260	Rupture Alarm	30/01/20 10:05	17725 L/H (Test POLAAR Energy)

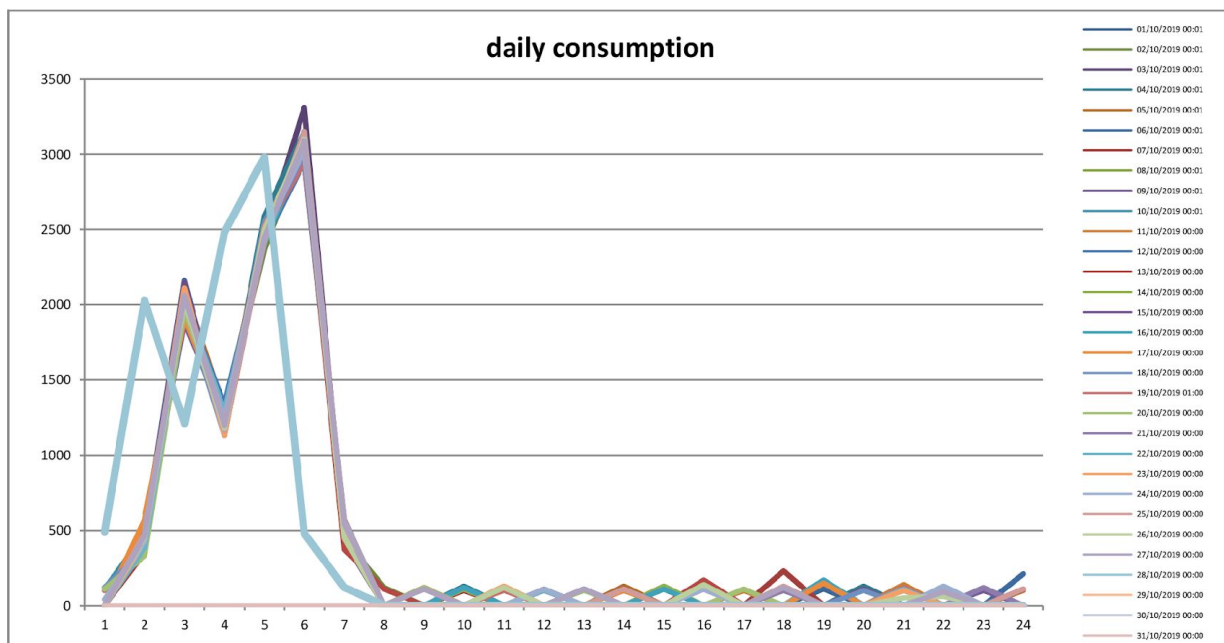
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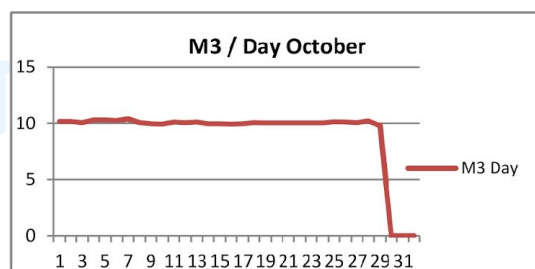
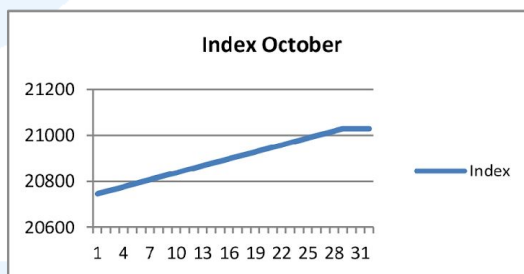
Customized reports

October	
Total	Total m3
1.242,79 €	292,42

Daily average
9,61 m3
40,85 €



October	M3 Day	Index	Price / Day
30/09/2019 23:01	10,18	20746	43,27 €
01/10/2019 00:01	10,17	20756,17	43,22 €
02/10/2019 00:01	10,06	20766,23	42,76 €
03/10/2019 00:01	10,3	20776,53	43,78 €
04/10/2019 00:01	10,31	20786,84	43,82 €
05/10/2019 00:01	10,25	20797,09	43,56 €
06/10/2019 01:01	10,4	20807,49	44,20 €
07/10/2019 01:01	10,06	20817,55	42,76 €
08/10/2019 01:01	9,96	20827,51	42,33 €
09/10/2019 01:01	9,93	20837,44	42,20 €
10/10/2019 01:01	10,12	20847,56	43,01 €
11/10/2019 01:00	10,06	20857,62	42,76 €
12/10/2019 01:00	10,13	20867,75	43,05 €
13/10/2019 01:00	9,95	20877,7	42,29 €
14/10/2019 01:00	9,97	20887,67	42,37 €
15/10/2019 01:00	9,94	20897,61	42,25 €
16/10/2019 01:00	9,97	20907,58	42,37 €
17/10/2019 01:00	10,06	20917,64	42,76 €
18/10/2019 01:00	10,05	20927,69	42,71 €
19/10/2019 01:00	10,04	20937,73	42,67 €
20/10/2019 01:00	10,05	20947,78	42,71 €
21/10/2019 01:00	10,04	20957,82	42,67 €
22/10/2019 01:00	10,03	20967,85	42,63 €
23/10/2019 01:00	10,05	20977,9	42,71 €
24/10/2019 01:00	10,14	20988,04	43,10 €
25/10/2019 01:00	10,12	20998,16	43,01 €
26/10/2019 01:00	10,06	21008,22	42,76 €
27/10/2019 01:00	10,23	21018,45	43,48 €
28/10/2019 01:00	9,79	21028,24	41,61 €
29/10/2019 00:00	0	21028,24	0,00 €
30/10/2019 00:00	0	21028,24	0,00 €
31/10/2019 00:00	0	21028,24	0,00 €



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Protect your building from leaks and water damage.

Our connected leak detection system allows you to monitor the water supply to your **business** or **home** with complete peace of mind, whether you are in the office, at home or on the move.

Unlike most systems currently on the market, it not only detects **water consumption**, low temperature and high **humidity** conditions, but also offers the **possibility of instantly shutting** off the water supply from the mains. It gives your building a voice that tells you what is wrong, allowing you to avoid unnecessary costs and damage.

Benefits for asset managers.

- Proven cost savings.
- Improved sustainability that can be proven.
- Assets can be leased longer and better.



Benefits for property managers.

- Substantial reduction of maintenance costs.
- Save energy and limit harmful emissions.
- New services and more continuity in turnover.
- Manage and save money through direct control of building performance.





Sensors



To be connected to pulse sensor of a gas meter

Gas

- ▶ Consumption monitoring



To be connected to a pulse meter

Calories

- ▶ Allocation of heating charges
- ▶ Energy monitoring



SP data Can for fuel level sensor

Fuel

- ▶ Fuel tank level monitoring
- ▶ Low tank alert
- ▶ Monitoring of fuel consumption



SP data Can with internal or external temperature sensor

Temperature

- ▶ Building temperature monitoring
- ▶ Control and performance monitoring
- ▶ High or low temperature alert



SP data Can with internal or external humidity sensor

Humidity

- ▶ Monitoring humidity in buildings



SP data Can with 8 dry contact inputs

Various

- ▶ Alarm report and monitoring
- ▶ Position monitoring door, shutter, ventilation, VMC...
- ▶ Report of alarm boiler, lift pump...



Rain gauge or anemometer

Meteorology

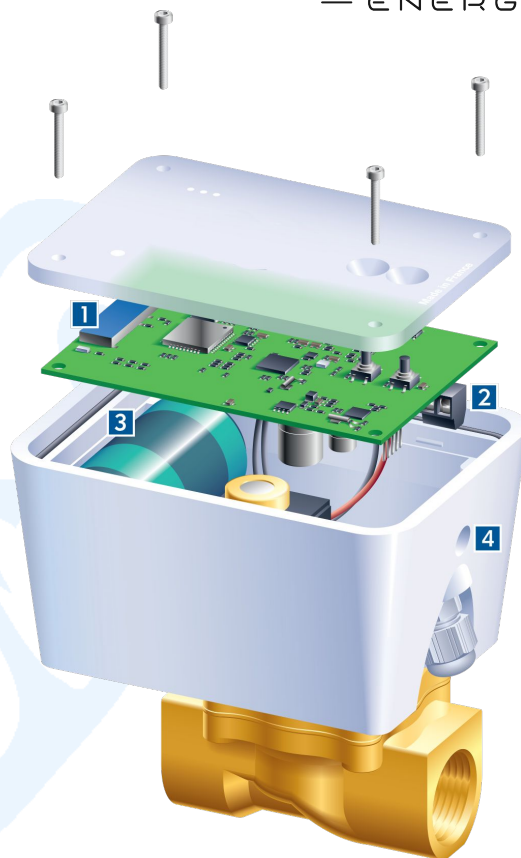
- ▶ Rain gauge : Remote monitoring of rainfall
- ▶ Anemometer : Remote monitoring of wind



Technical sheet

specification

- ▶ GSM (2G) communication
 - ▶ Automatic selection of the best network
 - ▶ High performance electronics
 - ▶ High gain integrated antenna (-110 dBm).....1
 - ▶ No software required for setup
 - ▶ Automatic connection to server
 - ▶ Remote settings if necessary
 - ▶ Connection of the meter by screw terminal.....2
 - ▶ Interchangeable battery.....3
-
- ▶ Weight : 0.9 kg
 - ▶ Valve : DN20
 - ▶ Power supply : 3.6v 13Ah lithium battery, long life, +10 years of autonomy
 - ▶ Radio frequencies : GSM 900/1800; BT: 2402 to 2480 MHz
 - ▶ Power : max 2W BT; 8.72 dBm EIRP
 - ▶ Maximum frequency of input : 10Hz
 - ▶ Activation key.....4



specification

- ▶ GSM (2G) communication
 - ▶ Automatic selection of the best network
 - ▶ High performance electronics
 - ▶ High gain integrated antenna (-110 dBm)
 - ▶ No software required for setup
 - ▶ Automatic connection to server
 - ▶ Remote settings if necessary
 - ▶ Screw terminal connection
 - ▶ Interchangeable battery
-
- ▶ Weight : 0.3 kg
 - ▶ Power supply : 3.6v 13Ah lithium battery, long life (Up to 10 years depending on the intensity of use)
 - ▶ Radio frequencies : GSM 900/1800; BT: 2402 to 2480 MHz
 - ▶ Power : max 2W BT; 8.72 dBm EIRP
 - ▶ Maximum frequency of input : 10Hz
 - ▶ Activation button
 - ▶ IP68 Case





Electricity device

Energy analysis of your data: for energy efficiency and cost reduction

- **Sub-counting:** for a correct distribution of costs and better optimization.
- Control of **current and future costs.**
- Reducing **environmental impact.**
- Dashboard or application: display of your data live, multi-site access to disaggregate data for the app.
- Be part of an **energy community:** we act as a broker to negotiate the best prices for electricity and gas.
- Receive your reports by email with energy advice.

Transparency and independence in the analysis and management of YOUR data





Case study #1 - Private home

Energy Efficiency

- Bill Disaggregation
- Cost and Consumption Alerts
- Peer Comparison
- Energy Saving Advice



Smart Home:

- Safety & Security
- Alerts
- Appliance Health Check
- Activity Monitoring

Elderly monitoring

(Non intrusive sensor)

- Intelligent alerts
- Reporting of unusual behaviour





Case study #2 - BP (carried out by our partner)

The installation

- BP Station, Hammersmith Street, London
- 20 3-phase sensors installed in 4 hours
- No downtime or interruption of business
- All devices connected to 4G Wi-Fi router



Analysis

- Live breakdown of costs by department.
- Deeper drill down to individual assets:
Pumps, Car Wash, Freezers, etc.
- Comparative analysis and benchmark of separate petrol stations.
- Automatic reporting of assets on key events.

Outcomes

- Benchmarking reveals poorly performing assets
- Correct allocation of costs to each sub unit:
pumps, shop, restaurant
- Reduction of operational failures
- At least 5% reduction in energy costs



Case study #3 - Multi-sites offices

The installation

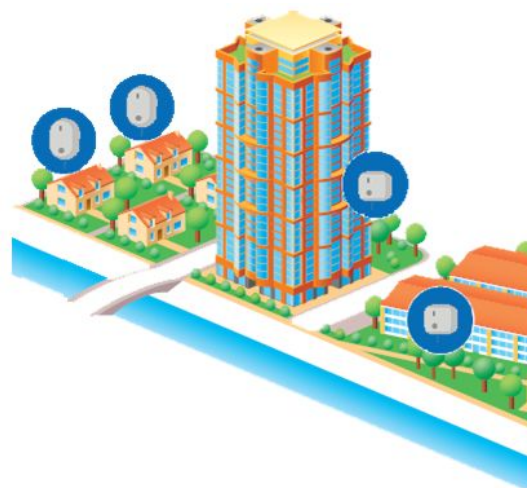
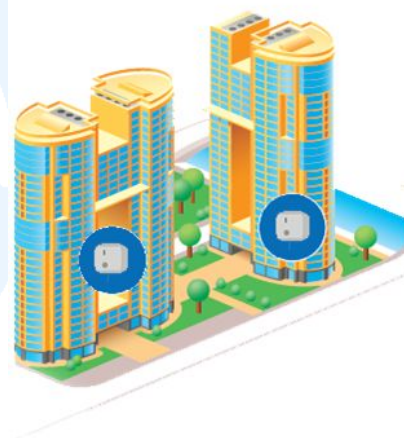
- Installed 100 3-phase sensors in 5000 m2 site
- Set up dashboard, reports and alerts
- App for each small business owner

Objectives

- Sub-metering of multi-occupant offices for billing
- Preventative maintenance for critical equipment
- Provide insightful, actionable energy saving advice to customers to reduce costs
- App for small business to manage energy use

Outcomes

- 10% reduction in energy use from improved reporting and accountability
- Significant cost savings by correctly charging tenants





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Solutions

- AUTOMATIC METER READING
- DIGITALIZATION OF BUILDINGS
- INNOVATIVE AND INTUITIVE SENSORS



ACCESS TO A
PLATFORM



AUTOMATIC
REPORT



EMAIL ALERTS
AND SMS

Our offer

**Purchase of the device
with annual subscription**



SUBSCRIBE



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