

UAV Water Quality Monitor

ATH9010WT

Features

- Parameters : chlorophyll, total phosphorus, total nitrogen, total suspended solids;
- The distribution pseudo-color map is directly formed, which is intuitive and clear.
- Vertical takeoff and landing drone or multi-rotor drone
- Maximum patrol distance: 200 kilometers
- Maximum river width: 2 Km
- Maximum flight altitude: 5 Km
- Maximum band range: 400~1000nm
- Maximum number of spatial bands: 2048
- Maximum number of spectral bands: 1088
- Compact size and light weight: <4 Kg (different for each model);
- Built-in calibration spectrometer for real-time calibration of radiation spectrum
- High-definition visible light camera for image fusion;
- Can add on-site water collection function

Application

- Coastline and marine environment monitoring
- Lake and watershed environmental monitoring
- Ecological environment protection and mining environment monitoring
- Water quality testing, soil monitoring

Description

The ATH9010WT UAV-borne hyperspectral imaging river water quality inspection system is a UAV remote sensing monitoring product launched by Optosky for application fields such as rivers, lakes, oceans, and water sources that need to monitor water quality. ATH9010WT is a brand-new product that combines the functions of large-scale hyperspectral water quality monitoring, on-site video evidence collection, and on-site water collection (optional).

ATH9010WT adopts the world's leading hyperspectral water quality remote sensing technology. It has a built-in high-performance hyperspectral analyzer developed and produced by Optosky. It has invested a lot of money in conjunction with the Chinese Academy of Sciences to jointly develop and train a deep learning inversion algorithm, and has experienced tens of thousands of on-site water quality tests. Sample experiments were carried out to successfully develop a multi-parameter real-time detector for water quality.

ATH9010WT can provide in-situ multi-parameter water quality parameters in real time, promptly alarm for abnormal conditions, and record on-site visible light videos/pictures.

Model	Description
ATH9010SL	Multi-rotor drones
ATH9010SL-FW	Vertical take-off and landing fixed-wing UAV



ATH9010WT



ATH9010WT-FW

1. Accessory list

NO.	Commodity	Number	Optional
1	Hyperspectral imager (400-1000nm) mainframe	1 unit	Standard
2	6 Rotor UAV	1 unit	Standard
3	Highly reliable UAV gimbals and landing gears	1 unit	Standard
4	On-board data acquisition and high-capacity data storage system	1 set	Standard
5	Battery pack	1 piece	Standard
6	Objective lens and radiometric calibration	1 set	Standard
7	Hyperspectral imaging water quality calculation algorithm software	1 set	Standard
8	50cm diameter 95% field calibration whiteboard	1 piece	Standard
9	High precision indoor scanning head	1 set	Optional
10	High blue steady current halogen lamp	4 pieces	Optional
11	Standard calibration plate	1 set	Optional
12	Original imported field-specific calibration cloth (1.2m×1.2m)	1 piece	Optional
13	360 degree field rotating platform	1 piece	Optional
14	Tripod	1 piece	Optional
15	Field-specific high-capacity lithium battery	2 pieces	Optional
16	Measurement darkroom	1 piece	Optional
17	Field portable transport case	1 piece	Optional
18	Sweeping device	1 unit	Optional