

AGSR-NDIR Datasheet

NDIR Refrigerant Gas Detector







24VAC or DC Power Input



Standalone
Detector or
Used with an
AGS Controller



LED & Audible Alarm



BMS/BAS MODBUS RS485 Communications



Modern & Compact Design



Alarm Relay Dry Contact



Plug & Play Installation



In-Built Audible Alarm

Product Overview

The AGS Refrigerant gas leak detector with NDIR sensor technology meets the need for a cost-effective and reliable solution to continuously monitor and detect refrigerant gas in occupied space in commercial buildings. The AGS-NDIR detector features is compact, modern, digital design which makes the units aesthetically pleasing, easy to install and reduces maintenance.

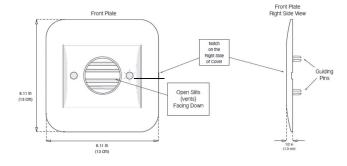
Popular Applications



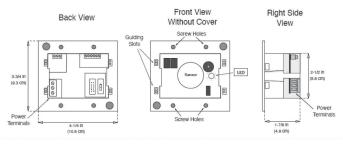








Mounting Orientation:



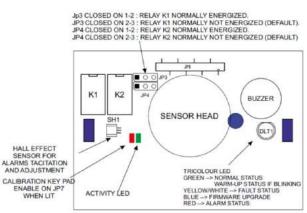
Technical Specification

General	
Sensing Element	Non-Dispersive Infrared (NDIR)
Detectable Gases	R410a R407a R404a R32 A2L SELECTABLE
Supply Voltage	24VAC, 120VAC, 60Hz
Power Consumption	44 mA amps @ 120VAC
Relay Output	Two SPDT (Form C) Dry Contacts 1.0A max. @ 24 VDC
Alarm Relays Actuation Points	Relay 1 & 2 at 1000PPM and 2000PPM
Multicolor Status LED Indication	Green Blinking Warm-up Green Fixed Normal status Yellow Fault
	Red blinking Alarm
Buzzer	83 dB at 10"
Serial Communications	Modbus RTU slave
Transmission Standard	RS485 (2-wire)
Installation	Mounted 18" from the floor, below the discharge of the fan coil. Fits in standard 2 gang PVC junction box.
Factory Calibration Range	5000 PPM
Accuracy	± 5% full-scale range under 50% full-scale, ±7% full-scale range above 50% of full-scale.
Storage Temperature	-15 to 140 F
Operating Temperature	-4 to 140 F
Relative Humidity	0-90 %RH non-condensing
Response time	T90 <30 seconds
Sensor Warmup time	2 min unit initialization - 1 hour for full specification performance
Recommended Maintenance	Accuracy and Bump Test once per year or as required by Code
Warranty	2 years
IP Rating	IP42
Approvals	EN 61000-6-3:2007 + A1:201; EN 50270:2015, IEC 60335-2- 40Annex LL, EN 378-3, EN 50676 and EN 14624, ISP5149-3, REACH/RoHS, CE Mark
Product Weight	0.44 lb. (200 g)
Product Dimensions	Width 5.11 in (13.0 cm), Height 5.11 in (13.0 cm), Depth 2.36 in (6.0 cm)



Fits in standard 2 gang PVC Junction Box Onboard diagnostics with unit fault alarm 5 seconds functionality test Available in 24vac or 120vac 2 alarm thresholds

Board Layout



Area of coverage

Consider the coverage required and function of the area. Emphasis should be placed on airflow patterns and correct placement, not perceived detecting

The AGSR-NDIR monitor should be installed approximately 1ft from the ground level.

Rs485 INTERFACE BOARD JP2: RELAYS TERMINAL BLOCK JP8:RS485 TERMINAL BLOCK B C.C. 107 JP6: BUZZER ENABLE CLOSED : ACTIVATION BUZZER ENABLED OPEN : ACTIVATION BUZZER DISABLED O ■ JP6 900 000000 JP2 OFF 8888 ON SW2 SLIDE SELECTOR FOR KEYPAD OR RS485 LINE SW2 SW2 GND 0 2 **ENABLE RS485** +12-24 VDC SERIAL LINE INTERFACE JP7 CALIBRATION KEYPAD CONNECTOR SW2 SW1: DIP 1 -> NOT USED. DIP 2 -> OFF: BUZZER REACTIVATION TIME = 1min (DEFAULT) DIP 2 -> ON: BUZZER REACTIVATION TIME = 5min. DIP 3 -> OFF: RELAY #81/25, ACTIVATION ON ALARM #3 IN OR WITH FAULT STRATUS (DEFAULT) DIP 3 -> ON: RELAY #82 (K2) ACTIVATION ON ALARM #3 ONLY. DIP 4 -> NOT USED. ENABLE CALIBRATION KEY PAD

Find out more

American Gas Safety LLC

www.americangassafety.com

Head office:

6304 Benjamin Road, Suite 502, Tampa, FL 33634

Tel: (727) 608-4375

Email: info@americangassafety.com

