IR INFRARED INDUSTRIES
Bringing you tomorrow's technology...today

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IR-208 Gas Analyzer

The IR-208 Gas Analyzer measures up to six different gases using multiple types of gas analysis integrated into one instrument. With a choice of gases, the instrument is a highly versatile performer. Up to three gases can be measured under infrared and up to three additional gases can be measured utilizing electrochemical cell, paramagnetic, or other sensors. The wide range of available sensors not only provides versatility, but also allows a configuration that is appropriate in accuracy and price for your application.

Product Features/Benefits

High Accuracy

The IR-208 analyzer is accurate to +/-1% of full scale. Each instrument has a large LCD display for easy and accurate readouts. The IR-208's dependability, accuracy, and stability increase process control capability, resulting in improved product quality and reduced process cost.

Long-Term Stability

With multi-layered compensation and high-quality infrared components, the IR-208 provides best-in-class stability.

Quality Composition

Superior materials include gold and stainless steel sample cells and reflective coatings. High-quality sapphire windows and selected o-rings mark the fine details that have gone into the analyzer's construction. Optional packages for corrosive gases and low gas concentrataions are also available.

Continuous Monitoring

The IR-208 has a long-life, multi-channel infrared detector designed for high performance and uninterrupted maintenance-free operation.

Easy Usability

The IR-208 features a large sunlight readable touchscreen graphic LCD display. A flow meter on the front panel insures consistent accurate measurements. Simple menu choices guide the user through configuration and measurement modes.

Selection of Outputs

Standard outputs include bi-directional digital RS232, a choice of 0-1, 0-5, or 0-10VDC analog, and optional 4-20mA. Measurement values can be expressed in parts per million (ppm) or percent (%) based on customer requirements and gas concentrations in the sample stream.

Infrared Industries Manufactured

All models of Infrared Industries gas analyzers are designed and manufactured in Hayward Callifornia guaranting affordability, fast turnaround, and consistently high quality.

Customization

For unique applications, we configure the IR-208 with specialized sensors, pumps, filters, and multiple optical benches to meet your requirements. Our manufacturing facility is also our design center. Speak to us about modifications to meet your specific needs.

InfraView Software

InfraView Software is a Windows-based program that allows remote control and display of up to eight different Infrared Industries gas analyzers or benches from one PC console. In addition to displaying current and logged results as raw data, the program offers full-featured graphical abilities.

Infrared Measurement Principles

A multiple channel infrared detector array utilizing a single beam infrared optical system detects target gases using specially designed narrow-band optical filters. Comparing the infrared absorption of the target gas filter to the reference filter in the array provides the comparative for measuring the gas concentration in the sample stream.

IR-208 GAS ANALYZER

APPLICATIONS

- Combustion Analysis and Efficiency
- Burners and Boilers
- Commercial Ovens and Stove Emissions
- Controlled Atmospheres
- Greenhouse Gas Monitoring

- Landfill BTU Calculations and Process Management
- Well Logging (CH4, C2H6)
- Stack Gas Monitoring
- Safety Monitoring
- CO2 and O2 Based Ventilation
- Hydrocarbon Monitoring
- Regulatory Compliance

- Flue Gas Testing and Measurement
- Hazardous Gas Detection
- Process Monitoring
- LEL Monitoring — Fuel Tanks and Gas Lines
- Heat Treatment
- Fermentation

SPECIFICATION	VALUE
Measuring method	NDIR single beam Electrochemical and paramagnetic also available
Gas measured	User Defined
Measuring range	0-100%
Dust	Should be dust-free
Moisture	Up to 95% relative humidity non-condensing
Response time	2 seconds (application- and flow-dependent)
Display	Graphic color LCD
Alarms	High and low (Optional)
Front panel	Touchscreen
Pressure	Inlet pressure compensated up to 5 PSIG
Exhaust gas	Non-restrictive outlet port and hoses
Outputs	Bi-directional digital RS-232 and analog 0-1, 0-5, or 0-10VDC Optional - Isolated self-powered 4-20 mA current loop
Maximum load impedance	4-20 mA isolated output 500 ohms
Analog ranges	Specify 0-1, 0-5, or 0-10 VDC full range output
Power source	120/240 VAC, 50/60 Hz
Power requirements	110-220 VAC; 12 VDC 3 Amp 10-16 VDC 1-3 Amp (dependent on options and configurations)
Materials in sample flow path	Stainless steel sample cell, saphhire windows, selected O-rings, and Teflon tubing
Sample flow	Standard: 0.2 to 2.0 liters/minute
Sample temperature	32° to 150° F (0° to 70°C)
Sample condition	Non-condensing, particulate free
Warm-up time	Ready for use in 5 minutes; fully stabilized in 15 minutes
Dimensions: Standard and Rack mount	7" x 17" x 12.8" (17.8 cm x 43.2 cm x 32.5 cm)
Weight	16 lbs. (7.3 kg)
Resolution	1 ppm
Repeatability	< + or - 1%
Accuracy	+ or - 1% of full scale
Drift	+ or - 1% of full scale per week determined on maximum range. Auto zero per day recommended.
Linearity	+ or - 1% of full scale
Options	Paramagnetic or Electrochemical Sensors

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