

ID100

Portable FTIR Analyzer



The ID100 is the first truly portable FTIR gas analyzer in the world. The lightweight analyzer module is located in durable Teflon coated backpack. The ID100 analyzer houses a Fourier Transform Infrared (FTIR) spectrometer, Rhodium-Gold coated sample cell and signal processing electronics. The sample gas is extracted into the sample cell with a pistol-type probe. Hence no sample preparation is needed.

The ID100 is designed for on-site measurements of different compounds (both organic & inorganic) at low concentrations in ambient air. Typical usage areas include industrial hygiene and emergency response situations. Analysis results are displayed on screen of a military grade PDA.

Optionally, the analyzer can be connected with a laptop PC for extended analysis capability (e.g. identification of unknown compounds with library spectra).

There are no consumable parts that would need replacing on regular basis. In addition, due to FTIR technology, the calibrations remain very stable. Hence no span calibrations are needed. Also, cross-interferences (i.e. interference from other gases) are automatically compensated in the analysis algorithm during the calculation of the results.

The ID100 is ideal to be used with the ChemPro®100 Detector. This enables rapid detection and accurate analysis of the detected threat.

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Technical Data

Size (H x W x D)

360 mm x 380 mm x 150 mm

Weight:

11,5 kg

Power:

12 VDC or 115/230 VAC

Measuring Principle

Fourier Transform Infrared (FTIR)

Performance

Analyzes up to 25 gas compounds simultaneously (PDA). 50 compounds with the optional PC Software

Response Time

< 120 s depending on the gas flow and measurement time

Measuring Parameters

Resolution

8cm⁻¹ or 4cm⁻¹

Scan Frequency

10 scans / s

Wavenumber Range

900 - 4200 cm⁻¹

Zero Point Calibration

24 hours

Zero Point Drift

< 2 % of measuring range per zero point calibration interval

Sensitivity Drift

None

Lineary Deviation

< 2 % of measuring range

Temperature Drifts

< 2 % of measuring range per 10K temperature change

Pressure Influence

1 % change of measuring value for 1% sample pressure change. Ambient pressure changes measured and compensated

Connections

The analyzer and PDA are connected with a bluetooth connection. The PDA provides the results from the analyzer.

Environmental

Operating Temperature

Ambient temperature -15 - 50°C

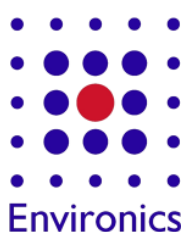
Storage Temperature

-20 - 60°C

Option

An optional PC software is available for additional analysis functions (identification of unknow samples etc.)

T i m e d o e s m a t t e r . W e a r e r e a d y f o r t h a t



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