

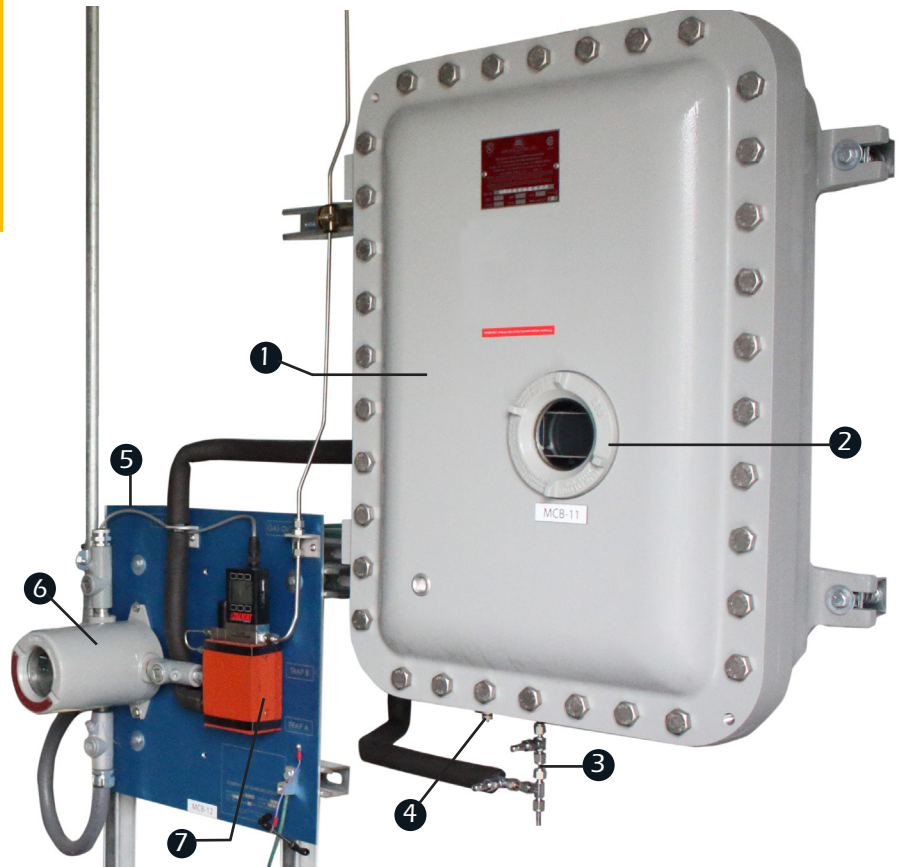
## AMNG-EXP

# Automatic Mercury Monitor for Natural Gas



Mustang Sampling®

Item Number	Description
1	Electronics Enclosure
2	Window to Indicator
3	Gas inlet
4	I/O Connection
5	Verification Panel
6	PID Temperature Controller
7	Sorbent Trap Standards



## APPLICATION

The AMNG-EXP Automatic Mercury Monitor for Natural Gas is designed for continuous, on-line measurement of Mercury in the gas flow. The spectrometer, operating computer, filters, valves, electrical connections, and power supply are located inside an explosionproof, ATEX certified enclosure. The AMNG-EXP Monitor is designed for indoor operation, or installation inside a climate controlled room. The embedded operating computer controls the measurement procedure, data processing, and data transfer via RS-232/485 interface or current loop.

**Spectrometer:** The AMNG-EXP features a highly sensitive, atomic absorption spectrometer with Zeeman background correction, providing interference free measurements

**Sample Lines:** The inlet and outlet ports of the Monitor are equipped with 6 mm compression fittings for connecting to 6 mm OD (1/4"), 4-5 mm ID, Teflon PTFE or PFA tubing.

**Data Acquisition / Communications:** Built-in industrial grade computer, real time readings with Excel data file or direct communications with DCS via Modbus TCP. On-line remote data transfer and analyzer control/calibration capabilities.

## FEATURES

- Wall mounted, explosion proof, ATEX certified Aluminum enclosure
- 25 mm shell thickness
- Hazardous Area Classification: Class 1 Division 1 or 2, Groups A, B, C, D
- External ON / OFF Switch
- Window in door displays the 5-minute average
- Window turns RED / GREEN to display status

## BENEFITS

- Direct continuous measurements
- Analyzes gas "as is", providing better process control
- Low detection limit and wide range of measurement
- Long term calibration stability
- No chemicals, carrier or zero gases
- No continuous operating costs
- Automatic zero drift and span drift correction
- Automatic recalculation to standard conditions
- Auto control and preventive maintenance functions
- Robust and low maintenance
- Customized configuration

## PRODUCT SPECIFICATIONS

	Treated Gas Range I	Treated Gas Range II	Raw Gas
Measurement Range	0 – 2000 ng/m <sup>3</sup>	0 – 20000 ng/m <sup>3</sup>	0 – 2000 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	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	-20 to +40°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>
Concentration of 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>
Data Output			
Communication Ports	RS-232/485; 2 x USB; LAN, Isolated 4-20 mA		
Status Outputs	MEASURING; ZERO CONTROL; CALIBRATION; SERVICE; FAILURE		
Operating Conditions			
Temperature	+(20±2)°C		
Pressure	84 TO 106.7 kPa		
Relative Humidity	< 98% at +35°C		
Power	110/240 V, 50/60 Hz; 120 VA		
Dimensions	29.1 x 23.0 x 9.9 inches (740 x 584 x 251 mm)		
Weight	190 lbs (86 kg)		

## Analytically Accurate® TECHNOLOGY

### About Mustang Sampling

Mustang Sampling, LLC is the innovator of Analytically Accurate® solutions within sample conditioning systems. We provide custom solutions of products and services globally to the Natural Gas, Natural Gas Liquids (NGL), and Liquefied Natural Gas (LNG) industries. Mustang Sampling continues to pioneer integrated control systems, allowing our customers to maintain phase stability from sample extraction at the source through sample analysis. Our products are continuously improved and subjected to the highest quality standards which provides our customers with the best sample conditioning solutions.

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