

Press Release

New online continuous laser process analyzer performs ultra-sensitive measurements of industrial trace gases

Patented technology based on cavity-enhanced laser spectroscopy offers precision in the parts per billion range

San Jose CA, June XX, 2016 -- ABB's Measurement & Analytics business announces a new online, continuous laser process analyzer that performs highly sensitive, accurate, precise and rapid measurements of trace gases. Applications include refining, petrochemical, chemical, power, pharmaceutical, and other industries. Called the LGR-ICOS™ Model 950 process analyzer, the new instrument uses ABB's patented Off-Axis Integrated Cavity Output Spectroscopy (OA-ICOS) technology. This cavity enhancement absorption technique extends the effective optical path length to multiple miles to greatly improve sensitivity to trace gases such as H₂S, CH₄, CO₂, CO, O₂, HCl, NH₃, HF, C₂H₂, H₂O, and others. The real-time analyzer provides fast, highly sensitive measurements over a wide dynamic range with no cross-interference from other background and matrix gases.



The LGR-ICOS analyzer is simple to use, starts up in minutes, requires no field calibration and has minimal preventative maintenance requirements. The highly robust optical subassembly can be readily field-serviced. Industry standard communications for data and diagnostics include 4 to 20 mA, digital Modbus, and Ethernet outputs. A specialized USB port offers local data access without the need for red tag procedures. Options include a wide array of hazardous area certifications, heated sample gas inlet, Hastelloy components, and analog outputs.

ABB says the new process analyzer is economical to purchase and operate. It requires no consumables, columns, carrier gases, fluids, or chemical scrubbers. A simplified sample conditioning system reduces complexity and maintenance cost. Continuous diagnostics and warnings avoid emergency repairs and unscheduled downtime. Additionally, the field-serviceable optical assembly requires no factory repair time. Typical applications include monitoring trace contaminants in calibration and industrial blanket gases; hydrogen and hydrocarbons; fuel gas and natural gas pipelines; stack gases; and many more industrial uses.

ABB's Measurement & Analytics business unit (www.abb.com/measurement) is among the world's leading manufacturers and suppliers of instrumentation and analyzers. With thousands of experts around the world and high-performance technology, ABB's team is dedicated to making measurement easy for its customers.

ABB (www.abb.com) is a leading global technology company in power and automation that enables utility, industry, and transport & infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 135,000 people.

For more information, please go to abb.com/measurements and search for LGR-ICOS, or contact:

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