The 1st smart connected flowmeter to measure your direct water consumption

Save your water  Save your planet

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About Robeau

• HQ in Dublin Ireland
  • International offices
    • UK
    • France
  • Distributor network in North America

• Our mission is to change water consumption habits to help protect our Planet.

• Our ambition is to equip any type of property with our connected flowmeter to bring awareness to users and reduce World Water consumption and waste.
Water Consumption Overview

4 billion m³ of water by year WW
= 1.3 million litres / second

Average of 200 litres a day used by 1 person

In 25 years, water available for people decreased by 26% in the world, and population increased by 36%

20% of water is lost due to leaks
= 0.8 to 1 billion m³ lost by year

2/3 of World the population could be in a Stress Situation in 2025 due to lack of Water [UN Organisation] &
740 millions of people in the world do not have access to clean drinking water
Did you know?

1. How many liters do you use to wash your teeth?
2. How many liters do you use to take a bath?
3. How many liters do you use to take a shower?
4. How many liters by minute does a normal tap use?
5. How many liters does a person use in an hotel for 1 night?
6. Which country is the most water consuming in the World?
Did you know?

- How many liters do you use to wash your teeth? 12 l
- How many liters do you use to take a bath? 200 l
- How many liters do you use to take a shower? 100 l
- How many liters by minute does a normal tap use? 8 l/min
- How many liters does a person use in an hotel for 1 night? 300 l
- Which country is the most water consuming in the World? China with 1,2 billion m3 a year
Our customers’ challenges

- How can I conserve water?

- How can I reduce my water bills?
  - How can I measure water wastage?
    - You can only manage what you measure
  - How can I see my building’s water consumption at a micro level?
    - Is a tap left running overnight?
    - Is a restroom consuming in excess of normal?
    - Is there water consumption in vacant property?

- How can I identify leaks in real time?
  - 40% of property insurance claims (by value) in UK&IRE are water leak related (AVIVA)
Robeau Smart Connected Solution

• Reduces water bills by >20%

• Provides actionable water consumption data
  • Real time data with remote monitoring
    • Per tap, Per room, Per floor - configuration dependent
  • **Calculates** and **consolidates** consumption
    • Follow trends by day, week, month and year throughout your real estate.
  • Identifies water wastage
  • Can be used to help modify user behaviours
    • Facilitates setting individual usage targets

• **Identifies leaks and minimises property damage**
  • **Alerts** when leak is detected or tap is still open. Set your own thresholds.
  • Allows you to act immediately
How does it work?

1. ROBEAU sensors
2. ROBEAU Gateway
3. LoRa Server network
4. ROBEAU Servers
5. ROBEAU Software
6. ROBEAU Display
How does it work?

...an app to monitor the direct water consumption on a smartphone, tablet or computer – and also available on small individual screen

...a real live program to see consumption of each tap and consolidate this data daily, weekly, monthly and annually in order to analyse and act on your water usage

...an embedded network to follow and store your Water consumption data by tap, room, floor, building, ...

Robeau integrates simply with other applications via open API
A Simple Dashboard

Display on all kind of screen

Robeau name

10 L

Direct consumption

Today

43 L

Yesterday

0 L

This Month

470 L

Functions list

- Login
- Groups
- Administrators
- Users
- Locations
- Devices
- Sensors
- Virtual Sensors
- Time Alerts
- Volume Alerts

Last Message: Tue May 29 2018 12:15:58 GMT+0100

Daily consumption

Day before

Monthly consumption
Robeau Use Cases

- Facilities Management
  - Residential
  - Commercial
  - Office buildings
  - Public buildings
  - Hospitality/Hotels
  - Schools
  - Shopping Malls
  - Camp sites

- Industry
  - Food processing
  - Catering

- Smart Cities
  - Resource optimisation

- Smart Agri
  - Remote monitoring
  - Leak detection

- Systems integration
  - Assisted living
  - Leak detection
Sample configuration

Commercial office building

- Restrooms only fitted
  - 22 floors
  - 2 restrooms per floor

- Hardware requirement
  - 40 Flowmeters (DN20) - 2 per restroom
  - 20 Dataloggers - 1 per floor

- Hardware cost - €3,800

- LoRa Gateway - €400

- Annual fee (After sales, data management, Maintenance, Software releases) - €684

* Excludes LoRa Gateway
Commercial model

- **Hardware - Robeau will supply**
  - Flowmeters sensors and Dataloggers
  - Price dependent on flowmeter dimensions and order volume
  - Option to include display screen

- **LoRa Gateway - Robeau or External supplier**
  - External suppliers Kerlink, Multitech, other
  - Normally 1 gateway only required per building

- **Dashboard - Robeau will provide**
  - Full access to all dashboard functionality
  - User setup guide
  - Technical support
  - Free updates
  - Unlimited users
Standard Global Pricing

Hardware

<table>
<thead>
<tr>
<th>Individual sensor</th>
<th>Datalogger</th>
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<tbody>
<tr>
<td>DN 15</td>
<td>€15</td>
</tr>
<tr>
<td>DN 20</td>
<td>€15</td>
</tr>
<tr>
<td>DN 25</td>
<td>€25</td>
</tr>
<tr>
<td>R160*</td>
<td>€250</td>
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</tbody>
</table>

1 sensor included  €175

Gateway

Range - €400 to €800 (SIM Card Inside)

Annual maintenance fee (%)  
18% of total Robeau hardware configuration

Volume discounts apply to Hardware and Annual fee
They work with Robeau
Our Partners
Project a go? - Steps

• Define project objectives

• Robeau will recommend optimal configuration

• Production forecast/order

• Sensor installation

• Dashboard configuration and set up

Enjoy the savings!
Be « Green », Save Water, Save money

25% to 40% of water saved
Check your Water invoice now!

A connected device
Your building becomes smart!

LoRa technology inside
Welcome in the IoT World!

Hundreds of thousands liter of water saved
You are GREEN and are protecting our Planet for the future!
Join Rob’

On our Website www.robeau.tech

And support Water.org with us!

Opportunity starts with safe water

Water.org has empowered 10 million people with access to safe water and sanitation through affordable financing.
Contact us

Thomas Sonneville
Associe- Partner
2 Park End Cottages, OX20 1AQ
Bladon, Oxfordshire
United Kingdom
FR+33(0) 6 11 23 88 40 - UK+44(0)74 6714 7991
thomas.sonneville@robeau.tech
www.robeau.tech

Sylvain Spenle
Associe- Partner
2 Park End Cottages, OX20 1AQ
Bladon, Oxfordshire
United Kingdom
FR+33(0) 7 62 89 45 05
sylvain.spenle@robeau.tech
www.robeau.tech

John McGrath
International Sales Leader
Suite 68, GEC Building
Taylor’s Lane, Dublin 8
Ireland
+353(0) 85 711 7485
john.mcgrath@robeau.tech
www.robeau.tech
Robeau

Wireless flowmeter and valve for water monitoring

Key benefits:
- ROBEAU solution helps to analyze water consumption, to respect new coming water regulation programs and to detect water leaks.
- ROI in savings from 25 to 40% on water bills
- Application of submetering for monitoring real consumption in C&I and residential markets

Product:
- Certified for LoRaWAN networks
- Measures logged when in use and sent every 5 minutes in LoRaWAN class A
- Min accuracy of 0,3 l/min – Exists with high precision R160 (drop by drop)
- 3 years battery
- Reports battery voltage
- Ease of data integration through analytics platform, or open API, or directly via sensor

Company | Country  | Type            | Commercial contact         | Technical contact          |
---------|----------|-----------------|----------------------------|---------------------------|
Robeau   | Ireland  | Flowmeter for water | John McGrath              | Nicolas Follet        |
         |          |                 | John.mcgrath@robeau.tech  | Nicolas.follet@robeau.tech|

Confidential Information – Property Robeau Limited
Our sensors diameters

Pipes/Sensors dimension Table

<table>
<thead>
<tr>
<th>Inches</th>
<th>Internal Ø / external Ø (mm)</th>
<th>Nominal Ø</th>
<th>External Ø</th>
<th>Robeau sensor name</th>
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</thead>
<tbody>
<tr>
<td>1/8 ''</td>
<td>5 / 10</td>
<td>DN6</td>
<td>Ø10.2</td>
<td>not yet</td>
</tr>
<tr>
<td>1/4 ''</td>
<td>8 / 13</td>
<td>DN8</td>
<td>Ø13.5</td>
<td>not yet</td>
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<tr>
<td>3/8 ''</td>
<td>12 / 17</td>
<td>DN10</td>
<td>Ø17.2</td>
<td>ROBEAU DN10</td>
</tr>
<tr>
<td>1/2 ''</td>
<td>15 / 21</td>
<td>DN15</td>
<td>Ø21.3</td>
<td>ROBEAU DN15</td>
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<tr>
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<td>Ø26.9</td>
<td>ROBEAU DN20</td>
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<tr>
<td>1 ''</td>
<td>26 / 34</td>
<td>DN25</td>
<td>Ø33.7</td>
<td>ROBEAU DN25</td>
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</table>

Special Flowmeter

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Special precision Q3/Q1=160</td>
<td>DN20</td>
<td>ROBEAU R160</td>
<td></td>
</tr>
<tr>
<td>Special Pressure &gt;25 Bar</td>
<td>DN20</td>
<td>ROBEAU R25</td>
<td></td>
</tr>
</tbody>
</table>

Flowmeters is polyamide 6.6, reinforced with 30% fiberglass: Zytel FG70G30HSR3 BK309 from DuPont enterprise