

DURAG GROUP

FUEL CELL  
CARS ONLY

H<sub>2</sub>

FUEL CELL  
CARS ONLY

H<sub>2</sub>

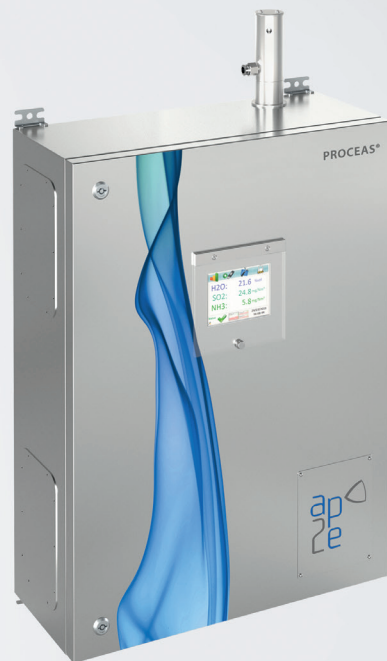
Gasoline & Diesel  
Not Available

Need to detect impurities in hydrogen –  
trust ProCeas analyzer!

ACHEMA  
PULSE

# ProCeas<sup>®</sup>

H<sub>2</sub> Purity analyzer



## Features

- Continuous multigas 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
- Multigas measurement without cross-interferences
- Recommended method for pure Hydrogen production
- Measurement available also in other matrix stream (Ar, N2, He)
- Zero information contained in the signal (no zero gas required)
- On-line or gas cylinders analysis
- No carrier gas needed

## Technical data

Gas	Range* (ppm)	LoD* (ppm)	EN 17124 limits (ppm)	ISO 14687 limits (ppm)
H <sub>2</sub> O	0 ... 100	0.02	5	5
CH <sub>4</sub>	0 ... 200	0.001	100	2
O <sub>2</sub>	0 ... 100	0.1	5	5
CO <sub>2</sub>	0 ... 50	0.01	2	2
CO	0 ... 10	0.001	0.2	0.2
H <sub>2</sub> 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 <sub>3</sub>	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, R<sup>2</sup>>0.999  
 Repeatability: 3\*LoD or +/-0,5% relative  
 Response time: <30 s (all gases) except NH<sub>3</sub>, HCl (<100s)  
 Drift Zero/Span: Negligible

\* LoD: 3σ over a period of 60 sec, σ: Standard deviation  
 \* Range: Can be adapted upon request

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

### AP2E