



AD506

# aquaDam

Automatic Equipment for the  
Quality Control in Dammed  
Water



## Operation

- **Manual mode:** The measurement process can be carried out by local order or by a remote order from the control center.
- **Automatic mode:** the aquaDam equipment automatically measures the parameters at different depths to obtain profiles. The frequency and depth of the measurement points are fully configurable.
- **Self-cleaning system:** Longs the autonomy of the system, while keeping the probe wet.
- **Transmission to the control center:** Data can be automatically transmitted to control centers and alert and monitoring systems (EcoData® by Adasa) for analysis and exploitation. In parallel, it carries out the local exploitation of the measures with the capacity to send alarms to other equipment or to control networks.

## Design

- Multiparametric probe, which incorporates the following parameters: temperature, pH, conductivity, ORP, dissolved oxygen, turbidity, chlorophyll. Other parameters: on request.
- Multiparametric probe control system, which manages the positioning, communication and self-cleaning and humidification of the probe.
- Software and electronics capable of controlling the system and managing data.

The dynamic vision of water quality has become a necessity for the proper management of the planet's water resources. To this end, it is necessary to obtain basic and meaningful information on the water bodies.

The state of eutrophication in which most reservoirs are found represents a serious problem for the management of the resource. The excess of nutrients that accumulate in these (discharge of wastewater, fertilizers, etc.) cause a high primary production. The excessive amount of biomass generated, when decomposing, produces serious anoxic problems with the consequent appearance of toxic substances, which are aggravated during the stratification period. Much of the primary production tends to be of cyanobacterial species that increase the risk of cyanotoxin generation.

Adasa's aquaDam equipment represents the best solution on the market for automatic monitoring of the quality of dammed water.

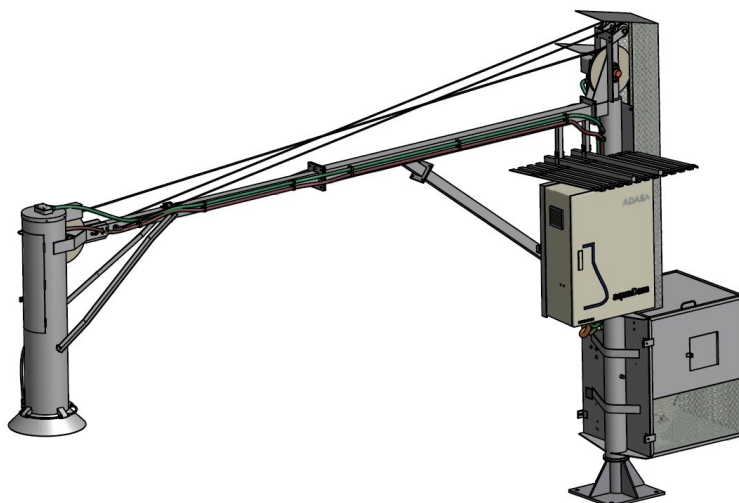
The system consists of a self-positioning multiparametric probe that allows to carry out measurement cycles, automatically and autonomously, of the representative parameters of the quality of the dammed water at different depths.

It is an effective tool for the management of dammed water that allows the minimization of operating costs and organoleptic problems in its purification.

In terms of communication with control center, it allows the transmission of MQTT messages, which facilitates integration with IoT-oriented services, such as the Adasa's ecoData® Alert and Monitoring System.

## Noteworthy Characteristics

- Only **integrated and complete solution** from the collection of measurements measures to the presentation of profiles.
- Generation of Historical records of the profiles taken.
- Fundamental information for the management of dammed water makint it easier to obtain the optimum point of collection in real time.
- **Automatic and remote** operation with high autonomy thanks to the robustness of its mechanical design and patented cleaning system.
- Easily integrated into control and exploitation networks (water quality network control, ...)
- **Quick and easy** installation.



## Technical Specifications

### Supply voltage and consumption

220Vac / 50 Hz. 700W/3,300W without / with complete cleaning system.

### Communications

ModBus TCP, MQTT (ecoData®), Ftp  
Other options: Talk to us for more options

### Physical ports

Ethernet (RJ45) and USB

### User Interface

Remote Desktop and WEB access.

### Measurement range

Temperature	0 - 50 °C
pH	0 - 14 udpH
ORP	-1,000 - 1,000 mV
Conductivity	0 - 200 mS/cm
Dissolved Oxygen	0 - 20 ppm O <sub>2</sub>
Turbidity	5 - 1,000 NTU
Chlorophyll	0 - 200 µg/L (ppb)
Phycocyanin	0 - 200 µg/L (ppb)
Depth	0 - 50.00 m
Other parameters	Consult

All Adasa products are designed and manufactured according to the highest quality standards:

- ISO 9001 Quality Management
- ISO 14001 Environmental Management
- EMAS Eco-Management and Audit Scheme