

TOG/TPH in Water & Soil Portable Analyser

Summary Information:

- ATR Mid Infrared Spectroscopy
- Detectable range of 100-5000ppm
- Correlates to ASTM D7066-04
- 2.5-5 μ m wavelength
- Portable and battery operated
- 500 measurements without recharging



Product Description:

The TOG/TPH in water & Soil Analyser uses ATR Spectroscopy, based on the ASTM D7066 standard, to extract oil in water concentration, TPH concentration (total petroleum hydrocarbons) in soil and FOG (fats, oil and grease) concentration in wastewater.

The Analyser is basically maintenance free being exclusively constructed from solid state dispersion elements, a black body infrared emitter and infrared sensor element. It is very robust with an outstanding battery lifetime. The Analyser comes with a sophisticated but user-friendly software which is run from an-situ tablet.

Application:

There are tight regulations on the amounts of oil allowed in water and with this comes large fines if these are exceeded. The oil and petroleum industry has a responsibility to analyse the TOG (Total Oils and Greases) in their upstream and downstream waste water. Spectrolytic's portable Oil in water analyser allows the customer to measure samples in the field and have real-time data within 5 minutes of sampling. The usual extraction method of oil in water is by pre-mixing with a known solvent and extracting a sample of oil/solvent to be measured on the analyser.

How to use:

The oil / solvent sample is placed on the ATR crystal which forms part of the spectrometer. This is done easily with a pipette of approximately 0.5-0.75ml. The measurement is started from the software. After about 30s the oil concentration in ppm of the sample will be displayed. The user can add traffic light specification (green/yellow/red) limits to make the result easily defined for any operational personnel.

Specification:

- Mid-infrared ATR Spectrometer
 - 4000-2000 cm^{-1}
 - Spectral Resolution 36-18 cm^{-1}
- Size: 39cm(W)*31cm(L)*17cm(D)
- Weight: 8kg
- Windows 10 Operating System

Special Features :

- Simultaneous system charging and measurement feature.
- Fixed internal batteries – no need for exchanging.
- Long battery charge life
- Fold-away Bluetooth keyboard and integrated touchpad.
- Microsoft Surface tablet (touchscreen)
- 2 USB Ports and RJ-45 ethernet connection for external access to ATR.
- Large compartment for wipes and pipettes and storage of fold-away keyboard