

# AURA Water Monitoring: Empowering Users with Smart Technology Benefits



## Smart water meters

The modern smart water meters enable reliable data transmission without physical access to measuring devices, which increases efficiency and reduces costs.



## Automatic recording

The AURA system ensures continuous collection of accurate data on drinking water consumption at flexible intervals and enables immediate detection of anomalies.



## Remote transmission

The unique remote reading system enables accurate monitoring of drinking water consumption, which brings benefits for more efficient management of water resources.

ARSS technological solutions enable very accurate measurement of drinking water consumption, rapid detection of irregularities, from minor leaks to major network failures.

# Water User Categories and Water Meters Used

Usually water users are divided into two main groups:



Industrial Users



Households

# Data Management and Integration

An advanced data management system ensures comprehensive collection, processing and distribution of information among all stakeholders.



## AURA Software Package

- Automated data collection from water meters in various ways
- Reliable and secure data storage in a protected AURA domain
- Continuous 24/7 monitoring with meter reading capture via smart ECHO gateways/devices
- Top-notch encryption and robust security protocols for data protection.



## BILLING

- Data exchange between the AURA system and the billing system in various data formats
- Advanced verification of data accuracy and integrity for optimal service billing.



## CUSTOMER

- Generation and delivery of custom reports in various formats
- Guaranteed security with transfer via secure HTTPS protocols
- Modern REST API interface for easy integration with customer information systems
- Flexible data delivery via email notifications
- Transparent and intuitive access via the AURA user portal.



# Monitoring water consumption for industrial users

## 1 Required equipment for consumption monitoring

Connection of smart water meter to the ECHO Rep device, which enables hourly (for large industrial consumers), daily or weekly sending of readings.

## 2 ECHO Rep - wireless device

ECHO Rep is a wireless device that operates without maintenance and does not require an external power supply.

## 3 Security protocols and data transfer

Water meter status and warning data is sent via the ECHO Rep device using a reliable NB-IoT network with 256-bit encryption, ensuring complete security and privacy of the industrial user's data.

## 4 Flexible alert settings for users

Based on data received from water meters, custom alerts can be set in the AURA system.

Industrial users can precisely define limit values for flow (e.g. 5-500 m<sup>3</sup>/h), water temperature (2-50°C\*) and pressure in the system (1-16 bar\*), and select an email address for simultaneous notification.

\*if the water meter has these sensors installed

## 5 Automatic notification of irregularities

AURA will automatically send a notification to the selected email addresses when the set values are exceeded or when the system detects irregularities in the operation of the water meter (alarms) such as leaks, backflow, detected magnetic field near the water meter, etc.

## 6 Data exchange with industrial users

- Data transfer via secure HTTPS protocols
- Modern API interface for easy integration with customer information systems
- Flexible data delivery via email notifications
- Access via the AURA user portal.



# Household water consumption monitoring

## ECHO LOB - wireless device

ECHO Lob is a wireless device that operates without maintenance. **The device is suitable for installation in multi-dwelling buildings**, as it can receive **up to 500 - 64.000 water meters** (or other remote meters) in its vicinity/reach (depending on the ECHO Lob version).



### 1 Security protocols and data transfer

Water meter status and alert data is sent via one or the other ECHO device using a reliable NB-IoT network with 256-bit encryption, ensuring complete security and privacy of user data.

## ECHO Rep - wireless device

ECHO Rep is a wireless device that operates without maintenance and does not require an external power supply. It can be installed in a shaft as it has IP68 protection. **Up to 5 water meters** can be connected to it in its vicinity/reach.



### 2 Users can access data in two ways:

- Customisable data delivery via email notifications
- Access via the AURA user portal.



# User Portal (AURA Portal)

## Consumption Overview

Customers see a graphical and tabular display of drinking water consumption and the latest reading.

## Notifications

Alerts about deviations and unexpected events.

## Advice

Information on the use of drinking water and how to handle errors.

# User Settings






## Remote Water Flow Control

Users can activate the system for monitoring unexpected water consumption with a single click via the AURA Portal. This advanced feature allows monitoring of consumption during periods when the water meter should be idle (e.g. when you are away). If flow is detected, the system automatically sends an alert to the user's email address within 24 hours.

The function is particularly useful for owners of holiday homes, garden connections or other occasionally used properties, as it provides immediate notification of possible water leaks or unauthorised use.

**Moj nadzor nad merilnikom**

Če povlečete stikalo v rdečo barvo, ste nakazali, da v tem času ne sme biti porabe vode. Če bo v tem primeru vseeno zaznana sprememba v porabi vode, boste o tem obveščeni na vaš elektronski naslov. Če je stikalo modre barve, pričakujete normalno porabo vode.

9. sep. 2024, 00:00:16  
**244.783,00 m<sup>3</sup>**  
Brez opozoril

**Informacije o odčitkih**

IZBERITE DAN ▼ JUN ▼ 2024 ▼

DATUM ODČITKA	VREDNOST ODČITKA (M <sup>3</sup> )	POVPREČNA PORABA (M <sup>3</sup> )
1. jun. 2024, 12:00:24	238.393.600,00	83,90
3. jun. 2024, 12:00:33	238.444.300,00	50,70

# Prevention is Better Than Cure

Smart water consumption monitoring: Our solution acts like a superhero for your water meter!

It keeps an eye on your water usage, sending you instant alerts if there's a leak or a burst pipe.

It's perfect for anyone keen to prevent unexpected flooding and ensure their home or business premises are always secure!







## How Does It Work?

### Existing Water Meter

Send us a photo of your existing water meter. We will recommend and select the appropriate Echo device for your system.

### Quick Installation

Our team will connect the Echo device to your meter. We will register it in our database for immediate monitoring.

### Access Your Data

Register on the AURA portal. Start viewing your water consumption data immediately from any device.

# Equipment Components



## Echo Rep

Ideal for water meters with existing OMS radio communication at 868/433 MHz.



## Echo Lob

Perfect for multi-dwelling buildings where water meters, calorimeters, or other devices with radio communication are present.



## Echo Pulser

Our advanced solution for water meters with pulse output for industrial users. The device is battery-powered and includes data transmission.



# AURA Portal

## Real-time Monitoring

Monitor current water consumption. Review consumption patterns on an hourly, daily, weekly, or monthly basis on intuitive dashboards.

## Alert System

Receive email notifications about leaks, burst pipes, or unusual consumption patterns. Prevent expensive water damage.

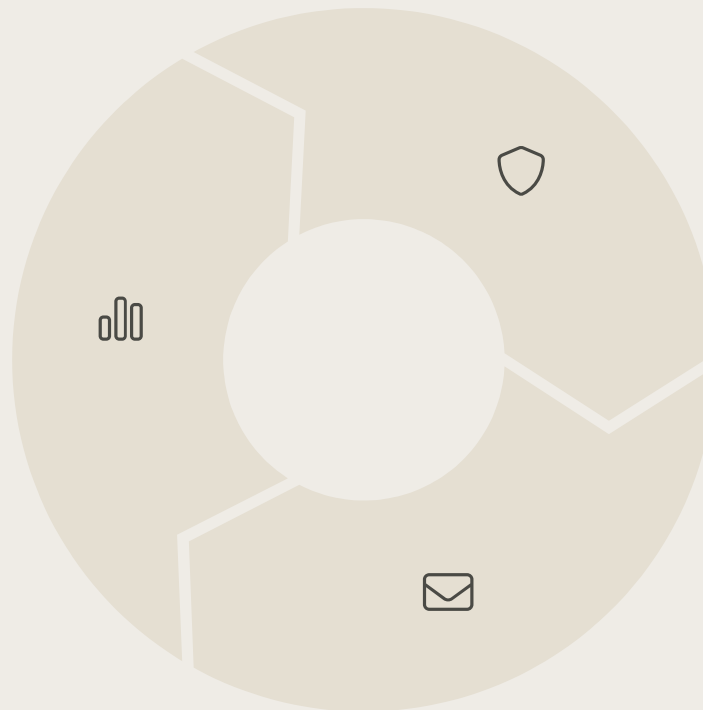
## Customisation

Customise your water consumption monitoring.

# Monthly Subscription Benefits

## Consumption Analytics

Detailed insight into your water consumption patterns and trends.



## Leak Protection

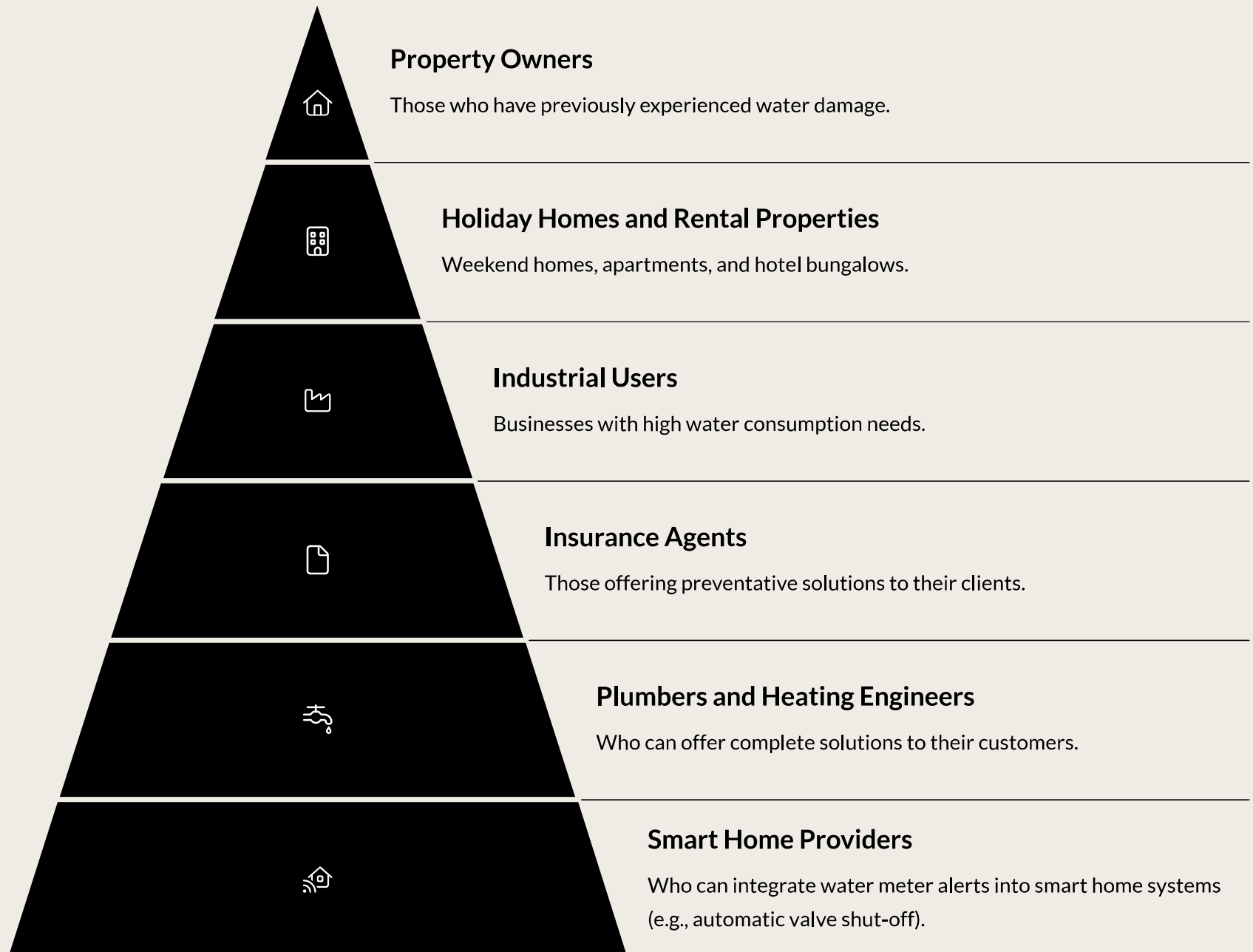
Early detection of leaks, before they cause significant damage.

## Notifications and Alerts

Customised email notifications for every water-related event.



# Who Benefits?





# What Can We Prevent?

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Seasonal disaster strikes: Holiday flat  
flooded, dreams ruined!

Shocking revelation:  
600 € of water leaked in six months!

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Brand new flat devastated by burst  
pipe after just one month!  
Neighbouring property also suffers  
significant damage!