GGUN-FL24 Flow-through downhole field fluorometers

Diameter 48 mm Height 270 mm.

Usage: tracing experiments in 2" boreholes tested to depths of 70 metres. No mechanical parts, no wear. Can be used as well with quick-connect fittings and 6 mm tubings. Model FL24 has quadruple excitation and detection axes, allowing simultaneous use of three tracers and independent turbidity measurement.

The sonde connects with a 4-wire signal cable to a waterproof box hosting a datalogger and 1 or 2 batteries. The datalogger provides power, timing, clock and data storage capability. The signal is transmitted in digital form. The box can connect to any PC through the RS232 interface. For unattended work, the datalogger stores as many as 4 x 60,000 samples and water temperature (0.01°C accuracy) on a Compact Flash card.

A recent datalogger version features following advantages: LCD display on 2x16 characters, USB interface instead of RS232, microSD card instead of CF, and optional GPRS modem for remote data access through the web.

ABS head:

400 g lighter than inox

Number of optics	**4**
Turbidity measurement	**0.2 to 100 NTU**
Detection limit	**2 x 10^{-11} g/ml typical (uranine)**
Recording time	**several weeks**
Number of storage pieces	**100000 pieces**
Serial output for PC	**RS232 (or USB with adaptor cable) or USB with new logger**
Power supply (lead battery)	**6 to 12 Volt**
Battery capacity	**12 to 24 Ah (1 or 2 batteries)**
Stand-by consumption	**< 1 mA**
Analog-digital conversion	**24 bit unipolar**
Connections	**cable (30 m or more) weight: 0.800 kg/10m**
Sonde casing	**stainless steel: 2.1 kg. Only 1.6 kg with ABS head**
Battery box (datalogger)	**waterproof, weight: 7.9 kg with 2 batteries 6V12Ah**

Detectable fluorescent tracer type :

Classe I:

- Uranine (fluorescéine sodique)
- Eosine
- Pyranine

Classe II:

- Amidorhodamine G
- Rhodamine WT
- Sulforhodamine B

Classe III:

- Tinopal (CBS-X ou -CL)
- Amino G acide
- Photine

Classe IV:

- Duasyne jaune T

Classe V:

- Naphtionate de Na

Special "speleo" design for less weight : FL24 fluorometer with ABS head, datalogger model III

Total weight : 2,8 kg without battery + weight of cable: 80 g per m

TRMC-5-(F) Datalogers 2G/3G/4G

Datalogger for scientific applications

- The TRMC™-5 is a battery powered datalogger with 4G interface, especially designed for scientific field applications.

Description: The TRMC™-5 was specially designed for scientific and industrial applications. It is the ideal tool for a continuous monitoring of springs, rivers or facilities.
The TRMC™-5 possesses the characteristics which will allow you to set up a successful, affordable and open network of telemetry.
Application function: (TRMC-5 datalogger is an independent recording equipment, and its application function depends on the connected detection equipment.).

- Remote measurement
- Tracing
- Continuous site monitoring
- Water source monitoring, alarms
- Conductivity and turbidity of water
- Water level
- Radon und CO2 measurement
- pH monitoring

Features:

- 2 digital output controlled remotely or through alarms (for sampler,...)

- 5 current analog inputs, 4-20mA
- 3 voltage analog inputs, 2x 0-3V, 1x 0-5V
- Compatible EN 13757-4, mode T1 (Wireless M-Bus), 868 MHz
- Option : Interface for FL-30 or FL-24 field fluorometers
- Option : interface for WTW Cond340i and WTW Cond197i conductivity meters, with galvanic insulation
- Data communication in 4G. 2G or 3G available on request
- Automatic data transfer to the server
- Internal memory for 100'000 measurements
- Operates with a simple 12V battery (to be ordered separately)
- Optional solar panel for enhanced autonomy
- Ultra low power consumption, several months, even several years of autonomy
- 2 independant pulse counters