

Description The ProCeas is a complete pre-calibrated multicomponent laser Infrared Spectrometer designed for online monitoring of Sulphur compounds (TRS, SO2, H2S...) in industrial process. The ProCeas features the exclusive LPS Low Pressure Sampling System enabling efficient installation and reduced operating cost by eliminating the need for "heated" sampling system. It uses the patented OFCEAS IR laser technology for enhanced specificity, selectivity, accuracy and

stability (no span or zero drift ).



Applications The ProCeas TRS fulfils the requirements of large chemical manufacturing facilities. Highly durable to harsh process conditions, the ProCeas is a field proven, reliable, robust and user friendly solution for online process monitoring in industrial applications such as steel industry, pulp and paper mills, refineries and sewage treatment facilities

AP2e True innovation in online gas analysis, the patented OFCEAS and LPS technologies offer numerous advantages in terms of operation and performance. With the LaserCEM and ProCeas analysers, AP2e has established a strong position in a large field of application including the Oil & Gas, Pharmaceutical and Chemical industries, Power Generation and Waste-to Energy with references such as Veolia, Exxon, GDF Suez, Air liquide...

## ProCeas® TRS Key Features

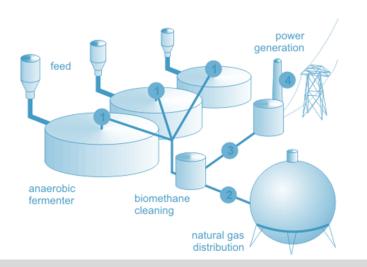
- True Direct Extractive CEMS (No sample treatment) 100mbar
   sampling pressure removes any risk of chemical adsorption, desorption and condensation along the sample line.
- Ease of integration The LaserCEM allows digital (Ethernet,
   RS485, RS232, ModBus) analogue and TDR IOs.
- Field proven The ProCeas is free of optical moving part and
  was designed and built strictly for industrial and on-board
  mobile applications.
- Interferences Free OFCEAS technology provides exceptional selectivity, enabling simultaneous monitoring of multicomponent without interferences, regardless of the gas matrix.
- No Drift The zero is contained in the signal, enabling automated and intrinsic zero drift compensation.
- Low maintenance The LPS system allows flow low rates within 3 and 9l/h without affecting the response time and reducing considerably dust and materials build-up.





## ProCeas® TRS Multipoint Monitoring System

The ProCeas technology enables sampling solutions tailored to the needs of large scale manufacturing industries with automated sampling sequences and multipoint monitoring enabling fast, accurate and detailed analysis at various location with a single instrument.





## ProCeas® TRS Specifications

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	INTEGRATION	GAS	RANGES	DETECTION LIMIT	
Dimensions	Standard 19" 4U rack unit - 550mm depth	SO2	50 ppm min	2 ppb min	
Weight	20kg		10% max	100ppm max	
Flow	3 to 9 lph	H2S	50 ppm min	2 ppb min	
Sample	Temp 600C max.		10% max	100ppm max	
	Pressure 1 atm. +/- 100mbar at the sampling point	Please consult us for other Sulphur compounds.  70 - 25 ppm SO <sub>2</sub> \( \)			
Sampling Line	No heating required if: Ambient temp> 10C and H2O<40% vol.	Absorption (u.a.)			
	Heating required if: Ambient temp<10C and H2O>40% vol.	30 -	10 ppm CH <sub>4</sub>		
Drift	None	20 -	1% H <sub>2</sub> 0		
Response time	10s to 200 s depending on sample line	0			
Interface	5.7" touch screen		Laser Wavelength (u.a.)		
	Windows XP / WinProceas	011, / dust free dry air (6 bar ± 0,5) - 200 (7/h			
Output	Ethernet / RS485 / RS232 / ModBus	Sonic nozzle Polytul 3-9 L/h 2 PFA L	be 110/220V 50/60 Hz		
Options	ATEX - Wall mount version	2µm filter passivated rock wool	sample @100 mbar	oCeas Exhaust	
Power supply	110-240 VAC 50/60 Hz - 200W		Standardized gas	2,45 pm Exhaust	



**Operating** 

conditions

+ Backflush

Pump 3-9 L/h @P\* Atm.

Temp 15-35C Pressure 86-108kPa

Compressed air 1-6 bar (oil free)