Mega-Gas Sensor detects over 100 toxic/combustible gases!

Microprocessor controlled unit maintains a library of setup and calibration data for all gases, ready for your selection. No conversions or guessing!

“Gas Search” feature allows you to quickly determine if any of the 100+ gases are present.

Additional Solid State, Electrochemical, and Catalytic Bead Sensors provide increased selectivity. IQ-1000 accepts and simultaneously displays the readings of up to 4 sensors.

Optional data logging allows storage of months worth of data which can be sent to a printer or PC. “Einstein” data management PC software included.

Additional features include:
- Built-in sample pump
- Audible and visual alarm indication
- Large, backlit LCD display
- Automated calibration
- RS-232 port
- Carrying case with shoulder strap
IST’s Model IQ-1000 is the most powerful and versatile portable gas detector on the market today. By using IST’s Mega-Gas Sensor in one of the IQ-1000’s four available sensor ports, this remarkable unit can detect OVER 100 toxic and combustible gases (see Mega-Gas Sensor Gas List below). Three alarm setpoints are provided for each gas, and audible as well as visual indicators alert you if any of these alarm limits have been exceeded.

Besides the Mega-Gas sensor, the IQ-1000 also accepts electrochemical, catalytic bead, and solid state sensors, allowing the unit to provide greater selectivity for key gases. The IQ-1000 accepts and simultaneously displays the readings of up to 4 sensors, giving it the flexibility to meet a wide range of applications. The IQ-1000’s “Gas Search” feature allows you to use the Mega-Gas sensor to scan an area for hazardous gases. Because the Mega-Gas sensor can detect over 100 gases, if a gas search indicates a zero reading, chances are that no hazardous gases are present.

The IQ-1000 has impressive capabilities, yet still remains convenient and easy to use. Calibration is simple and automated, with no manual adjustments necessary. Operation is a snap. Simply select the gases you want to monitor and the microprocessor based IQ-1000 will do the rest. A large, 8-line, 40-character per line display allows the simultaneous display of 4 gases along with alarm and calibration information for each gas.

The IQ-1000 includes a built-in sample pump and sample wand as well as a handy carrying case. Datalogging can be provided as an option, allowing the storage of months of data. An RS-232 port allows you to send data to a computer or printer. Included with datalogging is the IQ-1000’s powerful “EINSTEIN” data management PC software. This software allows you to download, manipulate, and plot data in a variety of ways.

Power is provided via 6 ‘D’ size alkaline or nickel cadmium batteries. The unit will operate approximately 20 hours on alkaline batteries and 14 hours on nickel cadmium batteries.

MEGA-GAS SENSOR GAS LIST
Gases with an “•” have a 100% LEL range also.
Equipped with the optional datalogging feature, the **IQ-1000** becomes a very powerful datalogger. Standard memory allows the storage of months worth of data for up to four sensors. And, if needed, additional memory can be added. Data stored by the **IQ-1000** can be displayed on the unit, sent to a printer, or transferred to a computer. Included with datalogging is IST’s one-of-a-kind Data Management Software, **EINSTEIN**, a Windows-based (Windows ‘95 compatible) PC software program which provides direct access to the **IQ-1000**, allowing you to download logged data with the click of a button.

Once loaded, **EINSTEIN** then automatically sorts through the data and puts it in an easy to read format. All vital information is displayed, including readings, time and date, channel number, gas, calibration status, and alarm status. **EINSTEIN** also provides you with critical calculations on your data such as Time Weighted Average (TWA) and Threshold Limit Value (TLV) information.

Next, view your data graphically using **EINSTEIN**'s array of powerful charting tools. Scatter plots, bar graphs, pie charts, best fit curve plots, you name it—**EINSTEIN**'s got it! Plots can be scaled by minutes, hours, or even days, and can be single or multi-channel, 2-D or 3-D.

**EINSTEIN** also includes a reporting feature which lets you generate and print out professional looking reports. An on-board database allows you to archive years worth of data. And data sorted by **EINSTEIN** can be easily imported into your own favorite spreadsheet or company database for custom analysis.

Together, **EINSTEIN** and the **IQ-1000** provide you with the most powerful gas detection combination in the business!
THE MEGA-GAS SENSOR

HOW IT WORKS

IST’s remarkable Mega-Gas Sensor is a Solid State Sensor which is specially manufactured to be sensitive to a wide variety of gases. In all, it is sensitive to over 100 gases. The IQ-1000, in turn, stores the setup and calibration data for each gas in memory. This data includes the gas response curve, the sensor operating temperature, and the zero and span values. When a gas is selected from the IQ-1000’s menu, the IQ-1000 automatically uses this data to configure itself properly for the gas selected, allowing the unit to provide an accurate reading of the gas concentration. To change gases at any time, simply select the new gas from the menu and the IQ-1000 will do the rest.

It’s that simple!

GENERAL SPECIFICATIONS

Operating Life: 20 hours on alkaline batteries, 14 hours on nickel cadmium.

Sensors: Accepts solid state, electrochemical, and catalytic bead sensors. 4 sensors maximum. Channels 1 and 2 accept all sensor types; channels 3 and 4 accept electrochemical only.

Controls: Pushbutton.

Display: Backlit LCD supertwist. 8 lines, 40 characters per line.

ELECTRICAL SPECIFICATIONS

CPU: Hitachi HD64180 or Zilog Z180.


External Interface: RS-232 using a DB-9 connector (1200 to 38,400 baud).

Batteries: 6 ‘D’ size alkaline or nickel cadmium batteries.

ENVIRONMENTAL SPECIFICATIONS

Temp: 0°C to +50°C operating. -20°C to +60°C storage.

Humidity: 0 to 95% RH, non-condensing.

MECHANICAL SPECIFICATIONS

Case: Weatherproof.

Pump: Built-in sample pump capable of drawing up to 1000 cc/min.

Size: 9.0”L x 4.5”W x 5.4”H (229 x 114 x 137 mm)

Weight: Approx. 6 lbs. (2.7 kg), including batteries.

GAS SEARCH

In addition to looking for a single gas, the Mega-Gas Sensor also comes with a “Gas Search” feature which allows you to perform a scan for all 100+ gases. Each of the 100+ gases is placed into 1 of 3 gas groups. The IQ-1000 searches each group and provides a relative reading from 0-100. A zero reading in all gas groups indicates that no hazardous gases are present.