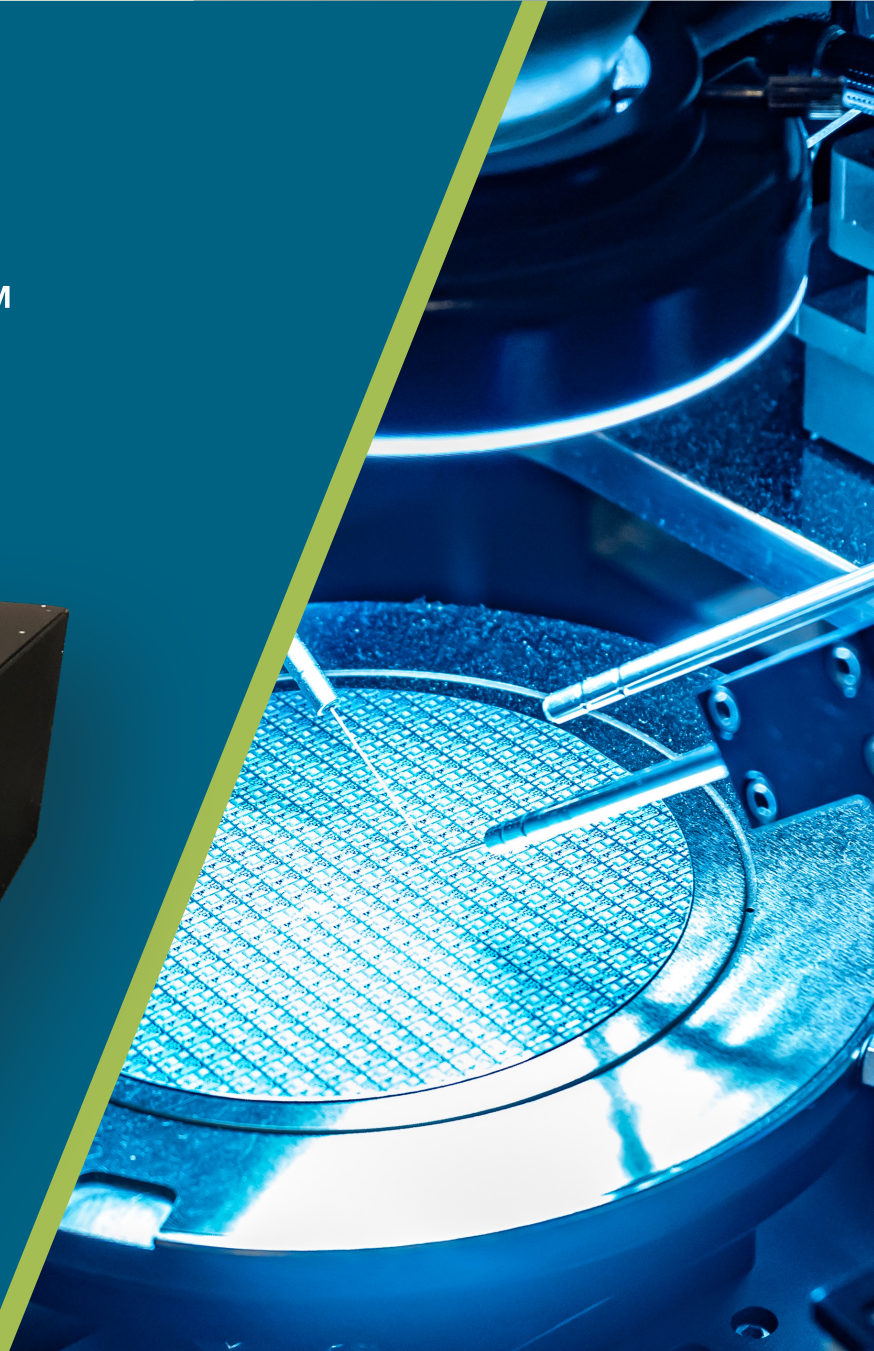


PRODUCT DATASHEET

# HALO 3 CH<sub>4</sub>™

TRACE METHANE ANALYZER  
FOR HIGH-PURITY GASES



## Designed for trace level methane analysis, HALO 3 CH<sub>4</sub> offers:

- Low single-digit parts per billion (ppb) methane detection capability in an array of gases
- Absolute measurement (freedom from calibration gases)
- Wide dynamic range
- Low cost of ownership and operational simplicity
- Clean technology – no external calibration gases required
- Compact analyzer footprint

# Specifications

## Performance

<b>Operating range:</b>	See gas performance table below
<b>Detection limit (LDL, 3<math>\sigma</math>/24h):</b>	See gas performance table below
<b>Precision (1<math>\sigma</math>, greater of):</b>	$\pm$ 0.75% or 1/3 of LDL
<b>Accuracy (greater of):</b>	$\pm$ 4% or LDL
<b>Speed of response:</b>	< 1 minute to 90%
<b>Environmental conditions:</b>	10°C to 40°C 30% to 80% RH (non-condensing)
<b>Storage temperature:</b>	-10°C to 50°C

---

## Gas Handling System and Conditions

<b>Wetted materials:</b>	316L stainless steel (corrosive gas version optional) 10 Ra surface finish
<b>Gas connections:</b>	1/4" male VCR inlet and outlet
<b>Leak tested to:</b>	1 x 10 <sup>-9</sup> mbar l / sec
<b>Inlet pressure:</b>	10 - 125 psig (1.7 - 9.6 bara)
<b>Flow rate:</b>	Up to 1.8 slpm
<b>Sample gases:</b>	Most inert, toxic, passive and corrosive matrices
<b>Gas temperature:</b>	Up to 60°C

---

## Dimensions & Weight

<b>Standard sensor:</b>	H x W x D 8.73 x 8.57 x 23.6 in (222 x 218 x 599 mm)
<b>Sensor rack (fits up to two sensors):</b>	H x W x D 8.73 x 19.0 x 23.6 in (222 x 483 x 599 mm)
<b>Standard sensor weight:</b>	28 lbs (12.7 kg)

---

## Electrical and Interfaces

<b>Platform:</b>	Max Series analyzer
<b>Alarm indicators:</b>	2 user programmable 1 system fault Form C relays
<b>Power requirements:</b>	90 - 240 VAC, 50/60 Hz
<b>Power consumption:</b>	40 Watts max.
<b>Signal output:</b>	Isolated 4-20 mA per sensor
<b>User interfaces:</b>	5.7" LCD touchscreen. 10/100 Base-T Ethernet. USB, RS-232, RS-485. Modbus TCP (optional)
<b>Data storage:</b>	Internal or external flash drive
<b>Certification:</b>	CE Mark

---

## Performance, CH<sub>4</sub>

Detection and Matrix	Range	LDL (3 $\sigma$ )	Precision (1 $\sigma$ ) @ zero
<i>Standard Model</i>			
CH <sub>4</sub> in N <sub>2</sub> :	0 - 8 ppm	1.6 ppb	0.6 ppb
CH <sub>4</sub> in He:	0 - 5 ppm	1.1 ppb	0.4 ppb
CH <sub>4</sub> in Ar:	0 - 7 ppm	1.4 ppb	0.5 ppb
CH <sub>4</sub> in H <sub>2</sub> :	0 - 8 ppm	1.6 ppb	0.6 ppb
CH <sub>4</sub> in O <sub>2</sub> :	0 - 6 ppm	1.1 ppb	0.4 ppb
<i>CO<sub>2</sub> Model</i>			
CH <sub>4</sub> in CO <sub>2</sub> :	0 - 70 ppm	35 ppb	12 ppb
CH <sub>4</sub> in N <sub>2</sub> :	0 - 60 ppm	30 ppb	10 ppb

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

## GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights delivers premium analytical sensors, analyzers, instrumentation, software and solutions that are mission-critical to keep your operations, personnel, and the environment safe. Our commitment to customer satisfaction is evident through our diverse range of products, programs, and services, designed to accommodate various budgets and application needs.

---

## CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

### Process Insights – The Americas

14400 Hollister Street, Suite 800B, Houston, TX 77066, USA +1 713 947 9591

### Process Insights – EMEA

ATRICOM, Lyoner Strasse 15, 60528 Frankfurt, Germany +49 69 20436910


### Process Insights – APAC

Wujiang Economic and Technology, Development Zone, No. 258 Yi He Road, 215200 Suzhou, Jiangsu Province, China +86 400 086 0106

---

For a complete range of products, applications, systems, and service options, please contact us at: [info@process-insights.com](mailto:info@process-insights.com)

For a complete list of sales & manufacturing sites, please visit:  
<https://www.process-insights.com/about-us/locations/>



REVOLUTIONIZING MEASUREMENT

EVERYWHERE™