

RA-915 AMNG

Automatic Mercury Monitor for Natural Gas



AREA OF APPLICATION

Automatic mercury monitor for natural hydrocarbon gas is designed for continuous online monitoring of mercury in a gas flow.

METHOD

Atomic absorption spectrometry with Zeeman correction of background absorption.

DESIGN

The monitor is mounted in standard 19 inch rack. The RA-915 AMNG monitor is designed for indoor operation or installation in climate controlled cabinets. The embedded PC controls the measurement procedure, data processing and data transfer via RS-232/485 interface or current loop. The monitor may be put into an explosion-proof ATEX certified enclosure.

ADVANTAGES

- Direct continuous measurements. The gas is analyzed "as is" providing better control of production process.
- Low detection limit and wide range of measurement.
- Highest selectivity.
- Long-term calibration stability.
- No chemicals, carrier and zero gases – No running cost.
- Automatic zero drift and span drift correction.
- Automatic recalculation to standard conditions.
- Auto control and preventive maintenance functions.
- Robustness and low maintenance.
- Customized configuration.



TECHNICAL SPECIFICATIONS

	Treated Gas Range I	Treated Gas Range II	Raw Gas
Measurement range	0–2 000 ng/m³	0–20 000 ng/m³	0–2 000 µg/m³
Detection limit	1–5 ng/m³	100 ng/m³	0.5–1 µg/m³
Averaging interval	5 min	Optional > 2 sec	Optional > 2 sec
Zero drift correction	Automatic		
Span drift correction	Automatic		
Sampling gas condition			
Gas pressure	Atmospheric (+/-20%)		
Flow rate	4–10 L/min	4–10 L/min	0.5–10 L/min
Gas humidity	Dew point < 10 °C		
Gas temperature	+1 to +40 °C		
Concentration of H2S	≤ 50 mg/m³	≤ 200 mg/m³	≤ 1000 mg/m³
Concentration of benzene	≤ 10 mg/m³	≤ 200 mg/m³	≤ 2000 mg/m³
Concentration of mercaptans	≤ 50 mg/m³	≤ 200 mg/m³	≤ 1000 mg/m³
Concentration of aromatic compounds	≤ 200 mg/m³	≤ 2000 mg/m³	≤ 10000 mg/m³
Data output			
Communication ports	RS 232/485; 2 x USB; LAN, Isolated 4–20 mA		
Status outputs	MEASURING; ZERO CONTROL; CALIBRATION; SERVICE; FAILURE		
Dimensions, Weight, Power requirements			
Dimensions	600 x 480 x 220 mm		
Weight	20 kg		
Power	110/240 V, 50/60 Hz; 120 VA max		