NDIR C_2F_6 SENSOR MODULE

LARK-1SMB C2F6 500PPM | Order No.: 001-090Z-101

DATASHEET

Parameters

Principle	NDIR
Range	0 ~ 500 ppm C_2F_6
Sampling Mode	Pumping
Response Time	≤ 10 s (@500 ml/min)
Recovery Time	≤ 10 s (@500 ml/min)
Long-term Stability*	Testing
Temperature	-20 ℃ ~ 50 ℃
Tolerance	± 3 ppm @ 20 ℃
Zero Temp. Drift	±20 ppm @ (-20 ℃ ~ 50℃)
Resolution	1 ppm/sec
Reading Unit	ppm
Detection Limit	3 ppm

*Long-term Stability: 28 days of zero drift measured in clean air of 0 ~ 90% RH, 0 ~ 35 °C

Mechanics

Optic Path	Steel
Circuit Board	FR4 / Lead-free HASL
Solder	Sn / Ag / Cu
Mounting Plate	ABS

Applications

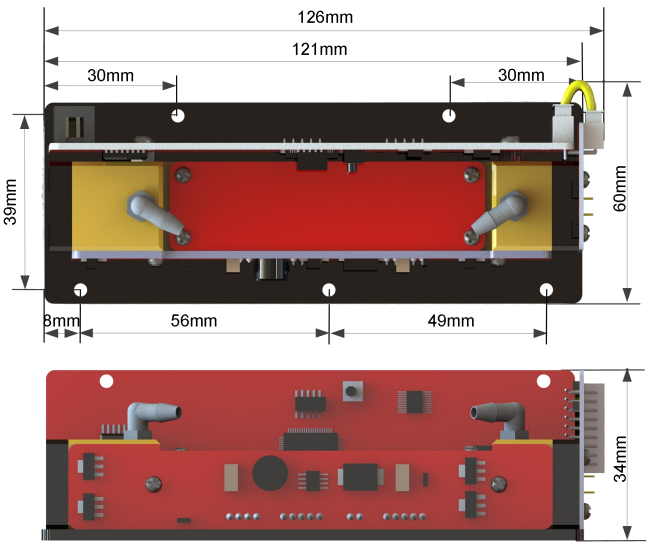
- C_2F_6 leakage detection

Merits

- Low Detection Limit
- Wide Temperature Range
- Small Size
- Long Life
- Fast Response
- Low Cross Interference
- RS485 modbus RTU

Dimensions

- Length: 126 mm ± 1 mm
- Width: 60 mm ± 1 mm
- Height: 34 mm ± 1 mm
- Weight: 208 g ± 5 g
- Screw Hole Diameter: 3 mm



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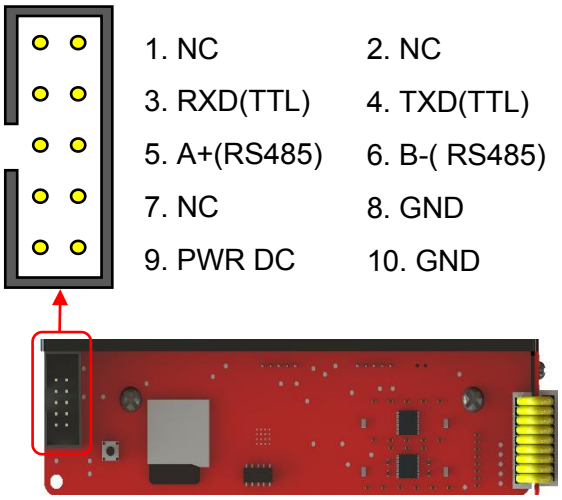
Electrical Parameters

Input Voltage	9 ~ 24 VDC (#9 pin)
Operating Current	< 0.15 A @9 VDC
Power	< 1 W for Average
	< 1.5 W @ Peak
Warm-up Time	3 minutes
	(Tolerance ± 6 ppm)
	60 minutes
	(Tolerance ±3 ppm)
Output Voltage	NR
Warranty	18 months*

Connector Definition



1. NC	2. NC
3. RXD(TTL)	4. TXD(TTL)
5. A+(RS485)	6. B-(RS485)
7. NC	8. GND
9. PWR DC	10. GND

Application Condition

Prefer Condition	Room Temperature, Dry, Clean
Safety	None Explosion-proof Design
Humidity	0% RH ~ 85% RH
	(No Condensation)
Flow Rate	300 ~ 800 ml/min
Pressure	0.5 ~ 1.5 ATM
	(Ambient air pressure measured, without pressure compensation)

Accessories Included

Tygon Tube

- Length 50 mm × 2
- Diameter 3.2 mm × 6.4 mm
- Polyethylene, Transparent

Ribbon Cable

- Length 200 mm × 1
- 10-pin, 28 AWG, Gray
- Female Connector, 2 × 5
- 2.54 mm Pitch

*Non-warranty Case:

- Polluted by condensation, water or dust; Dust and water removing is strongly suggested;
- Damaged by falling, hitting, disassembling, errosion or over-loading;
- Label has been torn.

We reserves the right to modify this datasheet and will optimize the product in the future. If you use this product for specific application, please contact us for more technical support.

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