



# Smart Water Overflow Controller: A Solution for Water Conservation

Discover how our intelligent system revolutionises water management, preventing wastage and ensuring sustainable practices for a brighter tomorrow.

# The Problem: Wasted Water and Manual Monitoring



## Unnecessary Water Wastage

- Residential and commercial properties often face significant water loss due to overflowing tanks.
- This leads to higher utility bills and contributes to water scarcity issues.

## Inefficient Manual Monitoring

- Current methods rely on human intervention, which is prone to error and can be time-consuming.
- Lack of real-time alerts means overflows are often detected too late.



# Introducing Our Smart Water Overflow Controller

Our innovative device is engineered to autonomously manage water levels, providing a seamless solution to prevent overflows and conserve this precious resource.

Automated Water  
Management

Real-time Efficiency

Sustainable Living

# How It Works: Sensors, Logic, and Actuation

## Sensor Detection

Advanced water level sensors continuously monitor the water tank, detecting rising levels.

## Intelligent Processing

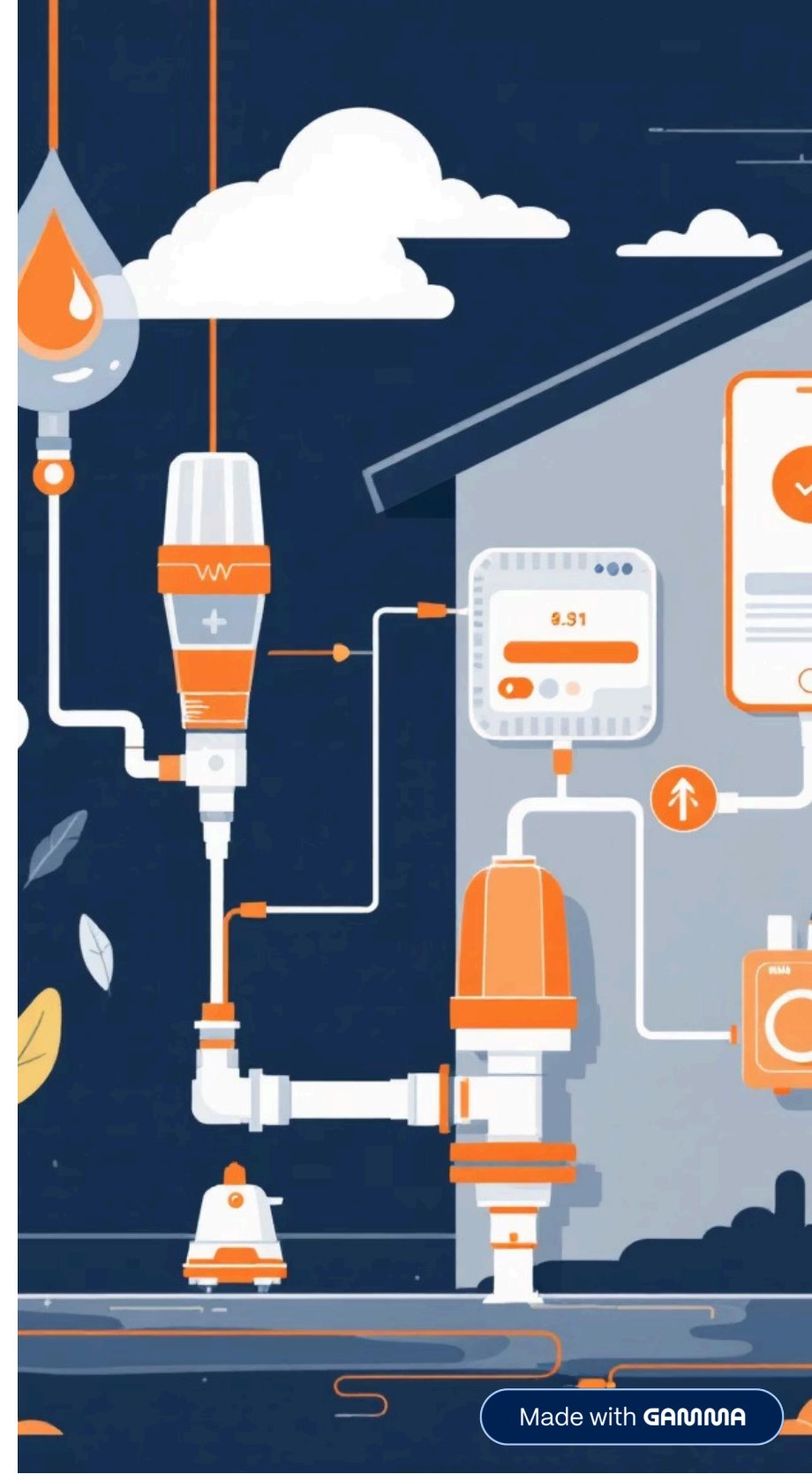
Data is fed to a microcontroller, which processes the information against pre-set thresholds.

## Automatic Actuation

Upon detecting an overflow risk, the system automatically shuts off the water supply.

## Instant Notifications

Users receive immediate alerts via mobile or email, ensuring awareness and control.







# Key Features: Real-time Monitoring, Automatic Shut-off, Alerts



## Real-time Monitoring

Access live water level data and system status through our intuitive mobile application.



## Automatic Shut-off

The system autonomously cuts off water flow once a pre-defined maximum level is reached.



## Instant Alerts

Receive immediate notifications on your smartphone or email for any detected overflow events.



## Customisable Settings

Adjust water level thresholds and alert preferences to suit your specific needs.

# Benefits: Water Savings, Cost Reduction, Environmental Impact



## Significant Water Savings

Eliminate water wastage from overflows, conserving thousands of litres annually.

## Reduced Utility Bills

Directly lower your monthly water expenses by preventing unnecessary water loss.

## Positive Environmental Impact

Contribute to global water conservation efforts and a more sustainable planet.

## Peace of Mind

Enjoy worry-free water management, knowing your system is protected 24/7.

# Technology Stack: Hardware and Software Components

## Microcontroller Unit (MCU)

The brain of the system, processing sensor data and controlling actuators.

## Mobile Application

User-friendly interface for monitoring, control, and customisation.



## Connectivity Module

Enables seamless communication with your home network and mobile devices.

## Precision Sensors

High-accuracy sensors for reliable water level detection.

## Smart Valve Actuator

Automated mechanism to shut off water supply precisely when needed.

# Case Studies/Use Cases: Homes, Apartments, Commercial Buildings

## Residential Homes

Ideal for preventing tank overflows in individual houses, protecting property from water damage.

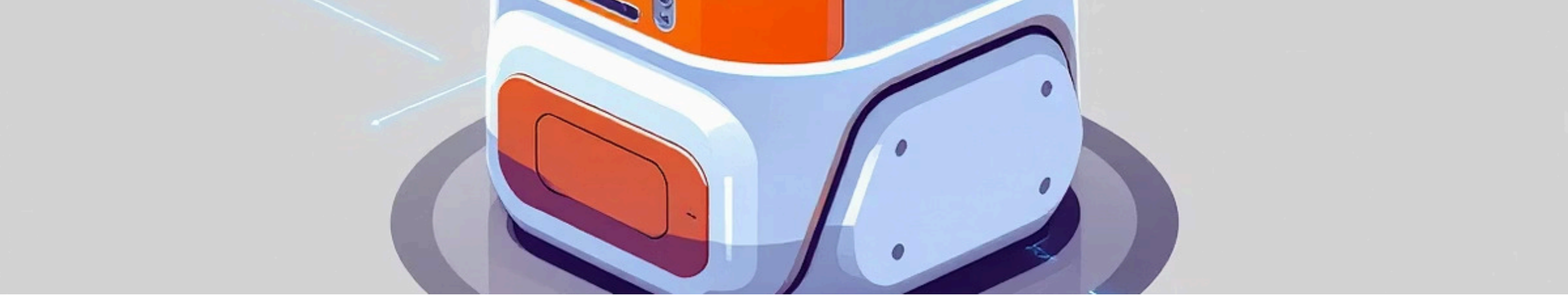
## Apartment Complexes

Manages water levels across multiple units, reducing collective water waste and disputes.

## Commercial Buildings

Ensures efficient water use in offices, hotels, and industrial facilities, leading to significant cost savings.





# Competitive Advantage and Future Enhancements

## Our Edge:

- Robust and reliable hardware with long-lasting performance.
- User-friendly interface with advanced customisation options.
- Seamless integration with existing smart home ecosystems.
- Exceptional customer support and warranty.

## Future Roadmap:

- Integration with AI for predictive maintenance and anomaly detection.
- Solar-powered models for enhanced sustainability.
- Expanded compatibility with various water systems and tank types.
- Voice command integration for hands-free control.



# Q&A and Call to Action: Join Us in Conserving Water

We are here to answer your queries and invite you to be a part of the water conservation movement. Let's make a difference, together!

[Contact Us](#)

[Learn More](#)