

All Purpose Fluorometer for Quantification & Detection

## On-Line Fluorometer

Continuos Monitoring for Wastewater, Algal Blooms  
Cooling Water, Dye Tracers, Chemical Injection, etc.

## Field Portable

Lightweight. Battery Operated. Self-Contained.  
Unparalleled On-Site Analysis.

## Laboratory

Accurate. Stable. Compact. Cost Effective.

## Bioluminescence

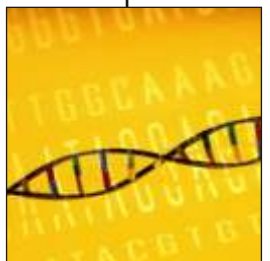
ATP/Luciferin-Luciferase.



## Overview

Multiple applications and multiple sampling options; the GFL-1 Fluorometer's unparalleled versatility proves there are no limitations. Whether your research is in a chaotic field environment or a controlled laboratory you'll be guaranteed accurate, repeatable measurements. The unique exchangeable cuvette system allows the user to switch between Discrete Cuvettes and Flow-Through Mode in just moments. Likewise, the quick change Filter Sets can be configured for DNA and in an instant be ready for Tracer Dyes or virtually any other application.

The precision of a bench-top unit packed in a lightweight, portable case the GFL-1 Fluorometer is also amazingly affordable. The GFL-1 is also available for rental for your one-time applications.



## Applications

### Tracer Dyes

- Ground Water Mapping
- Time of Travel/Flow Measurement
- Contaminant Tracking
- Mixing Zone Studies

### Algae

- Estimate Algal BioMass
- Monitor Algal Blooms

### Oil-in-Water

- Pollution Studies & Monitoring
- Emergency Response

### BioTechnology

- DNA/RNA Quantification
- Genetic Markers
- Protein & Immuno Assays

# OPTI-SCIENCES GFL-1 Fluorometer

The GFL-1 Filter Fluorometer allows researchers unprecedented on-site investigation capability. Incorporating the latest advances in micro-electronics and fluorescence detection, the instrument provides accurate substance quantification in a rugged, lightweight, field portable package. Scientists, Researchers and Hydrology Experts alike will enjoy tremendous advantages, obtaining mission critical data faster and easier than ever before. Because the GFL-1 is ready to go whenever and wherever your work takes you, it significantly reduces response time and logistical planning. With the GFL-1 your lab is in one 7 pound suitcase; equipped with onboard data logging, internal long-life battery and exchangeable application specific filter sets and more, it allows the user to run extensive on-site studies.

Until now so-called "portable" fluorometers have been bulky and rather heavy, lacking the pick-up-and-go flexibility researchers require to properly perform in-depth field analysis. The fact is, lugging 40 pounds of equipment along with an external battery is rarely feasible, not to mention physically exhausting. The GFL-1 eliminates these peripheral concerns allowing you to place the emphasis where it should be, conducting the experiment and obtaining accurate, reliable data.

The GFL-1 affords the user a number of options to accommodate a variety of research and budget criteria. Application specific optics, extended automatic data logging, flow through cells, pumps, enhanced sensitivity and detection range, external battery case (~10 lbs) for extended field use, or it can even be configured for continuous monitoring/on-line applications. We will gladly work with you in tailoring the GFL-1 to your needs.

As a plain bench-top unit, the price and accuracy of the GFL-1 would make it an excellent addition to any laboratory. But the advanced design and portability make the GFL-1 a necessity for any field researcher.

*Change Cuvette &  
Optical Filters  
in Seconds!*



*Pick-up and Go  
Field Portability*

## Technical Specifications

**Configuration:** 90 degree filter fluorometer with reference beam.

**Sample Cell:** Interchangeable holder for: 20ml vial, 1cm square cuvette, 13mm test tube, and flow through cell.

**Detector:** Silicon photodiode (PMT optional) with exchangeable filter.

**Source:** Exchangeable solid state source with integral optical filter.

**Temperature Compensation:** Sensor included in flow-through cell. Constant may be entered in test mode.

**Data Logging:** Built in. Manual, or automatic for unattended operation. Includes real time clock for timed measurements.

**Storage Capacity:** 61,000 points & 6 multi-point calibration tables.

**Sample Rate:** Manual, automatic 15 s/pt ~ 5 min/pt.

**Units:** User selectable (ppt, ppb, ug/l, uMols, etc.) or arbitrary units.

**Output:** RS-232 serial output.

**User Interface:** 192 x 192 pixel LCD with backlight.  
12 button keypad

**Power Supply:** Internal 12V 2Ah battery 110Vac adapter included (220 Vac option).

**Operating Temperature:** 32 ~ 122 °F (0 ~ 50 °C), 10~90% RH non-condensing.

**Enclosure:** Water tight ABS case.

**Dimensions:** 10.75" x 9.75" x 5" (27cm x 25cm x 13cm).

**Weight:** 7.5 lbs (3.4 kg).

**Battery Life:** Up to 36 hours in automatic mode.



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