



WETStar

- Chlorophyll
- CDOM
- Uranine
- Rhodamine
- Phycoerythrin

The highly successful WETStar fluorometer family is growing! These miniature, low cost, low power optical instruments provide comparable performance to other available fluorometers at a fraction of their cost, power requirements, and size. The unit employs a novel optical flow tube design that lends itself to both pump-through and flow-through operation. It is easily mated with existing CTD packages and is available with optional digital output.



Specifications

Mechanical		Electrical	
<i>Diameter</i>	2.7 in (6.9 cm)	<i>Response time</i>	0.17 sec (analog); 0.125 sec (digital)
<i>Length</i>	6.7 in (17.1 cm)	<i>Input</i>	7–15 VDC
<i>Weight in air</i>	1.7 lbs (0.8 kg)	<i>Current draw</i>	< 40 mA (analog); < 80 mA (digital)
<i>Weight in water</i>	0.25 lbs (0.1 kg)	<i>Linearity</i>	≥ 99% R ²
Environmental		<i>Output</i>	0–5 VDC (analog); 0–4095 counts (digital)
<i>Temperature range</i>	0–30 deg C	<i>Specifications subject to change without notice.</i>	
<i>Depth rating</i>	600 m		

Chlorophyll—an indicator of viable phytoplankton biomass and chlorophyll concentrations in water.

EX: 460 nm • EM: 695 nm • Sensitivity: ≥ 0.03 µg/l • Dynamic range: 0.03–75 µg/l (std)

CDOM—Created from decayed biomass, CDOM contributes to coloration of both fresh and marine waters.

EX: 370 nm • EM: 460 nm • Sensitivity: 0.100 ppb QSD • Dynamic range: 100, 250, or 1000 ppb

Uranine—Used as a dye to study hydraulic connections and water transport mechanisms.

EX: 485 nm • EM: 532 nm • Sensitivity: 1 µg/l • Dynamic range: 1–4000 µg/l uranine

Rhodamine—Used as a dye similar to uranine.

EX: 470 nm • EM: 570 nm

New!

Phycoerythrin—Allows measurement of the red pigment in cyanobacteria.

EX: 525 nm • EM: 575 nm



WETStar

Specifications Sheet

Revision History

Revision	Date	Revision Description	Originator
A	12/01/99	Begin revision control	H. Van Zee
B	01/03/00	Change depth rating; add excitation and emission	D. Hankins
C	12/12/00	Change sensitivity range	D. Hankins
D	11/26/01	Revise ex and em values (DCR 164)	J. Kitchen
E	04/10/02	Add digital capabilities (DCR 213)	H. Van Zee
F	6/8/04	Update format (DCR 402)	H. Van Zee
G	1/11/05	Combine fluorometer specs (DCR435)	M. Everett