

Introducing Spark CO₂!

Powerful Specifications: Trace CO_2 detection limit down to 250 ppb Range of 0-1500 ppm Wide dynamic measurement range Drift-free performance Compact footprint with rack mount option



Key Benefits:

Low Cost of Ownership – no calibration or maintenance requirements Robust - Immunity to vibration Simple operation – no dedicated technicians required Serani[™] interface software for remote analyzer control & data analysis

Trace CO₂ detection in Nitrogen Plants

N₂ Applications:

Electronics industry - semiconductor fabrication Petrochemical Industry – inerting, purging, and safety assurance Pharma and Food industries - storage and packaging

N₂ Production Technologies:

Cryogenic Air Separation to generate ultra-high purity N_2

Pressure Swing Adsorption – use molecular sieve to adsorb oxygen and separate N_2 from the air

Membrane Separation – selective permeation through membrane to separate $N_{\rm 2}$ from air – lower purity $N_{\rm 2},$ most economical



Ankersmid Process

In-line-, Portable-, Extractive measurement, Service, Emission reporting & Systems

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NEW Spark CO₂ analyzer affords fast, accurate response and clean-up, with robust, drift-

free performance Often unmanned plants – meets requirement for automated solution: low maintenance and no calibration

Temperature-controlled analyzer enclosure available



Target customers: Industrial and Electronic Gas Companies

Spark vs. Incumbent Technologies

Attributes	Incumbent technologies	Spark CO ₂
Cost of ownership	High maintenance costs	Minimal maintenance costs
Calibration	Frequent zero/span - requires complex sampling systems; prone to drift	None required
Consumables	Calibration gases, service gases, light sources, separation columns, electrolyte solutions, purifiers	None required
Construction	Moving parts – subject to mechanical failure and instability	No moving parts
Interferences	Often subject to interferences	None
Ease of Use	Extensive training required	Easy and intuitive
Detection Limit	PPM/PPB detection limit	PPM/PPB detection limit
Hazardous area rating	Yes	Yes
Wall-mount configuration	Yes	Yes
Installation/service	Often complex	Simple
Measurement rate	Fast	Fast

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