

## Ultraviolet Fluorescent Oil Pollution Remote Sensing Detector

# ATF2500

### Description

ATF2500 handheld ultraviolet fluorescent oil pollution remote sensing detector is a non-contact optical remote detector that can automatically detect whether the water or the ground contains oil. The equipment is highly sensitive and easy to maintain. It can detect oil leaks or spills in time, allowing users to control and respond to dangerous situations as soon as possible.

ATF2500 can detect 1um thick oil layer at a distance of 10 meters above the water surface. The detector emits ultraviolet pulse beam to the water surface or the ground, excites the oil molecules in the target area to generate fluorescence, use the inherent fluorescence properties of the oil molecules to identify its chemical composition, and send an early warning signal to the operator.

#### Detection oil category:

Automotive oil, turbine oil, vegetable oil, fuel oil, Marine diesel oil, crude oil, civil fuel oil, gasoline, aviation kerosene, lubricating oil, hydraulic oil, mineral oil, etc.

#### Application Field:

Petroleum and petrochemical facilities, transportation, logistics and maritime operations, distribution and power generation facilities, environmental monitoring in ecologically important areas, water treatment equipment, remote land/offshore applications, mining, industrial applications, agriculture.

### Features

- Working principle: UV fluorescence principle of oil stains.
- It runs 24 hours a day, without restrictions during the day and night, and is suitable for extreme environments.
- Oil pollution can be detected remotely, up to a detection distance of 10 meters.
- Long life, maintenance-free.
- 5-year life, low power operation (< 2W).
- Ultra high sensitivity. The advanced software algorithm ensures the detection limit as low as 1um thick oil film and reduces the misstatement rate..
- Built-in system calibration, can set the industry standard detection level, can also set the alarm limit according to customer needs, and reduce the false alarm rate.

Model	Description
ATF2500	Universal, handheld oil pollution detector
ATF2500ONL	Online installation, RS485/Modbus output
ATF2500UAV	UAV ultraviolet fluorescent oil pollution remote sensing detector



Fig.1 ATF2500 Handheld Ultraviolet Fluorescence  
Oil Contamination Spectrometer



Fig.2 ATF2500ONL online installation, RS485/Modbus output oil pollution remote sensing detector

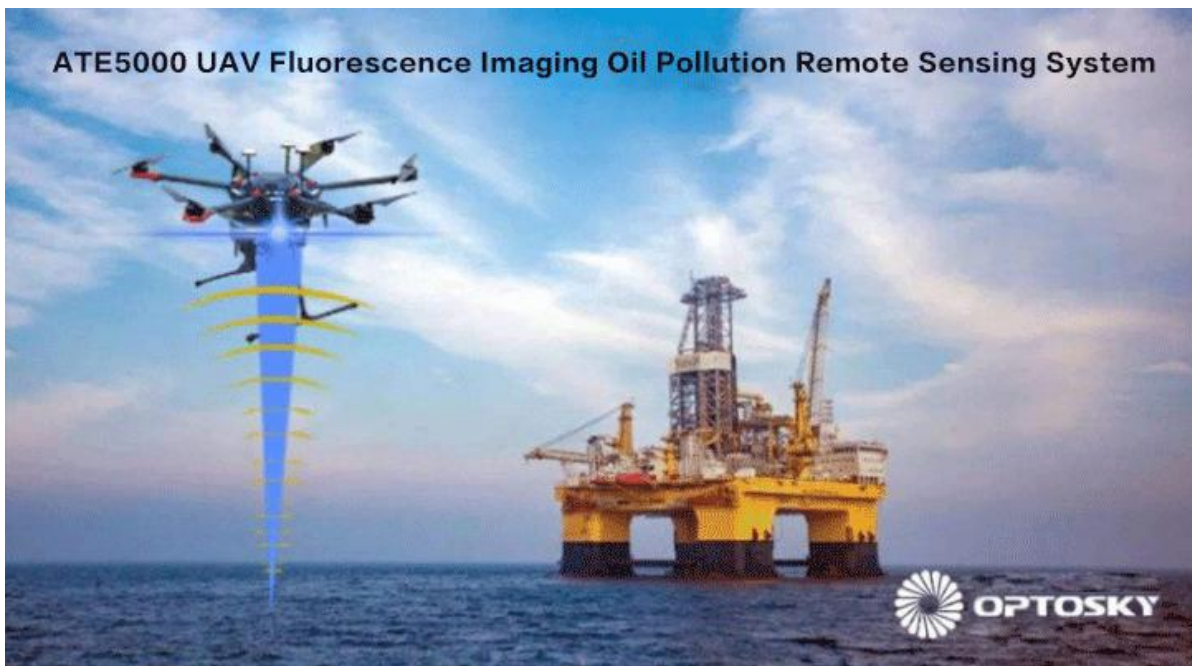


Fig 3. ATF2500UAV UAV ultraviolet fluorescent oil pollution remote sensing detector (also known as ATE5000)

## Specification

Project	Parameter	Note
Measuring distance	0~10 meters above water or ground	
Detection object	Motor oil, turbine oil, vegetable oil, fuel oil, marine diesel, crude oil, civil fuel oil, gasoline, aviation kerosene, lubricating oil, hydraulic oil, mineral oil, etc.	
Light source	Pulsed deep ultraviolet light source	
Light source life	> 10 years	
Spectral range	300-700nm	
Measure field angle	3°	
Measurement area	30cm diameter (10 meters away)	
Power supply	Standard 12 VDC (10-30V)	
Power	< 2W (Direct current)	
Size	24X16X6 cm	
Weight	1.6 kg	

## Accessories:

Standard spare parts	
1	USB data line
2	Charging adapter 5V/3A
3	Narrow field of view lens
Optional accessories	
1	Test stand