

Water Tracer Detection Using Handheld Fluorometer

Water-tracing dyes can be used in many useful applications. By adding dye to the water system in question, we can conduct plumbing/piping tracing, leak detection, checking for illegal tapping, pollution studies, natural waterflow analysis (rivers, lakes, ocean currents, cave waterflows, groundwater filtration, etc.), and sewer and stormwater analysis. In addition, in a cooling water system where treatment chemical agents are added to the circulating water to prevent pipelines and equipment from corrosion, scaling, fouling and microbial problems, water tracing dye can be added to the treatment to allow active monitoring of the concentration of the chemical agents to sustain effectiveness of the treatment.

Amiscience offers three light-weight FluoroQuik handheld fluorometers for detecting common types of water tracing dyes: PTSA, fluorescein, and Rhodamine WT. Its exceptional sensitivity, rapid-reading, and reliability in a convenient field kit can be used to detect trace amount (less than 1 ppb) of tracing dye with one single step, right on the spot. Built-in USB interface allows user to retrieve up to 3x80 data points for analysis in the laboratory. We can also provide dual-channel model of your wavelength selections for more flexible applications.

Fluorometer part number:

P/N	Description
FQ-PTSA-C	Handheld Fluorometer for PTSA
FQ-FLCN-C	Handheld Fluorometer for Fluorescein
FQ-RHDM-C	Handheld Fluorometer for Rhodamine WT

* Includes power adaptor, USB cable, and user manual CD.

Accessories for field kit:

Component P/N	Description
CC-215	Compact Field Kit Carrying Case
TPT-500UL-30	Disposable Transfer Pipette, 0.5mL, 30pcs/bag
CUV-1ML-64	Polystyrene Cuvette with Cap, 64pcs/box



Product Type	Single Tube Fluorometer
Read Type	Discrete
Sample Volume	1 mL
Detection Limit	1 ppb of dye dissolved in water
Wavelength	PTSA: 360ex/410em Fluorescein: 480ex/530em Rhodamine: 530ex/590em
Detection Range	0 – 20,000 ppb of dye dissolved in water
Read Out	Concentration or RFU
Calibration	2-Point Calibration (Blank and Standard)
User Interface	Touch Screen LCD Display
Power	4 AA Batteries or 5VDC Power Adaptor
Computer Interface	USB Interface to Recall up to 3x80 Data Points
Dimensions (L x W x H)	185mm x 90mm x 35mm