# RA-915AMNG

# Automatic mercury monitor for natural gas











## **AREA OF APPLICATION**

RA-915AMNG online mercury monitor is designed for direct continuous mercury determination in natural hydrocarbon gas. RA-915AMNG performs fully automated unattended measurement 24/7 in a gas flow.

#### PRINCIPLE OF OPERATION

Differential atomic absorption spectrometry with Zeeman background correction.

#### **DESIGN**

RA-915AMNG monitor is designed for indoor operation or installation in climate-controlled cabinets. The monitor is mounted in a standard 19-inch rack. The embedded PC controls the measurement procedure, data processing, and data transfer via digital or analog protocols. 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 the production process
- No pre-concentration on sorbent traps
- Low detection limit and wide measurement range
- · Highest selectivity
- · Long-term calibration stability
- No chemicals, no carrier and zero gases
- · Automatic zero drift and span drift correction
- Built-in control and preventive maintenance functions
- · Low running and maintenance cost
- · Customized configuration
- Autorun function in case of power supply failures

### TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS							
	Range I, ng/m³			Range II, ng/m³		Range III, ng/m³	
Measurement range	0-2 000	)		0-150 000		0-3 000 000	
Detection limit	1			50		500	
Zero drift correction	Automatic						
Span drift correction	Automa	tic					
Flow rate	4-10 L/	min		4–10 L/min		0.5-10 L/min	
Analyzed air temperature	-20 to +40 °C						
Sampling gas conditions							
Gas pressure				Atmospheric (+/-20%)			
Gas temperature				+1 to +40 °C			
Allowed concentrations of interfering components, mg/m³ (not more)							
Range of mercury content, ng/m³		1-10		10 – 100	100 – 1000		>1000
Hydrogen sulfide (H₂S)		100		100	1000		1000
Sulfur dioxide (SO <sub>2</sub> )		10		100	1000		1000
Mercaptans		100		100	100		100
Nitrogen oxides (NOx)		100		100	100		100
Benzene (C <sub>6</sub> H <sub>6</sub> )		0.5		5	50		500
Aromatic compounds (excluding benzene)		10		100	500		500
Data output							
Communication ports			RS 232/485; 2 x USB; LAN; 4–20 mA current loop; Relay output				
Data transfer protocols			GESYTEC; Modbus; Analogue				
Power requirements			100/240 VAC; 50/60 Hz; max 120 VA				
Dimensions			665×482×222 mm				
Weight			20 kg				

# **WARRANTY**

RA-915AMNG analyzer is covered by a full 1-year warranty.

# **SERVICE**

Installation and commissioning of Lumex Instruments' mercury monitors can be carried out at a customer site by our service engineers or by certified distributor service engineers.

