

GDA 3100: Refrigerant Gas Detector



- ✓ Reliable and Robust Sensor
- ✓ Relay Output
- ✓ Easy Installation
- ✓ Local Technical Support



The GDA 3100 is an advanced refrigerant detector utilizing the latest in nondispersive infrared sensor technology for detecting a wide range of refrigerant gases. Exhibiting extremely low cross sensitivity to other gases. In addition it is immune to changes in humidity and temperature with a longer lifespan than standard semiconductor sensors. It has analogy output and interfaces to the full range of GDA control units and will interface to BMS and SCADA.

- Standalone system or 4-20 mA, 0-20 mA, 0-5 V ; 0-10 V + volt free relay
- Highly selective, Infra-red sensor. (Not affected by other gases)
- No false alarms due to other gases
- 1 alarm relay (volt free)
- Calibration required every 3 years with 6 monthly functional tests
- 7 year lifespan in standard operating environment

Designed, manufactured and supported locally in
Australia. Call: **1300 768 887** for technical advice and
support

Specifications

Detectable Gases	Refrigerant: R123, R125, R134a, R404, R407c, R410 (Others on request)
Detectable Gas Ranges	0-1000 ppm or 0-2000 ppm
Power Requirements	24 VDC
Output Types	0-20 mA, 4-20 mA, 0-5 V, 0-10 V (4-20 mA Default)
Power Consumption	<300 mW (average)
Output Specifications	4-20 mA max 1K at 24 VDC supply (4-20 mA); Voltage: i/p Z for voltage o/p options 10K > Relay NC NO Comm. 1A at 24 VAC
Connection	4 pin plug connector and 3 screw down Relay contacts NC, NO, Comm (voltage free)
Wiring	3 core cable with overall screen, Screen to be connected to earth at control unit end only
Operating Temperature	-20 to +40°C (applications below 10°C low temperature version required)
Operating Humidity	0% to 95% RH (non-condensing)
Accuracy of Reading	1% Full scale
Warm Up Time	<2 minutes, Sensor Accurate After: <30 minutes
Response Time	Approx. 30secs
Zero Drift	≤2% Full scale p.a
Calibration Drift	≤2% Full scale p.a
Sensor Technology	Non Dispersive Infra-Red (NDIR), Dual Wavelength
Calibration Requirement	Every 3 years with 6 monthly functional tests if required
Dimensions	115 x 130 x 71 mm (L, W, D) Mounting holes 105 x 75 mm
Enclosure Material	ABS plastic

Ordering Information

Part Number	Gas Type & Detection Range
3100-004	R134. 0-1000 ppm
3100-005	R125. 0-1000 ppm
3100-006	R123. 0-1000 ppm
3100-007	R404a. 0-1000 ppm
3100-008	R410a. 0-1000 ppm
3100-010	R407a. 0-1000 ppm
3100-011	R407c. 0-1000 ppm
3100-012	R514a. 0-1000 ppm
3100-013	R1234yf. 0-1000 ppm
Other Gases Available On Request	

Optional

Part Number	Description
3100-XXX-02	Suffix 02 for 0-2000ppm range
3100-XXX-LT	Suffix for low temperature version for applications below 10°C
3100-GC-01	GDA 3100/3160 Series Calibration Assembly

To order please email: adelsales@onetemp.com.au