

## MODEL AGA 961 CE

ACID GAS ANALYZER SYSTEM  
FOR CLAUS SULPHUR RECOVERY UNITS  
TO ANALYZE THE H<sub>2</sub>S -CONCENTRATION



### UV-spectrophotometer

Ideal for:

- Inlet H<sub>2</sub>S measurement
- Feed forward control to bias the main air ratio controller

### General:

- Low installation cost
- Continuous, accurate, reliable
- No expansive shelter required
- User and service friendly modular design

### Sample System:

- Reliable and trouble free
- Sample Lines connect the analyzer with sample and vent point
- Hermetically separated from electronics/ optics (fibre coupled)

### Spectrophotometer:

- Full spectrum analyses with high wavelength resolution
- Excellent cross-interference compensation for high accuracy measurements under real process conditions
- High linearity; Wide dynamic range
- Extreme over range capability
- No moving parts, no optical filters
- Easy handling due to self explaining display
- Extensive self diagnostic built in

## Technical Data

|                                     |   |   |
|-------------------------------------|---|---|
| Electrical Classification           | EEx p ib (ia) m e IIB T3 Cert.No.: TÜV 00 ATEX 1616 or  |   |
|                                     | General Purpose according IEC/VDE   |   |
| Power Supply                        | 1/N/PE ~ 50/60 Hz 230 V or 115 V  |   |
| Power Consumption                   | 1200 Watt   |   |
| Protection                          | IP 65 according IEC 529 DIN 40 050  |   |
| Instrument air or another inert gas | Pressure: 5.5 ... 7 barg<br>550 ... 700 kPa   | Flow: 3,4 m³/h normal<br>25 m³/h at short intervals |
| Dew point -40 °C (-40 °F)           | To comply with ANSI/ISA S7 - 3 - 1975 R/1981  |   |
| Steam Supply                        | 3.5 ... 4.5 barg for sample line heat trace   |   |
| <b>SIGNAL OUTPUTS</b>               |   |   |
| Analog                              | Two outputs 4 ... 20 mA, updated once per second, isolated to 250 V <sub>rms</sub> , self- or loop powered, load < 1000 Ω,<br><br>Output signal linear to concentration:<br>1. Hydrogen Sulphide H <sub>2</sub> S (track & hold) 0 ... 5 to 0 ... 100 vol %<br>2. Hydrogen Sulphide H <sub>2</sub> S (live) 0 ... 5 to 0 ... 100 vol %<br>: |   |
| Digital                             | Potential free SPDT relay contacts. Isolated to 250 V <sub>rms</sub><br>The operational status outputs: STATUS (Fault/Normal)<br>MODE (Calibrate/Run)<br>CONTROL (Manual/Auto)  |   |
| Display                             | Flat Paned Industrial PC c/w 12" TFT screen   |   |
| Material in sample contact          | Stainless steel, high purity aluminum or PTFE   |   |
| Source                              | Highly stable deuterium broad band lamp   |   |
| Detector                            | Spectrometer with a 2048 element CCD array detector   |   |
| Accuracy                            | ± 2 % H <sub>2</sub> S F.S.   |   |
| Speed of response T <sub>90</sub>   | Typical 3 seconds w/o sample line delay   |   |
| Warm up time                        | < 90 minutes  |   |
| Repeatability                       | ± 2.0 % F.S.  |   |
| Sensitivity                         | H <sub>2</sub> S – reading ± 2.0 % F. S.  | SO <sub>2</sub> – reading ± 2.0 % F.S.              |
| Zero drift                          | 0.25 % F.S. in 24 hours<br>Based on Auto Zero every four hours.   |   |
| Calibration                         | H <sub>2</sub> S output is factory calibrated.<br>High purity N <sub>2</sub> for Zero required  |   |
| Sample flow                         | 80 Liter/h  |   |
| Sample transport                    | Differential pressure between sample and vent point   |   |
| Weight                              | 140 kg  |   |

This Analyzer is based on BRIMSTONE Technology.