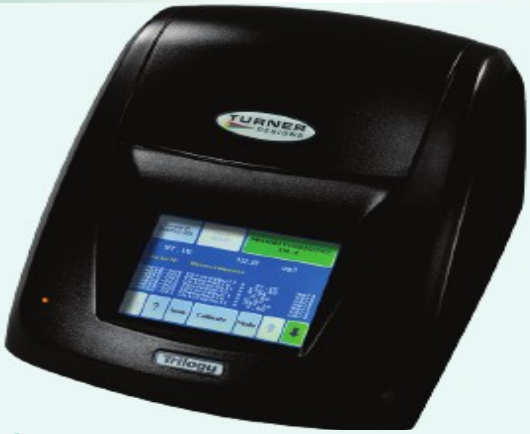
Trilogy

Laboratory Fluorometer



Features of the Trilogy

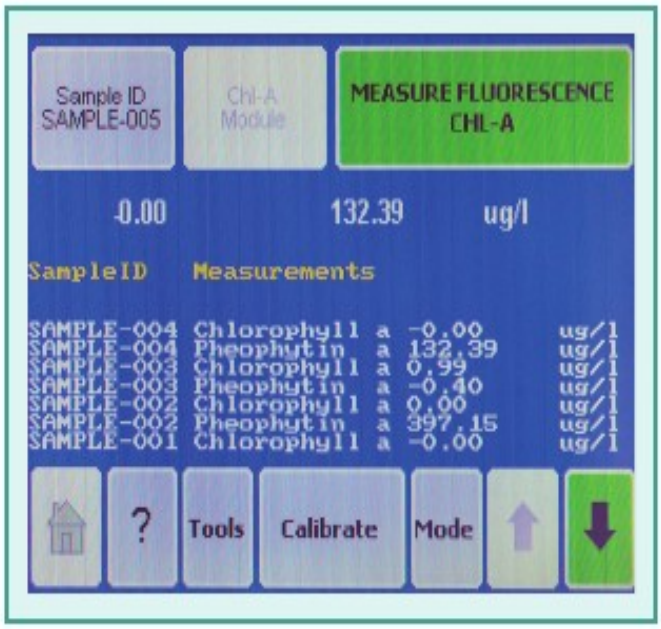
- Multifunctional, Compact and Modern Design
- Sample Adaptor accommodates 10 x 10 mm square plastic cuvettes, 12 x 75 mm round tubes and 12 x35 mm round vials

nap-in Modules Provide Flexibility

Trilogy Laboratory Fluorometer

The Trilogy Laboratory Fluorometer is a compact laboratory instrument for making fluorescence, absorbance and turbidity measurements using the appropriate snap-in Application Module. Trilogy provides you with excellent sensitivity and measurement range. The all solid-state design ensures you will make reliable and repeatable readings.

Fluorescence modules are available for chlorophyll *a*, (extractive acidification and non-acidification plus *in vivo*), rhodamine and fluorescein dye, cyanobacteria (phycocyanin and phycoerythrin pigments), CDOM, optical brighteners and ammonium. For extracted chlorophyll measurements using EPA 445, Trilogy automatically calculates the concentration using the filtered and solvent volumes. The Turbidity Module uses an IR LED with a wavelength of 860 nm to meet ISO 7027 requirements for Turbidity water quality measurements.



Snap-In Application Modules

Snap-in modules enable you to select the applications you need today while being able to easily add capabilities in the future

Available Modules

- Turbidity
- Absorbance
  - Phosphate
  - Nitrate
  - Silicate
- Chlorophyll *a*
- Blue Green Algae - Phycocyanin
- Blue Green Algae - Phycoerythrin
- Rhodamine Dye
- Fluorescein Dye
- Ammonium
- CDOM
- Histamine
- Oil
- Optical Brighteners

Custom Modules Also Available

Touchscreen Highlights

Intuitive Color Touch Screen User Interface

Store Up to 18 Named One to Five Point Calibrations

Blank Reads and Automatically Subtracts in Direct Concentration Mode

Fluorescence Module Performance

APPLICATION	MINIMUM DETECTION LIMIT	DYNAMIC RANGE
Chlorophyll *a*	0.02 µg/l	300 µg/l
Phycoerythrin	150 cells/ml	150,000 cells/ml
Phycocyanin	150 cells/ml	150,000 cells/ml
Rhodamine WT	0.02 ppb	500 ppb
Fluorescein	0.02 ppb	500 ppb
Ammonium	0.1 µm/l	100 µm/l
CDOM	0.1 ppb	1,000 ppb Quinine Sulfate
Refined Oil	0.25ppb	6,000 ppb Napthalene
Optical Brighteners	0.5 ppm	10,000 ppm Detergent in Water

Absorbance Module Performance

APPLICATION	MINIMUM DETECTION LIMIT	DYNAMIC RANGE
Phosphate	0.04 mg/l of total inorganic P	0-14 mg/l of total inorganic P
Silicate	3 µg/l of total inorganic Si	0-3000 µg/l of total inorganic Si
Nitrate	1 µg/l of total inorganic N	0-930 µg/l of total inorganic N

Turbidity Module Performance

APPLICATION	MINIMUM DETECTION LIMIT	DYNAMIC RANGE
Turbidity	0.05 NTU	1,000 NTU

Trilogy Physical Specifications

Readout	Direct Concentration (µg/l, ppb, etc.) or Raw Fluorescence
Dimensions (D x W x H)	12.92" x 10.44" x 8.42" (32.82 cm x 26.52 cm x 21.39 cm)
Weight	8.1 lbs (3.65 kg)
Operating Temperature	60 - 105° F (15 - 40°C)

Trilogy Electrical Specifications

Light Source & Detector	Light Emitting Diode and Photodiode
Data Output	100% ASCII format through a 9 pin RS-232 serial cable at 9600 baud
PC Operating System (optional if connected to PC)	Window 98 or later
Power	100 to 240VAC Universal Power Supply included, Output 12 VDC 0.84A Max

Ordering Information

INSTRUMENT	PART NUMBER
Trilogy Laboratory Fluorometer	7200-000

FLUORESCENCE MODULES	PART NUMBER
Chlorophyll *a* Acidification	7200-040
Chlorophyll Non-Acidification	7200-046
Chlorophyll *a in-vivo*	7200-043
Rhodamine/Phycoerythrin	7200-042
Phycocyanin	7200-044
Fluorescein	7200-048
CDOM/Ammonium	7200-041
Histamine	7200-049
Short Oil	7200-062
Crude Oil	7200-063
Optical Brighteners	7200-047

TURBIDITY MODULE	PART NUMBER
Turbidity	7200-060

ABSORBANCE MODULES	PART NUMBER
Phosphate Kit	7200-070
Silicate Kit	7200-072
Nitrate Kit	7200-074
Absorbance (requires filter paddle)	7200-050
560/10 nm Filter Paddle	7200-051
600/10 nm Filter Paddle	7200-052
560/10 nm Filter Paddle	7200-053