



**GENERAL MONITORS**  
Protection for life.

## AUTOMATIC REMOTE GAS CALIBRATOR [ARGC]



### Features

- Capable of being actuated electronically
- Easy to install
- Two-part design for gas application
- Checks integrity of the gas sensor diffusion path

### Benefits

- When used with S4000CH, allows operators to calibrate detector via HART or Modbus
- No electrical wiring or connections
- Easy to calibrate sensor in remote locations
- Fail safe operation

### Description

To verify the proper operation of a catalytic combustible gas sensor, it is necessary to periodically apply a gas of known concentration to the sensor. This is usually done manually at the site with gas supplied from a small lecture bottle. As the sensor reacts to the calibration gas, adjustments are made to the monitoring system to bring its calibration into agreement with the known concentration of gas.

At times, sensors are mounted in inaccessible locations, requiring expensive catwalks or scaffolding to reach them. The Automatic Remote Gas Calibrator (ARGC) allows the calibration gas to be applied to the catalytic bead sensor from easily accessible locations.

The ARGC is used for blocking ambient air and re-directing methane to the catalytic sensor for calibration or testing sensor accuracy. The ARGC tests or calibrates the General Monitors catalytic sensor with 50% LEL methane. The unit is capable of calibrating gas at wind velocities up to 50 mph.

*Note:* the RGC (P/N 80153-1), used manually with a pressure regulator (P/N 80146-2), is suitable for calibrating with any light hydrocarbon.

### Applications

- Hard-to-reach sensor locations
- Aircraft hangars
- Crude oil pumping stations
- Drilling rigs
- Petrochemical plants
- Refineries
- Warehouses



# AUTOMATIC REMOTE GAS CALIBRATOR [ARGC]

## System Specifications

<b>Input Power:</b>	24 VDC from S4000CH (ARGC only)
<b>Electrical Classification:</b>	Class I, Div 1, Groups A, B, C, and D (solenoid valve only)
<b>Warranty:</b>	Two years
<b>Part Numbers:</b>	80153-1 (RGC) 80154-1 (ARGC solenoid valve and hardware) 80155-1 (remote installation ARGC) 32547-1 (remote junction box with connecting board)

## Environmental Specifications

<b>Operating Temperature:</b>	-40°F to 167°F (-40°C to 75°C)
<b>Storage Temperature:</b>	-40°F to 167°F (-40°C to 75°C)
<b>Humidity:</b>	5-95%, non-condensing
<b>Air Velocity:</b>	55 mph maximum
<b>Accuracy:</b>	5% to 20% of full scale depending on angle of air flow
<b>Response Time*:</b>	T <sub>50</sub> < 10 seconds, T <sub>90</sub> < 30 seconds

## Mechanical Specifications

<b>Operating Pressure:</b>	45 ±5 psi
<b>Maximum Tubing Length:</b>	200 ft for 1/8 inch tubing (OD) 100 ft for 1/4 inch tubing (OD)



RGC  
(P/N 80153-1)



ARGC  
(P/N 80153-1 & 80154-1)



ARGC with Junction Box  
(P/N 80155-1)

\* Response time of S4000CH assumes sample tubing is pressurized with calibration gas.

Specifications subject to change without notice.

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