EURsense

AG-2-LPG-M2610(D)

Features

✓ High Sensitivity to LP gases
✓ Long life and cost-effective
✓ UART digital output
✓ pre-calibrated before leaving the factory

Product Description

The AG-2-LPG-M2610(D) is an embedded type module equipped with the Figaro's TGS26 series semiconductor Sensor, capable of detecting LP and its component gases (e.g. propane and butane). The module has been pre-calibrated before leaving the factory and has good durability, stability, and anti-poisoning. It utilizes digital communication through a UART bus output for gas concentration readings, which makes it suitable for Residential / Portable LP gas detectors.

Technical Specification

Item	Specification
Model Number	AG-2-LPG-M2610(D)
Target Gases	LP and its component gases (e.g. propane and butane)
Sensing Principle	Semiconductor
Detection Range	1 ~ 25% LEL
Resolution	1 ppm
Measurement Error	< ±3% LEL
Operating Voltage	5V±0.1V DC
Power Consumption	≤1.5W
Output Signal	UART (+3.3V TTL)
Temperature Range	-10 - 55°C
Humidity Range	20% -95%RH
Pressure Range	1 ± 0.1 atm
Storage Temperature	-10 - 40°C
Size	L*W*H=41mm*27mm*22mm (TGS2610-D)
Expected Life	See the corresponding sensor data sheet for details.

Application

- Residential LP gas detectors
- Residential LP gas alarms
- Portable LP gas detectors

Product Appearance and Dimensions

Pin Configuration

The module reserves a 3P + 4P pin header with a pitch of 2.54 mm as the electrical interface. Pin descriptions are as follows:

Pin Number	Name	Functional Description
1	VIN	Power supply, 5 - 12V DC
2	GND	Signal ground
3	RXD	Serial port input, Connected to the host TXD
4	TXD	Serial port output, Connected to the host RXD
5	VOT	Module onboard 3.0V reference power output (maximum output capacity 100mA)
6	FAT	Fault signal output pin (reserved)
7	ALM	Alarm signal output pin (reserved)

Note:
1) After being powered-on, the module needs approximate 3 minutes to warm up. Once the process is complete, the module enters into normal monitoring state.
2) After being powered-on, the module's serial port outputs a frame of data containing status and concentration values every 1 second.

Application Notes

1. The module is not protected against reverse polarity or ESD (Electrostatic Discharge). Users should ensure correct power connection and implement appropriate ESD protection measures when using the module.
2. Exceeding the module power supply voltage range may cause damage to the module or the module may fail to operate properly.
3. Please follow precautions specific to the sensor when using the module.