

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 *a*
- Extracted Chlorophyll *a*
- Blue Green Algae - Phycocyanin
- Blue Green Algae - Phycoerythrin
- Fluorescein Dye
- Rhodamine Dye
- Ammonium
- CDOM
- Optical Brighteners for Wastewater Treatment

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
<i>In Vivo</i> Chlorophyll <i>a</i>	0.3 µg/L	0 - 300 µg/L
Extracted Chlorophyll <i>a</i> *	0.5 µg/L	0 - 300 µg/L
Ammonium*	0.1 µM	0 - 100 µM
CDOM	0.1 ppb	0 - 1000 ppb
Cyanobacteria	150 cells/mL	0 - 150,000 cells/mL
Optical Brighteners	0.5 ppm	0-30,000 ppm
Fluorescein Dye	0.4 ppb	0 - 400 ppb
Rhodamine Dye	0.4 ppb	0 - 400 ppb
Turbidity	0.5 NTU	0 - 1000 NTU

*Reagents and Reaction Time Required

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>a in vivo</i>	8000-406
		Chlorophyll <i>a</i> Extracted	8000-407
		Blue Green Algae - Phycocyanin	8000-412
		Blue Green Algae - Phycoerythrin	8000-411
		Fluorescein Dye	8000-405
		Rhodamine Dye	8000-409
		Ammonium	8000-402
		CDOM	8000-401
		Optical Brighteners for Wastewater Treatment	8000-403

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

Contact Us for Custom Optics

*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 Address:
Phone: 408.749.0994 Web: www.turnerdesigns.com 845 West Maude Avenue
Fax: 408.749.0998 Sunnyvale, CA 94085