

Glow Tracka

Transmissiomètre

Applications

- Primarily used in the marine environment for biomass studies.
- Whilst the abundance of individual bioluminescent species can be studied, it is often an indication of toxic algal blooms.
- Primary production assessment
- Designed to be moored or profiled (with pumped systems) or deployed in towed vehicles (AQUA^{shuttle}, NV-Shuttle, SeaSoar).



Features

- Small, rugged
- Low power consumption
- High sensitivity
- interface for flow sensor



Product Description

GLOW^{tracka}'s precision flow meter stimulates bioluminescent organisms – principally dinoflagellates. The instrument then measures the light flashes as the organisms pass the detector. The complete range of flashes that can occur – from single events to mesoscale – is measured.

The measurements indicate changes in primary productivity in an area, giving the instrument a useful role in pollution monitoring and biomass studies. Since the abundance of individual bioluminescent species can be studied, it is often an indication of toxic algal blooms.

GLOW^{tracka} is designed to be moored, profiled (with pumped systems) or deployed in towed vehicles.



The [AQUA^{shuttle}](#) towed vehicle system in use with the Royal Navy contains a GLOW^{tracka}.

Specification

GENERAL

Type:	Flow through (28mm internal pipe diam.)
Optical viewing:	Transverse to flow
Detector:	Photodiode (100 sq.mm.)

Irradiance detectivity	10 picowatt at 560nm over z.f. -50Hz(-3db)
Relative responsivity:	400nm 600nm 700nm x 0.4 x 1.1 x 1.3 (nom.)
Power requirement:	External supply version: 6.0V to 25V (40mA at 12V nominal); fully insulated from all outputs via DC-DC converter.
Grounding:	All circuitry DC isolated from chassis
Signal outputs:	All 1 volt full-scale, 0.5 ohm source resistance, (z.f. - 50Hz) > 10 kilohm load
Flowmeter input:	Zero-crossing required, from +/-5mV to +/-100V; 500Hz full-scale, other scalings as factory option.
Depth capability:	1000 meters standard.
Dimensions:	112.5mm. diameter; 152mm overall length.
Weights (approx):	2.4Kg in air
Connector:	Impulse LPMIL-4-PS