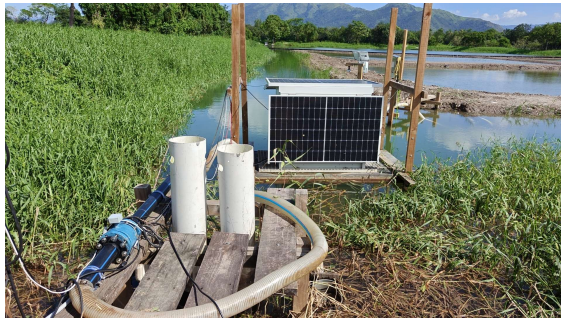


Smart Water Conservation System

Smart Water Pump Solution

Project Overview

This project is a floating smart water pump system that integrates solar power supply and real-time monitoring. Through modular design, it combines energy harvesting, data collection, and pump operation into a unified solution.



Key Features

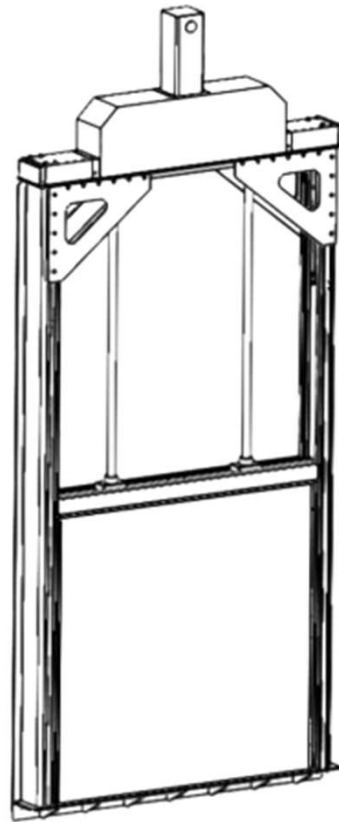
- **Floating design:** The device can stably float on water.
- **Solar power supply:** Uses high-efficiency solar panels, eco-friendly
- **Smart monitoring:** Collects water quality, water level, and flow data in real time.
- **Integrated control:** Supports remote management and automated scheduling.
- **Application Scenarios:** Agricultural irrigation, water resource management, environmental monitoring, emergency water supply.
- **Project Value:** This system reduces reliance on external power and manual monitoring, improves efficiency, and lowers maintenance costs.

Smart Water Conservation System

Smart Sluice Gate Solution

Project Overview

This project is a smart sluice gate solution powered by solar energy and integrated with real-time monitoring. With innovative structural design, it enables efficient water flow regulation and environmental data collection.



Key Features

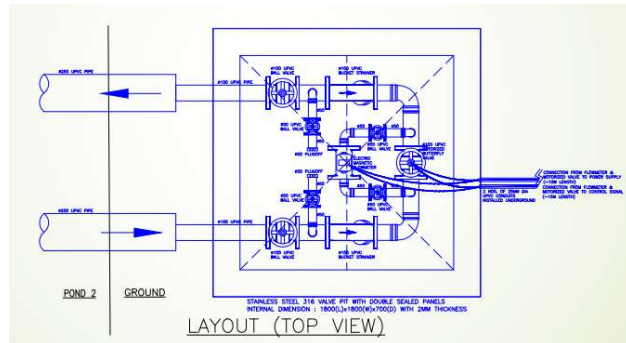
- **Solar power supply:** Ensures stable operation without external electricity.
- **Smart monitoring:** Collects water level, flow, and quality data in real time with remote transmission.
- **Hidden screw design:** Improves aesthetics and safety by avoiding exposed screws.
- **Integrated control:** Supports automated scheduling and remote management.
- **Application Scenarios:** Water resource management, agricultural irrigation, flood control, environmental monitoring.
- **Project Value :** This system achieves smart and sustainable sluice gate operation, enhances safety and durability, and reduces maintenance costs.

Smart Water Conservation System

Smart Water Valve System

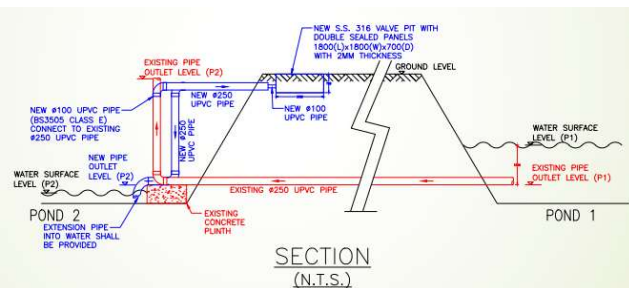
Project Overview

This project is a smart water valve system based on the siphon effect. It uses underground U-shaped pipes to connect two ponds and achieves automatic water level regulation through remote-controlled air release. The system utilizes the physical siphon principle to enable automatic water flow from high-level ponds to low-level ponds without external power, making it energy-efficient and environmentally friendly.



Key Features

- Energy Efficient: Natural siphon effect, no power required, zero emissions
- Low Maintenance: No mechanical wear, low costs, long service life
- Smart Management: Remote control & automated scheduling
- Hidden Design: Underground pipes, no landscape impact
- Sustainable: Simple, reliable, long-term stable operation



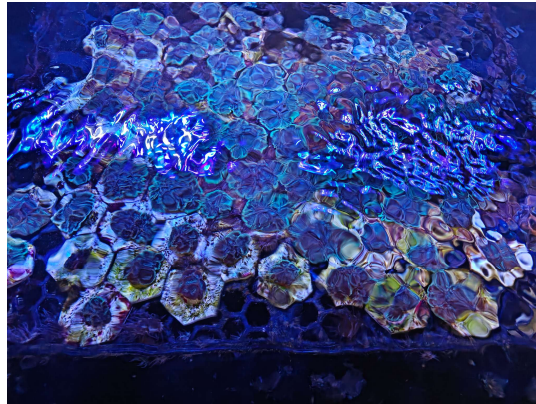
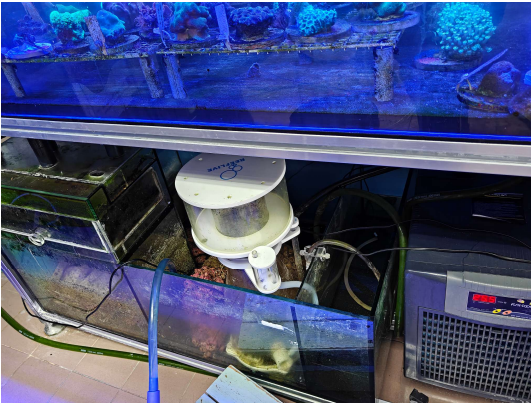
This system not only achieves zero-energy automatic water diversion, but also reduces maintenance costs and manual intervention through underground hidden design and remote smart control, embodying the perfect combination of physical siphon principle and smart water technology

Marine Ecological Protection Engineering

Smart Coral Tank Solution

Project Overview

This project is a smart system designed for coral farming, integrating automatic water exchange, seawater quality monitoring, and remote control.



Key Features

- **Automatic water exchange:** Reduces manual intervention.
- **Dual monitoring:** Monitors both external seawater and internal tank water quality.
- **Remote alerts:** Sends notifications for water quality anomalies or maintenance.
- **Remote control:** Operable via mobile or computer.
- **Integrated design:** Combines energy, monitoring, and control modules.
- **Project Value :** This solution simplifies coral ecosystem maintenance, enhancing safety and convenience in farming.

Illegal fishing monitoring solution

Project Overview

This project is a smart security system for bay conservation areas, using thermal imaging turrets for 24/7 patrol and intrusion detection.

Key Features

- **Thermal imaging turret:** Effective monitoring even at night or in adverse weather.
- **Automatic patrol:** 24-hour surveillance without manual intervention.
- **Intrusion alarm:** Alerts immediately when vessels enter restricted zones.
- **Vessel identification:** Identifies vessel types for targeted management.
- **Remote management:** Enables real-time monitoring and event logging.
- **Project Value :** This solution strengthens conservation area security, reduces patrol costs, and protects ecosystems from illegal vessel activity.

