

# S-Guard CO<sub>2</sub>

## Infrared CO<sub>2</sub> Gas Detector



GasTech Australia Smart Guard series S-Guard™ Series GIR-3000 Carbon Dioxide CO<sub>2</sub> detector is a single source dual wavelength instrument. The sensing and reference elements are self-compensating for optical integrity and other signal inhibitors. The industry standard 4 -20 mA analog output provides remote alarm, fault and calibration signals.

### Features

- Continuous detection of CO<sub>2</sub> gas in explosion hazardous area with flame proof structure
- State of art Infra red detection principle
- Long service life (more than 5 years)
- Low operation cost due to maintenance free
- Operation at no oxygen environment
- Self diagnosis function with built-in Microprocessor
- Rapid response time (with 10 secs)
- Built in Back Light LCD display
- Auto calibration and program setting with Manet control
- Two stage alarm, with one fault relay output
- 4-20mA DC output signal
- Easy configuration of monitoring system with RS-485 Modbus(isolated) Serial communication function

### Applications

- Refineries
- Gas turbines
- Drilling and production platforms
  - Chemical plants
  - Fuel loading facilities
  - Compressor stations
  - Oil well logging
- Wastewater treatment facilities
  - LNG/LPG processing and storage facilities
  - Transportation facilities

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## Infrared CO<sub>2</sub> Gas Detector

<b>Model</b>	S-Guard GIR-3000 (CO <sub>2</sub> )
<b>Measuring gas</b>	CO <sub>2</sub> gas
<b>Measuring type</b>	Diffusion type
<b>Sensor type</b>	Infrared type
<b>Measuring range</b>	0-1,000 ppm & 0-5% VOL
<b>Sensor life time</b>	More than 5 years
<b>Response time</b>	<10 sec / 90% scale
<b>Accuracy</b>	±3% / Full scale
<b>Parameter controls</b>	Non intrusive control with Magnet bar (calibration, maintenance, alarm setting)
<b>Operation mode display</b>	4-LED (Power, 2-Alarm, 1-Trouble)
<b>Measuring value display</b>	LCD display (Built-in Back light 2-Line, 16 characters)
<b>Alarm signal output</b>	250V 1A / 3-SPST Relay contact (2-Alarm, 1-Trouble)
<b>Output signal</b>	
<b>Analog output : Measuring signal</b>	4-20 mA DC
<b>Maintenance signal</b>	3 mA DC
<b>Calibration signal</b>	2 mA DC
<b>Fault signal</b>	0 mA DC
<b>Digital output</b>	RS-485 MODBUS (Option)
<b>Cable / Distance</b>	Power + signal cable: 3 wire (above CVVS 1.5sq) / 500m max.
<b>RS-485 data communication cable</b>	1par (UL2919 RS-485) / 1,000m max.
<b>Conduit pipe</b>	1/2" & 3/4" PF, NPT (3/4" PF standard)
<b>Mounting type</b>	2" Pole mount, Wall mount, Duct mount
<b>Operating temperature</b>	-20°C ~ +50°C
<b>Operating humidity</b>	5 ~ 99%.RH (non-condensing)
<b>Operating power</b>	18 ~ 31V DC (24V DC normal) / 300mA max.
<b>Dimensions</b>	301.5 x 152 x 109 (W X H X D)
<b>Weight</b>	2.5kg
<b>Approval</b>	Flame proof structure (Ex d IIC T6), ATEX, IECEx
<b>Ordering information</b>	67-9090-CO2 S-Guard IR Smart Transmitter, 4-20mA, 0-5% CO <sub>2</sub> IECEx 67-9090-R-CO2 S-Guard Smart IR Remote Sensors Smart Transmitter, 4-20mA, 0-5% CO <sub>2</sub> IECEx

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Specifications subject to change without notice (June 2011)