

# 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.

# Design and specifications subject to change without notice. ChemPro® is a registered trademark of Environics. 2.0 05/2007 © Environics Oy

# **ID100**

## Portable FTIR Analyzer

### **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 simultaniously (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.)

Time does matter. We are ready for that



### **Environics Oy**

P.O. Box 349 FI-50101 Mikkeli Finland

Tel: +358 201 430 430 Fax: +358 201 430 440 E-mail: sales@environics.fi

www.environics.fi

### **Environics USA, Inc.**

4401 Eastport Parkway Port Orange, FL 32127

USA

Tel: +1 386 304 5252 Fax: +1 386 304 5251

E-mail: sales@environicsusa.com

www.environicsusa.com