

Dahir Smart Aquaculture Platform

Managing Farms from Anywhere at Any Time



Why Smart Farm?

Dahir smart aquaculture platform provides a comprehensive solution for automating all processes and equipment in an aquaculture environment. What we mean by automation is the ability to monitor and control farming equipment and workers locally and remotely, provide reports, send alerts in critical situations, optimize feeding, and provide Al suggestions to increase productivity.

Integration of all smart aquaculture solutions in a single infrastructure is the most significant feature of Dahir; Therefore, after implementing Dahir's infrastructure, any smart aquaculture solution can be easily added to the platform.









Why Dahir?

Dahir smart aquaculture platform is a brand of Ronika Co. Ltd. Ronika was established in 2018 by a team of talented and motivated young people to develop smart solutions based on the Internet of Things (IoT) technology. IoT-based automation makes it possible to monitor and control equipment, devices, people, etc., remotely.

Dahir is committed to providing expert consultation to every employer and carrying out design, production, implementation, and training in the best possible way. We also offer system customization according to the user's needs. Then, our primary work starts; Providing after-sales service is one of the most significant values defined for us.



Why Dahir?

Due to the broad range of aquaculture and diverse fisheries needs, automation in this industry has different aspects. Dahir's comprehensive platform provides you with all the following smart solutions in one app:

- Automation System
- · Acoustic Feeding Controller
- Smart Security System









Dahir Smart Aquaculture Solutions

Automation System

Dahir Automation System measures and displays the water quality parameters in real-time in the mobile or web application. Additionally, the farmer can remotely control farm equipment and receive alerts in critical conditions by defining thresholds for each parameter.

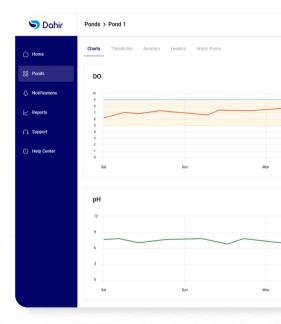
How it helps:

- Real-time monitoring of dissolved oxygen, temperature, pH, turbidity, electrical conductivity, salinity, ammonium, and ORP parameters.
- Controlling equipment remotely.
- Scheduling aeration and feeding operations.
- Automating aerators based on the oxygen levels.
- Sending alerts when parameters exceed thresholds and equipment status changes.
- Generating reports of the farm's history.









Dahir Smart Aquaculture Solutions

Acoustic Feeding Controller

Dahir Smart Feeding Controller manages each pond's automatic feeders by analyzing the aquatic behavior towards food to optimize the feeding process. Therefore, feeders will only operate when the aquatic need feeding. By optimizing this process, no food will be wasted, and the farmer can minimize the Feed Conversion Ratio (FCR).

How it helps:

- Real-time monitoring of dissolved oxygen and temperature in each pond.
- · Considering timeframes for feeding
- · Analyzing aquatic behavior while feeding
- · Controlling pond's automatic feeders to optimize the FCR.



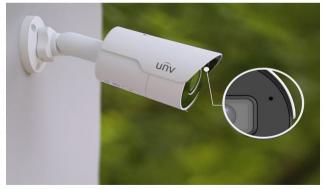
Dahir Smart Aquaculture Solutions

Smart Security Systems

By using real-time video surveillance and tracking systems, the farmer can ensure the productiveness of employees and establish security without having to be physically present in the farm.

- Tracking: Monitoring the current location of workers and the history of their movement on a map using tracking bracelets
- Smart Security camera: Real-time visual surveillance from any place by climate -resistant cameras
- Virtual Fence: Deploying sensors and cameras around the farm to create a virtual fence capable of detecting the presence and sending alerts.









Dahir Application

Farmers can monitor, control, and generate reports of each pond using the Dahir web and mobile app. The Dahir app can be used both locally (offline) and on the cloud (online), depending on the farm's infrastructure.

The Features:

- Online and offline access to the app
- · Customized dashboards for each farmer
- · Generating reports in real time
- Monitoring water quality remotely
- Defining thresholds to receive alerts.
- · Controlling or automating equipment remotely

Use Cases

Given the extent of Dahir smart products, our platform can be used to enhance optimization in all aquaculture farms, including:

- Hatcheries
- Online and offline access to the app
- Shrimp Nurseries
- Shrimp Farms
- Fish Farms
- Mariculture
- Ornamental Fish Cultivation
- Algae Farms
- Intensive Shrimp Farms

















Right Next to You

Our vision is to become the smart aquaculture leader in the Middle East by providing the most comprehensive platform for shrimp, fish, and other aquaculture farms. Dahir's smart platform products will help you increase productivity and reduce costs through 24/7 monitoring and equipment control. The information collected from farms is a great source for development planning.

Some of our successful projects in fisheries industry:

- 55 smart shrimp farms in Bushehr, Iran
- 15 smart fish farms in Kermanshah, Iran

Some of our successful projects related to automation industry:

- Design of ThingsPod comprehensive IoT platform
- Providing smart water metering solution for universities in Iran
- Design and implementation of IoT infrastructure at Bushehr Port
- · Persian Gulf University's greenhouse automation

Let's connect:

**** +98 937 022 5808

www.dahir.io/en

