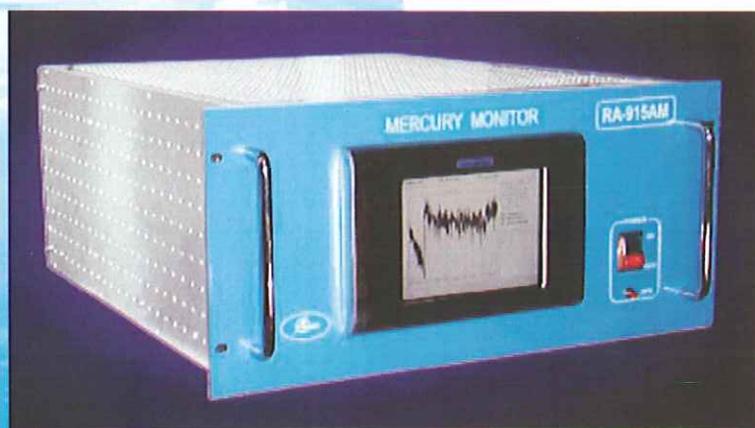


# RA-915AM Air Mercury Monitor



## Area of application

Background mercury monitoring of ambient air, technological control.  
The RA-915AM monitor is designed for the continuous measurement of the mass concentration of elemental mercury in ambient and indoor air, and technological gases.

## Principle of operation

Atomic absorption with Zeeman background correction.

## Advantages

- Direct continuous measurements
- Highest selectivity
- No chemicals, no pre-concentration
- Stable calibration
- Automatic zero drift and span correction
- Automatic recalculation to standard conditions
- Customized operation parameters and communication protocol

## Design

The RA-915AM monitor is designed for indoor operation or installation in climate controlled cabinets. The monitor can be installed in standard 19 inch rack.



## Technical Specifications

<b>Analytical</b>	
<b>I</b>	
Range I	0.5–2,000 ng/m <sup>3</sup>
Response Time	300 sec
<b>II</b>	
Range II	5–20,000 ng/m <sup>3</sup>
Response Time	20 sec
Automatic Zero Drift Correction	
Automatic Span Drift Correction	
Gas Flow	7–10 l/min
Communication Ports	RS 232; 4 x USB; 1 Relay
Status Outputs	MEASURING; ZERO CONTROL; CALIBRATION; SERVICE; FAILURE
<b>Operating Conditions</b>	
Ambient air temperature	–20 to +50°C
Atmospheric pressure	84 to 106,7 kPa
Ambient relative humidity	< 98 % at 35°C
<b>Power</b>	
Built-in UPS (optional)	110/240 VAC, 50/60 Hz; max 120 VA
Dimensions	(550 x 480 x 220) mm
Weight	22 kg



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# 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

The method of mercury determination in gas is based on atomic absorption spectrometry with Zeeman correction of background absorption.

## 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.

## DESIGN

The monitor is mounted in a 19" case. 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 RS232/485 interface or current loop. The monitor may be put into an explosion proof ATEX certified enclosure.



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## TECHNICAL SPECIFICATIONS

	Treated Gas Range I	Treated Gas Range II	Raw Gas
Measurement range	0-2 000 ng/m <sup>3</sup>	0-20 000 ng/m <sup>3</sup>	0-2 000 µg/m <sup>3</sup>
Detection limit	1-5 ng/m <sup>3</sup>	100 ng/m <sup>3</sup>	0.5-1 µg/m <sup>3</sup>
Averaging interval	Optional > 2 sec		
Zero drift correction	Automatic		
Span drift correction	Automatic		
<b>Sample gas condition</b>			
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		
Concentration of H <sub>2</sub> S	≤ 50 mg/m <sup>3</sup>	≤ 200 mg/m <sup>3</sup>	≤ 1000 mg/m <sup>3</sup>
Benzene	≤ 10 mg/m <sup>3</sup>	≤ 200 mg/m <sup>3</sup>	≤ 2000 mg/m <sup>3</sup>
Concentration of mercaptans	≤ 50 mg/m <sup>3</sup>	≤ 200 mg/m <sup>3</sup>	≤ 1000 mg/m <sup>3</sup>
Concentration of aromatic compounds	≤ 200 mg/m <sup>3</sup>	≤ 2000 mg/m <sup>3</sup>	≤ 10000 mg/m <sup>3</sup>
<b>Data output</b>			
Communication ports	RS-232/485; 2 x USB; LAN, Isolated 4-20 mA		
Status outputs	MEASURING; ZERO CONTROL; CALIBRATION; SERVICE; FAILURE		
<b>Operating conditions</b>			
Temperature	+10°C to +40°C		
Pressure	84 to 106.7 kPa		
Relative humidity	< 98% at +35°C		
Power	110/240 V, 50/60 Hz; 120 VA		
Dimensions	600 x 480 x 220 mm		
Weight	20 kg		



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