Spark CH_4: Trace Level Methane Analyzer
At last, measurements made easy!

GASES & CHEMICALS | CEMS | ENERGY | ATMOSPHERIC | SEMI & HB LED | SYNGAS | LAB & LIFE SCIENCE

Designed for trace methane analysis, the new, affordable Spark CH_4 offers:

- Powerful, proven Cavity Ring-Down Spectroscopy (CRDS) technology
- Drift-free measurement
- Increased laboratory safety without the need for fuel gas
- Self-tuning and auto-calibration
- Extremely low Cost of Ownership
- Ethernet, 4-20 mA and RS-232 connectivity
- Fast response with low gas consumption
- CH_4 analysis over a vast range: 6 ppb to 50 ppm (in O_2)

With the Spark CH_4, powerful advanced spectroscopy is available at a popular price for a host of applications, from process control to quality and safety assurance in Air Separation Plants. Other applications include monitoring of cylinder filling, bulk delivery and distribution transfer points, as well as welding, medical, industrial and high-purity gas production, and more. Sensitivity as low as 6 ppb with full range measurement as high as 80 ppm CH_4 makes the Spark an ideal solution for these applications.

Say goodbye to cumbersome, complex, costly and labor-intensive mid-20th century technology. Gone is the need for calibration, spare parts, limited measurement ranges, and worries about drift and downtime usually associated with NDIRs. And without the need for H_2 fuel gas and with plug-and-play installation within minutes, the Spark CH_4 is a faster and safer alternative to FIDs. Plus, it's a joy to start up and to operate.

Put a little Spark in your life!

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Spark CH_4
Trace Level Methane Analyzer

Performance	
Operating range	See table below
Detection limit (LDL, 3σ/24h)	See table below
Precision (1σ, greater of)	± 0.75% or 1/3 of LDL
Accuracy (greater of)	± 4% or LDL
Speed of response	< 1 minutes to 90%
Environmental conditions	10°C to 40°C
	30% to 80% RH (non-condensing)
Storage temperature	-10°C to 50°C

Gas Handling System and Conditions	
Wetted materials	316L stainless steel
	10 Ra surface finish
Gas connections	1/4" male VCR inlet and outlet
Inlet pressure	10 – 125 psig (1.7 – 9.6 bara)
Flow rate	~1.0 slpm (in N_2)
Sample gases	Most inert, toxic, and
	passive matrices
Gas temperature	Up to 60°C

Dimensions	H x W x D [in (mm)]
Standard sensor	8.73 x 8.57 x 23.6 (222 x 218 x 599)
Sensor rack	8.73 x 19.0 x 23.6 (222 x 483 x 599)
(fits up to two sensors)	

Weight	
Standard sensor	32 lbs (14.5 kg)

Electrical	
Alarm indicators	2 user programmable
	1 system fault
	Form C relays
Power requirements	90 – 240 VAC, 50/60 Hz
Power consumption	40 Watts max.
Signal output	Isolated 4–20 mA per sensor
User interfaces	5.7" LCD touchscreen
	10/100 Base-T Ethernet
	802.11g Wireless (optional)
	RS-232
	Modbus TCP (optional)

Performance, CH_4:	Range	LDL (3σ)	Precision (1σ) @ zero
In Nitrogen	0 – 80 ppm	7.5 ppb	2.5 ppb
In Oxygen	0 – 50 ppm	6 ppb	2.0 ppb
In Argon	0 – 70 ppm	6.5 ppb	2.2 ppb
In Helium	0 – 50 ppm	6 ppb	2.0 ppb
In Hydrogen	0 – 80 ppm	7.5 ppb	2.5 ppb
In Clean Dry Air (CDA)	0 – 80 ppm	7.5 ppb	2.5 ppb

Contact us for additional analytes and matrices.
U.S. Patent # 7,277,177

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9/2017