



Analizador Laser Gás Single Path Monitor

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neoMONITORS LaserGas™ II SP



Neo Monitors LaserGas™ is using Tuneable Diode Laser Absorption Spectroscopy (TDLAS) i.e a non-contact optical measurement method employing solid-state laser sources. The sensor remains unaffected by contaminants corrosives and does not require regular maintenance. The absence of extractive conditioning systems further improves availability of the measurements and eliminates errors related to sample handling. The monitor is mounted directly onto flanges, which include purge gas connections and a tilting mechanism for easy alignment. Continuous purge flow prevents dust and other contamination from settling on the optical windows. Once power and data lines are connected, measurements are performed in real-time.

Customer benefits

- In-situ monitoring
- Highly reliable real time analyzer
- Low maintenance cost
- Reduce emission to the environment
- Easy to install and operate
- Reduce daily operation costs
- Optimize process
- Well proven measurement technics

Features

- Response time down to 1 second
- No gas sampling: In-situ measurement
- No interference from background gases
- Applicable for many process conditions:
 - high/low temperature
 - high dust
 - corrosive gases
- Line measurement, integral concentration over the full stack diameter
- ATEX and CSA certified
- TÜV, MCERTS, GOST approved technology
- Integrated span check option available
- Suitable for harsh environment
- No moving parts
- No zero drift
- Stable calibration
- Long OPLs

Applications

LaserGas™ II SP is designed for reliable and fast measurement of all kinds of gases in any environment, most typically:

- Chemical industry
- Petrochemical industry
- Metal industry
- Power plants
- Waste incinerators
- Cement industry
- Automotive industry
- Scrubber technology
- Glass industry
- PVC production
- Pulp and paper
- and more

Gas	Detection limit (ppm)	Max temp (°C)	Max pressure (bar abs)
NH ₃	0.15	600	2
HCl	0.05	600	2
HF	0.015	400	2
H ₂ S	3	300	2
O ₂	100	1500	20
% H ₂ O	50	1500	2
ppm H ₂ O	0.1	400	2
% CO	30	1500	2
% CO ₂	30	1200	2
ppm CO	0.3	1500	2
ppm CO ₂	0.2	300	2
NO	10	300	2
N ₂ O	1	200	2
CH ₄	0.2	300	3

NOTE: Detection limits are specified as the 95% confidence interval for 1m optical path and gas temperature / pressure = 25 °C / 1 bar abs. Measured in N₂.

Other gases might be available on request. Please contact us for details.

Dual Gas: NH₃+H₂O, HCl+H₂O, CO+CO₂, CO+H₂O, CO+CH₄, O₂+temp, CO+temp. Higher pressure may be available on request for certain gases. Please contact us!

TÜV and MCERTS, GOST approval available for some gases

Specifications

Response time	1 – 2 sec
Accuracy	Application depended
Repeatability	1% of range (gas & application specific)

Environmental conditions

Operating temperature	-20 °C to +55 °C (special version up to +65 °C on request)
Storage temperature	-20 °C to +55 °C
Protection classification	IP66

Inputs / Outputs

Analogue output (3)	4 – 20 mA current loop (concentration, transmission)
Digital output	TCP/IP, MODBUS, Optional fibre optic
Relay output (3)	High gas-, Warning - and Fault relays (normally closed-circuit relays)
Analogue input (2)	4 – 20 mA process temperature and pressure reading

Ratings

Input power supply unit	100 – 240 VAC, 50/60 Hz, 0.36 – 0.26 A
Output power supply unit	24 VDC, 900 – 1000 mA
Input transmitter unit	18 – 36 VDC, max. 20 W
4 – 20 mA output	500 Ohm max. isolated
Relay output	1 A at 30 V DC/AC

Installation and Operation

Flange dimension Alignment	DN50/PN10 or ANSI 2"/150lbs (other dimensions on request)
Alignment tolerances	Flanges parallel within 1.5°
Purge flow	Dry and oil-free pressurised air or nitrogen (application dependent)

Maintenance

Visual inspection	Recommended every 6 – 12 months (no consumables needed).
Calibration	Check recommended every 12 months
Validation	In-situ span check with optional internal cell (EN 14181 compliant)

Safety

Laser class	Class 1 according to IEC 60825-1
CE	Certified, conformant with LVD 73/23/EEC, including 93/68/EEC
EMC	Conformant with directive 2004/108/EC

Explosion protection (optional)

ATEX zone 1	II 2 G Ex px op is Gb II T4, II 2 D Ex pD 21 IP 66 T64°C
ATEX zone 2	II 3 G Ex nA nC op is Gc IIC T4, II 3 D Ex td A22 IP65 T100°C
CSA	Class I, Div. 2, Groups A, B, C and D; Temp. Code T4; non-incendive

Dimension and weight

Transmitter unit	405 (plus 65 for purge unit) x 270 x 170 mm, 6.2 kg
Transmitter unit (Ex version)	405 (plus 65 for purge unit) x 270 x 310 mm, 7.9 kg
Receiver unit	355 (plus 65 for purge unit) x 125 x 125 mm, 3.9 kg
Power supply unit	180 x 85 x 70 mm, 1.6 kg

**Caso queira adaptar este produto a suas necessidades
usando um sistema de condicionamento, uma
automação ou formando um produto, contate:**

COMERCIAL@ENGEZER.COM.BR

**para mais informações ou preços*



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