

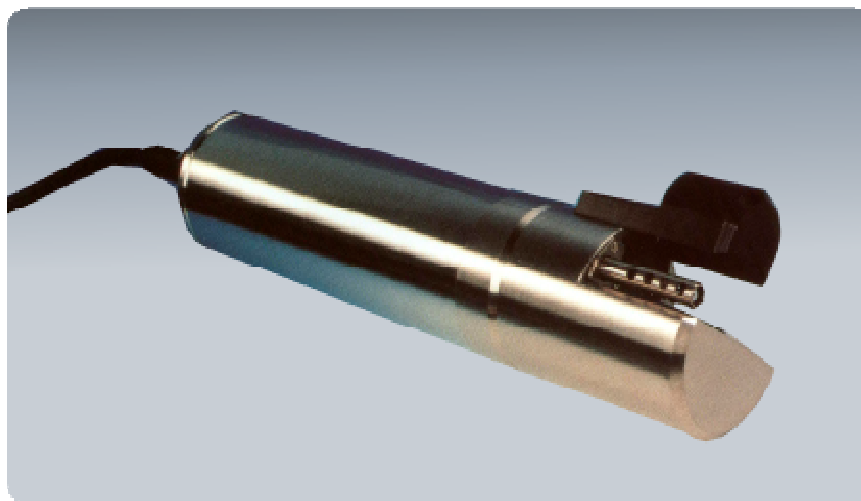
UV AquaTracka

In-situ Hydrocarbon Fluorometer



APPLICATIONS

- In-situ crude & refined hydrocarbon detection / monitoring.
- Water mass indicator studies (CDOM)
- Pipeline leak detection
- Pollution monitoring
- Designed for use on profiling, towed, moored or ROV deployments and from gliders
- Biogeochemical oceanography



UV AquaTracka shown with optional light cowl



FEATURES

- Robust miniature PMT
- High sensitivity
- Built In Test (BITE) circuitry gives high stability and extended calibration intervals
- Low power consumption
- Analogue output
- Optional temperature probe
- Optional ambient light baffling cowl

UV AquaTracka

INSTRUMENT DESCRIPTION

The UV AquaTracka is a submersible fluorometer to monitor the concentration of refined hydrocarbons (360nm) or crude hydrocarbons (440nm) in a wide range of oceanographic applications. In support of this, it has been designed to be deployed from gliders, undulating vehicles, moored or profiling systems. This robust, compact, lightweight instrument has built in test (BITE) circuitry which ensures high stability. The instrument is easy to use and gives accurate and repeatable measurements.

The UV AquaTracka's pressure housing is manufactured in titanium for long life. It utilizes a pulsed xenon light source, a miniature PMT as the detector and incorporates a 20-bit ADC under the control of a micro controller. Data output is factory set as logarithmic analogue. The turret mechanical arrangement and main PCB allows for an optional Pt100 temperature probe. This option allows user correction of the fluorescence signal quantum yield variation with temperature. For deck and laboratory applications a flow through cowling is available.

The instrument is rated to 6000 metres and has an optional ambient light baffling cowl for use in surface waters.

SPECIFICATION

Physical

Length (excluding connector):	406.0 mm
Diameter (max. excluding light baffling cowl):	89.0 mm
Weight in air:	5.5 kg
Weight in water:	3.5 kg
Depth rating:	6000m
Materials of construction	
Pressure housing	Titanium (grade 5)
Fixings (external):	Titanium

Optical

Peak wavelength:	Refined Hydrocarbon (360nm)		Crude Hydrocarbon (440nm)	
	<i>Excitation</i>	<i>Emission</i>	<i>Excitation</i>	<i>Emission</i>
	239nm	360nm	239nm	440nm

Performance

Range:	Refined Hydrocarbon (360nm)	Crude Hydrocarbon (440nm)
	Resolution:	0.001 to 10 µg/l Carbazole 0.001 µg/l Carbazole or 1% of reading

Environmental

Operating temperature:	-2 deg C to +40 deg C
Storage temperature:	-40 deg C to +70 deg C

Temperature Probe – Optional (600m version only)

Range:	-2 deg C to +32 deg C
Accuracy:	0.01 deg C
Resolution: Analogue	10 deg C/V

Options: Deck units, calibration equipment, software for data acquisition, processing and display.



**Chelsea
Technologies
Group Ltd**

55 Central Avenue
West Molesey
Surrey KT8 2QZ
United Kingdom
Tel: +44 (0)20 8481 9000
Fax: +44 (0)20 8941 9319
sales@chelsea.co.uk
www.chelsea.co.uk



In view of our policy of continual improvement, the designs and specifications of our products may vary from those described.
(2271-007-PD-E-UVAquaTracka-Datasheet-0155)