

ProCeas®

H₂ purity analyzer

- Measurement compliant with ISO 14687 & EN 17124
- Continuous multi-gas measurement
- Available in pressurized enclosure (ATEX, IECEx, cUL)



Features

- Continuous multi-gas measurement
- High resolution IR laser technology
- Patented OFCEAS TDL technology
- No optical moving parts
- Patented Low Pressure Sampling system
- Low sample gas consumption (<2.4 to 20 slh)
- Maintenance: yearly
- Available in pressurized enclosure (ATEX, IECEx, cUL)

Benefits

- Measurement compliant with ISO 14687 & EN 17124
- Multi-gas measurement without cross-interference
- Recommended method for pure hydrogen production
- Measurement also available in other matrix stream (Ar, N₂, He)
- Zero information contained in the signal (no zero gas required)
- Online or gas cylinder analysis
- No carrier gas needed

Technical data

Gas	Range* (ppm)	LoD* (ppm)	EN 17124 limits (ppm)	ISO 14687 limits (ppm)
H ₂ O	0 ... 100	0.02	5	5
CH ₄	0 ... 200	0.001	100	2
O ₂	0 ... 100	0.1	5	5
CO ₂	0 ... 50	0.01	2	2
CO	0 ... 10	0.001	0.2	0.2
H ₂ S	0 ... 10	0.001	0.004	0.004
HCHO	0 ... 50	0.001	0.2	0.01
HCOOH	0 ... 50	0.01	0.2	0.2
NH ₃	0 ... 10	0.001	0.1	0.1
HCl	0 ... 5	0.00005	0.05	0.05
COS	0 ... 10	0.001	0.004	0.004

Linearity: <1% range, R²>0.999
 Repeatability: 3*LoD or +/-0.5% relative
 Response time: <30 s (all gases) except NH₃, HCl (<100 s)
 Drift zero/span: negligible

* LoD: 3σ over a period of 60 s, σ: standard deviation
 * Range: Can be adapted on request

Analyzer	
Power supply	110 ... 230 VAC, 50 ... 60 Hz, 150 W max 80 W average
Ambient conditions	+10 ... +35 °C (temperature) 10 ... 90% RH, non-condensing
Degree of protection	Up to IP65, according to IEC 60529
Probe connections	Metric or imperial
Ex versions	Available on request