

# AquaFluor®

## Handheld Fluorometer/Turbidimeter



### AquaFluor® Handheld Fluorometer/Turbidimeter

The AquaFluor® is a lightweight, inexpensive, handheld fluorometer/turbidimeter ideal for field use. Its small size and durability make the AquaFluor® perfect for the user who needs quick measurements away from the laboratory. Dual-channel capability allows users to measure fluorescence and turbidity in one sample.

While small in size, performance has not been compromised. The AquaFluor® brings a new level of simplicity and economy to Turner Designs' line of fluorescence-based instrumentation.

### Available Channels

The AquaFluor® can be configured with one or two of the following channels:

- Turbidity
- *In Vivo* Chlorophyll
- Extracted Chlorophyll *a*
- Blue Green Algae - Phycocyanin (freshwater)
- Blue Green Algae - Phycoerythrin (marine)
- Fluorescein Dye
- Rhodamine Dye
- Ammonium
- CDOM/FDOM
- Optical Brighteners for Wastewater Monitoring

Contact us for Custom Optical Kits

### Highlights of the AquaFluor®

- Dual channels allow for quick toggling between two applications
- Small size easily fits in shirt or jacket pocket
- Dustproof and watertight for field use, it even floats!
- Single-point plus blank calibration
- 12 bit resolution
- Operates using AAA batteries for >1,000 measurements per set
- 5 second warm up
- Low maintenance field fluorometer



### Optional Accessories

- Internal Data Logging stores up to 1,000 points of data
- Adjustable Solid Secondary Standard provides Quick and Easy Checks of Calibration, Stability and Performance.

Reliable Instruments for an Unreliable World

# AquaFluor®

## Handheld Fluorometer/Turbidimeter



| Application                               | Minimum Detection Limit | Linear Range         |
|---|-------------------------|----------------------|
| Ammonium                                  | 0.1 µM                  | 0 - 100 µM*          |
| CDOM/FDOM                                 | 0.1 ppb                 | 0 - 1000 ppb         |
| Chl <i>a</i> Extracted - Acidification    | 0.5 µg/L                | 0 - 300 µg/L         |
| Chl <i>in vivo</i>                        | 0.3 µg/L                | 0 - 300 µg/L         |
| Fluorescein Dye                           | 0.4 ppb                 | 0 - 400 ppb          |
| Optical Brighteners                       | 0.5 ppm                 | 0-30,000 ppm         |
| Phycocyanin<br>(Freshwater Cyanobacteria) | 150 cells/ml            | 0 - 150,000 cells/ml |
| Phycoerythrin<br>(Marine Cyanobacteria)   | 150 cells/ml            | 0 - 150,000 cells/ml |
| Rhodamine Dye                             | 0.4 ppb                 | 0 - 400 ppb          |
| Turbidity                                 | 0.5 NTU                 | 0 - 1000 NTU         |

\* Ammonium linear range >10 µM requires minicell adapter and minicells

| AquaFluor® Physical Specifications |  |
|------------------------------------|--|
| Weight in Air                      | 13.9 oz; 0.4 kg                                  |
| Size                               | 1.75" x 3.5" x 7.25"; 4.45 cm x 8.9 cm x 18.4 cm |
| Warm-up Time                       | 5 seconds  |
| Case                               | IP 67 standard; dustproof/waterproof             |
| Temperature                        | 41-104°F; 5-40°C                                 |

| AquaFluor® Electrical Specifications |                                   |
|--------------------------------------|-----------------------------------|
| Power                                | 4 AAA batteries                   |
| Detector                             | Photodiode 300nm-1,000 nm capable |

### Ordering Information

| INSTRUMENT                                   | PART NUMBER | AVAILABLE CHANNELS                            | PART NUMBER |
|--|-------------|---|-------------|
| AquaFluor® Handheld Fluorometer/Turbidimeter | 8000-010    | Turbidity                                     | 8000-408    |
|  |             | Chlorophyll <i>in vivo</i>                    | 8000-406    |
|  |             | Chlorophyll <i>a</i> Extracted                | 8000-407    |
|  |             | Blue Green Algae - Phycocyanin (freshwater)   | 8000-412    |
|  |             | Blue Green Algae - Phycoerythrin (marine)     | 8000-411    |
|  |             | Fluorescein Dye                               | 8000-405    |
|  |             | Rhodamine Dye                                 | 8000-409    |
|  |             | Ammonium                                      | 8000-402    |
|  |             | CDOM/FDOM                                     | 8000-401    |
|  |             | Optical Brighteners for Wastewater Monitoring | 8000-403    |
|  |             | <i>Contact us for Custom Optics</i>           |             |

  

| ACCESSORIES  | PART NUMBER |
|--|-------------|
| Internal Data Logging                              | 8000-920    |
| Adjustable Solid Secondary Standard*               | 8000-952    |
| Adjustable Solid Secondary Standard**              | 8000-951    |
| 12mm Test Tube Adapter***                          | 8000-932    |
| Minicell Adapter                                   | 8000-936    |
| 12x75 mm Round Glass Test Tubes (12 ea)***         | 10-029A     |
| 10x10 mm Square Polystyrene Cuvette (100 ea)****   | 7000-957    |
| 10x10 mm Square Methacrylate Cuvette (100 ea)***** | 7000-959    |
| Minicells (200 µL capacity) (1000 ea.)             | 7000-950    |

\*For use with chlorophyll, phycoerythrin, phycocyanin and rhodamine WT channels only

\*\*For use with fluorescein channel only

\*\*\*Required for use with extracted chlorophyll

\*\*\*\*Recommended for use with turbidity

\*\*\*\*\*Required for use with UV (<400nm)

### Contact Us

Toll-Free: 1.877.316.8049

Email: [sales@turnerdesigns.com](mailto:sales@turnerdesigns.com)

Address:

Phone: 408.749.0994

Web: [www.turnerdesigns.com](http://www.turnerdesigns.com)

845 West Maude Avenue

Fax: 408.749.0998

Sunnyvale, CA 94085