



# APPLICATION NOTE



**ProCeaS®**

THE NEW  
GENERATION OF  
AMBIENT AIR  
GAS ANALYZERS

 Highly sensitive  
and accurate

 Low maintenance  
and utilities costs

 Short response  
time



1



Extraction Probe

2



Sampling Line  
(fast loop)

3



ProCeas  
Formaldehyde

## ProCeeas® FORMALDEHYDE

As per the international OHS regulations on formaldehyde, **private and public sector** evaluated several technologies to implement continuous real-time monitoring of formaldehyde in ambient air in their plant facilities. The **ProCeeas®** has been selected as the most suitable technology according to their monitoring needs in terms of response time, accuracy and flexibility. Customers use the ProCeeas® to measure various levels of formaldehyde in the air at different locations: laboratories, offices & workshops.

## OFCEAS TECHNOLOGY

For **indoor air quality monitoring**, the ProCeeas® spectrometer is equipped with a laser at a single wavelength used to determine the concentration of a specific compound with an extremely low detection limit and short response time. The **OFCEAS** extended optical path and continuous signal feedback provide a high- definition spectral response using a traditional absorption measurement. The OFCEAS system uses a **high-finesse optical cavity** to provide path lengths of dozens of kilometers. The OFCEAS technology can also take advantage of light sources to provide **multi-component analysis**, while offering improved sensitivity (ppb).

## ProCeeas® KEY FEATURES

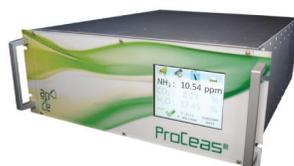
- Low detection level (ppb)
- Complete pre-calibrated laser infra-red spectrometer
- Reduced response-time (seconds) with LPS (Low Pressure Sampling) fast loop.
- No Zero drift and no Span drift - No daily calibration required
- No nitrogen, zero air, no purge nor other carrier gas
- Suitable for a wide range of components in ambient air: NH<sub>3</sub>, CH<sub>4</sub>, HCL, N<sub>2</sub>O, HF, HCHO, (...)

## PERFORMANCES

Range : 0-10 ppm

LOD : < 1 ppb

Response time : < 10 seconds



# ProCeas® FORMALDEHYDE

is a complete pre-calibrated laser infrared spectrometer for measurement of formaldehyde in ambient air.

## ANALYTICAL SPECIFICATIONS

GAS	RANGE <sup>A</sup>	LOD <sup>B</sup>
HCHO	0 - 10 ppm	< 1 ppb
Response time	< 10 seconds	
Zero drift	None	

<sup>A</sup> adjustable range on request

<sup>B</sup> limit of detection 3 Sigma



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