

# AlgaPro DC6000



## *Autonomous Water Quality Surveillance*

The AlgaPro DC6000 is an AI-powered online plankton monitoring system designed for automated and continuous water quality monitoring. It combines intelligent image recognition, automatic sampling, high-resolution imaging, and remote data transmission to accurately identify and analyze plankton in real time, making it ideal for long-term unattended deployment in monitoring stations, outdoor environments, and floating platforms.

### Fully Automated Monitoring



The system automatically performs sample collection, fixation, concentration, cleaning, scanning, recognition, counting, and data uploading, significantly reducing the need for manual operation while improving monitoring efficiency.

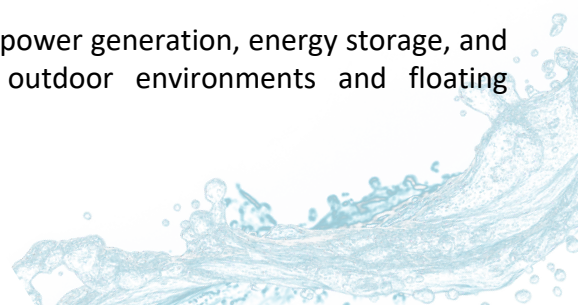
### Remote Monitoring & Real-Time Data

With integrated remote communication and automatic data transmission, AlgaPro DC6000 enables authorities and operators to monitor water conditions in real time and respond quickly to abnormalities.



### Outdoor & Floating Deployment Capability

Advanced models such as the AlgaPro DC6000 support solar power generation, energy storage, and 4G communication, making them suitable for remote outdoor environments and floating monitoring stations without external power supply.



Technical Specifications	AlgaPro DC6000
Electrical Rating	• AC 220/110V
UAV Configuration	• Dual-UAV Configuration on a Single Platform
Remote Analysis Function	• Supports Remote Water Quality and Water Parameter Analysis
Flow Monitoring Function	• Supports Water Flow Monitoring
Operation Mode	• Fully Automated, Autonomous UAV Take-off and Landing
Operating Temperature	• -20°C to 55°C
Maximum Take-off Weight	• 32.5 kg
Obstacle Avoidance	• Forward Millimeter-Wave Radar Obstacle Avoidance
Water Sampling Capability	• Multi-point Water Sampling
Sample Collection	• Scheduled Sampling with Configurable Sampling Time
Sample Pre-treatment	• Automatic Filtration, Automatic Reagent Addition, Automatic Sample Concentration
Microscope	• Biological-grade Microscope, 40X Objective
Camera	• High-speed Industrial Camera, Resolution ≥ 20 MP, 30 fps
Image Acquisition Method	• Continuous Multi-Focus Deep Scanning with Automatic Acquisition of >100 Images at Different Focal Planes
Recognition Capability	• Identifies 165 Common Algae Species; Supports Customized Species Database Development
Intelligent Hardware Control	• Software Automatically Controls Different Hardware Modules Based on Detection Stage
Communications	• Ethernet, Fiber Optic, 4G Network Integration



ZWECC is a Singapore-based technology company focused on creating innovative water technology solutions. We carry out extensive technological research to develop cutting-edge solutions that help our customers solve challenging problems in the water and environmental sector. Our smart water technology solutions have been implemented in Singapore, the US, China, Taiwan, and the Middle East and have won numerous awards.

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