

# SGA Single Gas Analyzer

Precision measurement of a single gas in protective heat treating atmospheres

## Color Touch Screen



## Benefits

- Easy to operate
- Built in sample pump
- Onboard data logging
- Easy to use onboard calibration
- Software utilities for printing charts
- Ammonia compatible design
- Field calibration for zero and span
- Ethernet and USB connection to PC
- User-assignable alarms with visibility on touch screen
- Easy integration with SCADA package
- Highly visible color touch screen readout
- Multi-language support

The SGA can be set up to measure one or more of the following gases:

### CO: Carbon Monoxide (Part No. 13672-CO)

Range: 0 - 100%  
Accuracy:  $\pm 0.2\%$   
Resolution:  $\pm 0.01\%$   
Non-Dispersive Infrared (NDIR)

### CO<sub>2</sub>: Carbon Dioxide (Part No. 13672-CO2)

Range (standard): 0 - 2.0%  
Optional Range (high range): 0 - 20.0%  
Accuracy (standard):  $\pm 0.02\%$   
Accuracy (high range):  $\pm 0.2\%$   
Resolution (standard):  $\pm 0.001\%$   
Resolution (high range):  $\pm 0.01\%$   
Non-Dispersive Infrared (NDIR)

### CH<sub>4</sub>: Natural Gas/Methane (Part No. 13672-CH4)

Range: 0 - 100%  
Accuracy:  $\pm 0.2\%$   
Resolution:  $\pm 0.01\%$   
Non-Dispersive Infrared (NDIR)

### H<sub>2</sub>: Hydrogen (Part No. 13672-H2)

Range: 0 - 100%  
Accuracy:  $\pm 0.1\%$   
Resolution:  $\pm 0.1\%$   
Thermal Conductive

## Unit Specifications

|                             |                                                        |
|-----------------------------|--------------------------------------------------------|
| Response Time:              | 0 - 6 seconds                                          |
| Power Supply Input Voltage: | 110VAC or 230VAC                                       |
| Max. Operating Temperature: | 122 °F (50 °C)                                         |
| Analog Outputs:             | 2 (4-20mA or 0-5 V)                                    |
| Serial Communications:      | 2 RS485 ports using Modbus RTU, configurable baud rate |
| Ethernet:                   | 2 ports                                                |
| USB:                        | 1 Type A port,<br>1 Type B port                        |

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# Single Gas Sensors

Precision measurement of a single gas with broad application and implementation



## Unit Specifications

|                             |                                                        |
|-----------------------------|--------------------------------------------------------|
| Response Time:              | 0 - 6 seconds                                          |
| Power Supply Input Voltage: | 10 - 30 VDC                                            |
| Max. Operating Temperature: | 122 °F (50 °C)                                         |
| Analog Outputs:             | 2 (4-20mA or 0-5 V)                                    |
| Serial Communications:      | 2 RS485 ports using Modbus RTU, configurable baud rate |
| Ethernet:                   | 2 ports                                                |
| USB:                        | 1 Type A port, 1 Type B port                           |
| Calibration:                | Field calibration via web interface                    |

## OEM Sensor Enclosures

- CO:** Part No. A20831-CO  
Range: 0 - 100%  
Accuracy:  $\pm 0.2\%$   
Resolution:  $\pm 0.01\%$
- CO<sub>2</sub>:** Part No. A20831-CO2  
Range (standard): 0 - 2.0%  
Optional Range (high range): 0 - 20.0%  
Accuracy (standard):  $\pm 0.02\%$   
Accuracy (high range):  $\pm 0.2\%$   
Resolution (standard):  $\pm 0.001\%$   
Resolution (high range):  $\pm 0.01\%$
- CH<sub>4</sub>:** Part No. A20831-CH4  
Range: 0 - 100%  
Accuracy:  $\pm 0.2\%$   
Resolution:  $\pm 0.01\%$
- H<sub>2</sub>:** Part No. A20830  
Range: 0 - 100%  
Accuracy:  $\pm 0.1\%$   
Resolution:  $\pm 0.1\%$

## H<sub>2</sub>/O<sub>2</sub> Sensor H<sub>2</sub> measurement with O<sub>2</sub> input

The H<sub>2</sub>/O<sub>2</sub> sensor provides a measurement of hydrogen gas percentage in a sampled gas while allowing for an external oxygen input. The hydrogen sensor is typically mounted directly to the top of a furnace and does not require any additional sample lines or pumps to operate. It measures hydrogen and can also accept the input from an externally mounted, optional oxygen sensor.



- H<sub>2</sub>:** Part No. A20829  
Range: 0 - 100%  
Accuracy:  $\pm 0.1\%$   
Resolution:  $\pm 0.1\%$
- O<sub>2</sub>:** Part No. 31435  
Range: 0 - 21%  
Accuracy:  $\pm 0.1\%$



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