# NDIR GAS DIFFUSION SENSORS



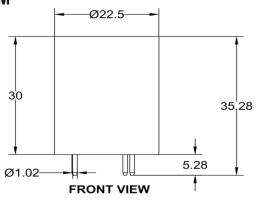
## IR SENSLITE SERIES

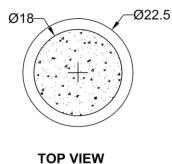
### Model No.: SZ-LITE-R134a-1000 PPM





**BOTTOM VIEW** 





ISOMETRIC VIEW

Gas Analysis the Smarter way...
High Precision & Durable Sensors......

We are highly Focused on Customized Solution & Maintaining the highest quality standards with exceptional customer service

### IR SENSLITE

- Infrared Gas Sensor Refrigerant R134a:1000 PPM
- Pre Calibrated & Low drift
- Compact Design
- 3.3 VCC Supply Voltage
- · Sensor Life > 5 Years
- · Gas Entry by diffusion
- TTL Output

#### **FEATURES:**

Measuring Principle: Non – Dispersive Infra-RedMeasurement Range: 0 – 1000 PPM Full Scale

Flow Rate (Calibration) : 0.5 - 0.8 LPM Warm-up time : 60 sec.

**Accuracy** : 5 % of Reading or ± 30 PPM Whichever is More

#### **SPECIFICATIONS:**

Digital Resolution : 1 PPM

Response Time : < 6 Sec.@ 0.5 LPM T90 (10 to 90 % FS) : < 60 Sec.@ 0.5 LPM

Repeatability : ±20 PPM Linearity Error : ±30 PPM

**Long term stability** :  $\leq \pm 100$  PPM Over 12 month period

Weight : 42.2 Grams

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### **ELECTRICAL SPECIFICATION:**

Supply Voltage : 3.2 VCC to 3.6 VCC
Supply Current (peak) : 80 mA @ 3.3 VDC

Digital Output Signal : MODBus Protocol TTL UART @9600,8,1,N

Calibration : Zero and span

# **ENVIRONMENTAL CONDITIONS:**

Operating Temperature : -10 to +50°C

Storage Temperature : -20 to +60°C

Air Pressure : 800 to 1150 hPa

Ambient Humidity : 0-95 % Relative Humidity (Not Condensing)

# **TEMPERATURE PRESSURE EFFECTS:**

Temp. Dependence (Zero) :  $\leq \pm 20$  PPM per °C Temp. Dependence (Span) :  $\leq \pm 30$  PPM per °C

Method of Detection : Diffusion

### **SOME TYPICAL APPLICATIONS:**

· Refrigerant leaks detection systems

## LIST OF NDIR BASED GAS WITH ENVIRONMENTAL CONDITION

Sr. No.	MODEL NO.	GAS NAME	GAS FORMULA	GAS RANGE	RESOLUTION	ACCURACY	REPEATABILITY	LINEARITY ERROR	Т90
1	SZ-LITE-N2O-1000	Nitrous oxide	N <sub>2</sub> O	1000 PPM or more	1 PPM	< 5 % of Reading or ±20 PPM Whichever is More	±10 PPM	±10 PPM	< 45 sec.
2	SZ-LITE-CO-10%	Carbon monoxide	СО	10%V/V	0.01%V/V	< 3% of Reading or ±0.2% V/V Whichever is More	±0.2%V/V	±0.1%V/V	< 30 sec.
3	SZ-LITE-CO2-5000	Carbon dioxide	CO <sub>2</sub>	5000 PPM	1 PPM	< 5% of Reading or ±50 PPM Whichever is More	±100 PPM	±50 PPM	< 45 sec.
4	SZ-LITE-CO2-10000	Carbon dioxide	CO <sub>2</sub>	10000 PPM	1 PPM	< 5% of Reading or ±30 PPM Whichever is More	±20 PPM	±30 PPM	< 45 sec.
5	SZ-LITE-CO2-5%	Carbon dioxide	CO <sub>2</sub>	5% V/V	0.01% V/V	< 5% of Reading or ±0.5% V/V Whichever is More	±0.02% V/V	±0.1% V/V	< 30 sec.
6	SZ-LITE-CO2-100%	Carbon dioxide	CO <sub>2</sub>	100% V/V	0.1% V/V	< 2 % of Reading or ±0.5% V/V Whichever is More	±1 % V/V	±2 %V/V	< 30 sec.
7	SZ-LITE-CH4-100%	Methane	CH4	100 % LEL	0.1% LEL	< 5 % of Reading or ±0.5% LEL Whichever is More	±2% LEL	±2%LEL	< 30 sec.
8	SZ-LITE-CH4-100%	Methane	CH4	100% V/V	0.1% V/V	< 5% of Reading or ±0.5% V/V Whichever is More	±2% V/V	±2% V/V	< 30 sec.
9	SZ-LITE-HC-100%	Hydrocarbon	НС	100 % LEL	0.1% LEL	< 5% of Reading or ±0.5% LEL Whichever is More	±2% LEL	±2%LEL	<30 sec.
10	SZ-LITE-R134a-1000	Refrigerant	R134a	1000 PPM or more	1 PPM	< 5% of Reading or ±30 PPM Whichever is More	±20 PPM	±30 PPM	<60 sec.
11	SZ-LITE-SF6-1000	Sulphur hexafluoride	SF6	1000 PPM or more	1 PPM	< 5% of Reading or ±30 PPM Whichever is More	±20 PPM	±30 PPM	<60 sec.

<sup>\*</sup>For other gases, please contact our sales team