

# UniLux

The new family of low cost miniature digital fluorimeters  
from Chelsea Technologies



## APPLICATIONS

- In-situ chlorophyll & algae class studies
- Environmental monitoring
- Dye tracing
- Particulate studies
- Process control
- Designed for moored, profiled, towed or ROV / AUV platforms



## FEATURES

- Miniature, low cost *in-situ* fluorimeter
- Digital output in engineering units
- High sensitivity
- Single wavelength excitation options
- Low power consumption
- Additional analogue output as standard
- High rejection of ambient daylight
- Sampling rate 0.1 – 3Hz
- Low turbidity breakthrough
- Internal light output referencing
- Low Noise and large dynamic range
- Acetal housing

## INSTRUMENT DESCRIPTION

The UniLux is an innovative series of new low cost digital in-situ fluorimeters, which offer the user significantly increased functionality to existing in-situ fluorimeter designs.

Two signals are obtained from the UniLux fluorimeters, one being a digital signal (RS232 with RS422 as an option), and a 0 to 5 volt analogue output, making the UniLux suitable for integrating into many different systems and platforms. For stand-alone applications, the UniLux Fluorimeter can also be deployed with a small handheld portable interface unit designed for operation with commercially available PDAs and laptop PCs.

A Graphical User Interface is provided, which allows the user to record time stamped data when operating the UniLux directly from a PC. A Flow Through Manifold is available for the UniLux for in-flow applications.

Chelsea Technologies Group has used expertise gained within its Life Science Group to employ manufacturing techniques that have resulted in a significant reduction in production costs, providing the marine, fresh water, surveying and process control markets with a low cost, high performance sensor.

Although small and low cost, the UniLux fluorimeter maintains the performance standards and build quality previously maintained by the Chelsea range of in-situ fluorimeters.

Users can select from a wide range of fluorescent parameters, specifying the UniLux tailored to their monitoring requirements.

## SPECIFICATION

### Configurations available:

- Chlorophyll-a
- Phycoerythrin
- Rhodamine WT
- Phycocyanin
- Fluoroscein
- Nephelometer

### Performance:

Concentration range	0 to 100 µg / l (up to 500 µg / l as an option)
Detection limit:	0.01 µg / l or 0.01 FTU (Nephelometer)

### Mechanical

Size:	26.5mm dia x 105mm (140mm to end of connector)
Weight in air:	100g
Pressure housing:	Acetal C
Depth rating:	600 metres
Connector:	MCBH-6-MP-SS

### Electrical

Input voltage:	11 to 18Vdc
Data output:	Digital RS232 and analogue 0 to 5Vdc (RS422 as an option)
Power requirements:	< 1 Watt @ 12 volt

**Delivery Package:** UniLux, Handbook, flying lead (0.5m) with locking sleeve & Graphical User Interface.



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