

Universal Gas Sensor for Selective Detection of Toxic Chemicals and Combustible Gases

This product can be set to selectively detect any reducing or oxidizing molecule and/or vapor in the presence of other molecules. The technology is designed to use any sensor head (solid state and/or electrochemical) which features high reliability, high sensitivity, fast response and low cost. The system can be tailored to suit specific purposes in the field of toxic and combustible gases (alcohols, organic vapours, CFCs, etc.) and in the domestic field of gas & fire alarms and control instruments. Environmental changes, such as temperature and/or humidity changes, have no effect on the performance of the system.

Applications

Highly selective and reliable for the detection of hydrogen, specifically for industrial applications and fuel cell industries. Can be set to detect hydrazine and distinguish easily between hydrogen and hydrazine molecules. An effective device for the selective detection of natural gas in furnace rooms, pipelines, industrial sites and mines. Can be set to detect carbon dioxide efficiently in public buildings and/or greenhouses. An excellent carbon monoxide detector/monitor. A version of the unit can be

can be interfaced to a computer for on-screen control and setting of the unit to scan and search for different molecules like a sniffing camera. Another version sends information via radio frequency for remote sensing by computer. In its handheld version, dip switches are employed to set for selective detection of different gases.

Development Stage

Working prototypes have been developed and tested.

Intellectual Property Status

US Patent Number 5,987,964, granted November 23, 1999.

Partnering Opportunity

Available for co-development or licensing (exclusive or non-exclusive) by jurisdiction and/or field of use.

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