SGOES COMBUSTIBLE GAS DETECTOR

SGOES-M11-SS-C1, Combustible Gas Detector (methane), P/N 100-0001-M11-SS-C1
SGOES-M11-SS-C3, Combustible Gas Detector (propane), P/N 100-0001-M11-SS-C3
SGOES-M11-SS-OTHER, Combustible Gas Detector (other), P/N 100-0001-M11-SS-OTHER

ESP ⚡ SAFETY INC

The typical SGOES delivery set consists of the following components

1. Protective Cap (Qty 1), P/N 125-0008
2. SGOES Combustible Gas Detector (Qty 1), P/N 100-001-M11-SS
3. 3/4" NPT Threaded Plug (Qty 1), P/N 420-0210
4. 3/4" NPT Threaded Plug w/ Raised Head (Qty 1), P/N 125-0015
5. 10mm Hex Wrench (Qty 1), P/N 120-0078 *one provided per 10 SGOES
6. Calibration Magnet (Qty 1), P/N 120-0076 *one provided per 10 SGOES
7. Mounting Hardware (Qty 1 Set), P/N 125-0020
8. Calibration Cup (Qty 1), P/N 120-0023 *one provided per 10 SGOES

COMPONENTS:

SGOES COMBUSTIBLE GAS DETECTOR
QUICK INSTALLATION GUIDE

OVERVIEW

This Quick Start Guide provides basic guidelines for mechanical and electrical installation of the SGOES Combustible Gas Detector in preparation for product startup. For detailed testing, troubleshooting and operation instructions, refer to the SGOES Operating Manual.

The SGOES Operating Manual can be downloaded from the ESP Safety website:

www.espsafetyinc.com

Prior to startup of the SGOES, review that the following have been completed:

Pre Startup Checklist:

1. Verify that the SGOES has been properly mounted.
2. Verify that all conduit/cable gland entries have been tightened and sealed, if necessary
3. Verify that all detector wiring has been installed correctly.
4. Verify that the detector is properly earth grounded.
5. If using the SGOES in conjunction with a Field Control Unit such as the VECTOR, verify that the connections between the SGOES and the Field Control Unit is secure and functional.
6. Verify that the SGOES rear cover is securely tightened and locked with the housing cover lock screw.
7. Disconnect or power down all output devices and alarms to prevent false actuation during functional testing.
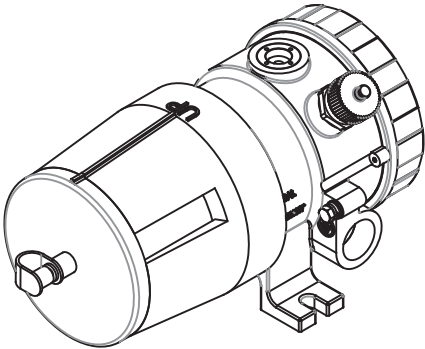
CONGRATULATIONS! You have successfully installed your SGOES Combustible Gas Detector and are now ready to apply power and perform startup procedures.

The following items for the SGOES may be ordered:

Accessories:

Calibration Magnet, P/N 120-0076
Calibration Cup, P/N 120-0023
Protective Cap, P/N 125-0008
HART Connection Cable, P/N 260-0009
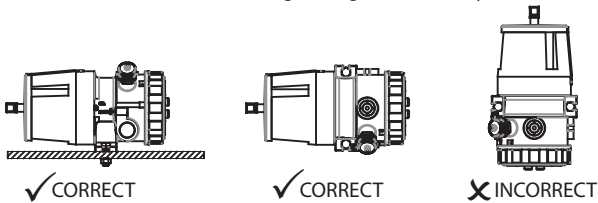RS-485 to USB Converter, P/N 260-0021

Contact ESP Safety:

USA

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San Jose, CA 95112
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email: info@espsafetyinc.com

1. Secure mounting bracket to a stable surface using the SGOES's integral mounting lugs

Attaching to a Vertical Surface:

Mounting Lugs
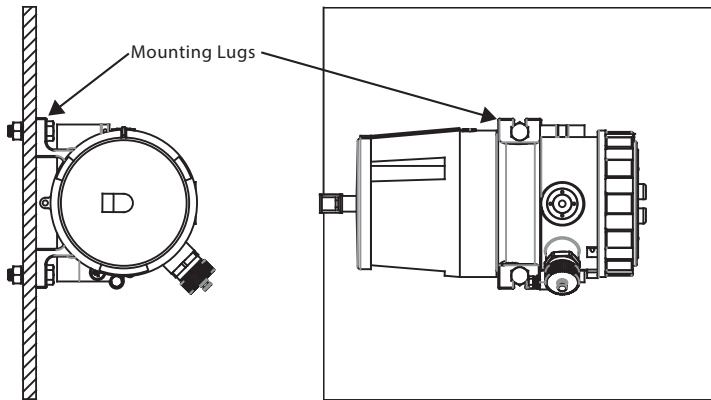
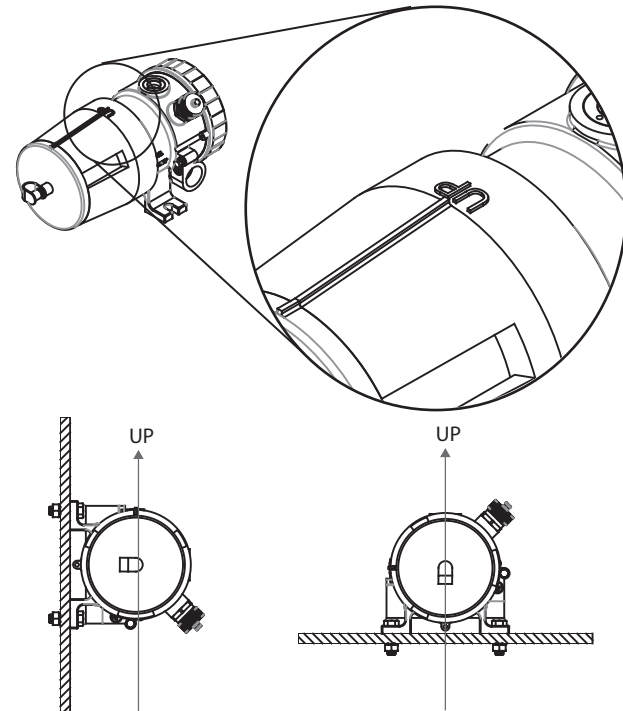The SGOES must be mounted with the long axis aligned horizontally.

✓ CORRECT   ✓ CORRECT   ✗ INCORRECT

Additional mounting details can be found on pages 11-13 of the SGOES Operating Manual.

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1. The Protective Cover of the SGOES must be oriented so that the "UP" marking is in the 12-o'clock position.
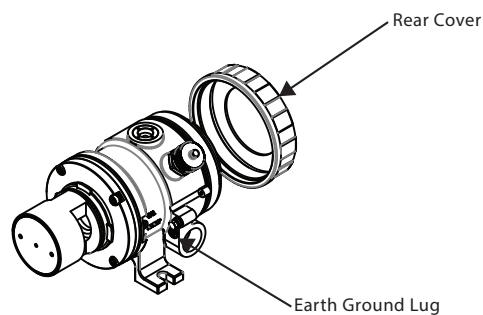

UP   UP

Additional mounting details can be found on pages 11-13 of the SGOES Operating Manual.

Connect wiring to the SGOES terminal blocks.   Note: The SGOES Combustible Gas Detector requires a 24VDC power source (18-32VDC voltage range)

1. Access the SGOES wiring terminals by unscrewing and removing the threaded rear cover.


Rear Cover

Earth Ground Lug

2. Connect wiring to the appropriate terminals on the terminal blocks. Refer to diagram on Page 6 for terminal label and function.

3. When completed, replace the treaded cover on the SGOES.

4. Run the earth ground wire to the external ground stud on the SGOES body

Additional wiring details can be found on pages 14-15 of the SGOES Operating Manual.

SGOES Terminal Block (end view with rear cover removed)

HART Connection Port
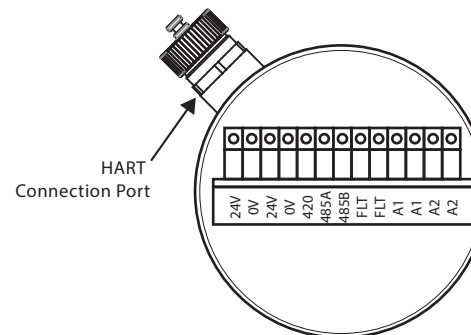
24V 0V 24V 0V 420 485A 485B FLT FLT A1 A1 A2 A2

LABEL	FUNCTION
24V	+ 24V DC (DC power input)
0V	System Ground
24V	+ 24V DC (DC power input)
0V	System Ground (common)
420	+4-20 mA (current output signal)
485A	RS-485 A (Modbus RTU output signal)
485B	RS-485 B (Modbus RTU output signal)
FLT	Fault alarm relay, (pin 1)
FLT	Fault alarm relay, (pin 2)
A1	Alarm Relay 1, pin 1
A1	Alarm Relay 1, pin 2
A2	Alarm Relay 2, pin 1
A2	Alarm Relay 2, pin 2

Additional wiring details can be found on pages 14-15 of the SGOES Operating Manual.