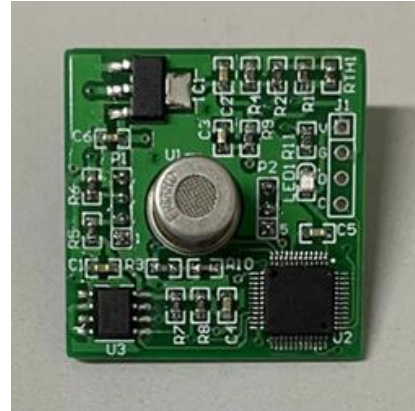


## AG-2-LPG-M2618(D)

### Features

- ✓ High selectivity to LP gas
- ✓ Long life and low cost
- ✓ Alarm output
- ✓ USART digital output
- ✓ pre-calibrated before leaving the factory



### Product Description

The AG-2-LPG-MA2618(D) is an embedded type module equipped with the Figaro's semiconductor Sensor TGS2618-D; It is pre-calibrated at the factory and features a filter designed to minimize interference from gases such as alcohol. This module is capable of detecting liquefied petroleum gas (LP gas), for instance, propane ( $C_3H_8$ ). It utilizes digital communication through a UART and Alarm output interface for gas concentration readings. This allows users to easily and quickly integrate the module into LP gas detectors and alarms systems, such as Residential LP gas detectors.

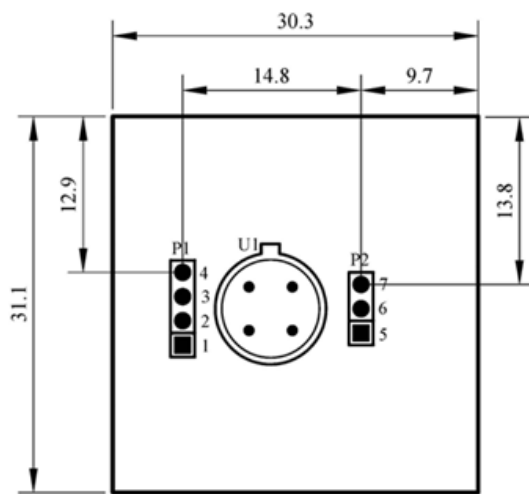
### Technical Specification

Item	Specification
Model Number	AG-2-LPG-M2618(D)
Target Gases	Propane
Sensing Principle	Semiconductor
Detection Range	0 ~ 20% LEL
Measurement Error	< $\pm 3\%$ LEL
Response time(T90)	$\leq 30$ s
Output Signal	USART Alarm (Alarm Point: 8% LEL)
Resolution USART	1 ppm
Operating Voltage	5V $\pm$ 0.2V DC
Power consumption	$\leq 1.5$ W

## Technical Specification

Humidity Range	20% ~ 95%RH
Pressure Range	1 ± 0.1 atm
Temperature Range	-40 ~ 70 °C (Operating) -10 ~ 80°C (Storage)
Warm up time	10 minutes
Electrical interface	2.0 mm pitch 2-row pin header
Size	L*W=31.1mm*30.3mm

## Pin Configuration



Pin	Name	Functional Description
1	ALARM	Alarm Output
2	RX	USART Input
3	TX	USART Output
4	+5V	Power Supply, 5V DC
5	NC	
6	GND	Signal Ground
7	FAT	Fault signal output pin

### Note:

- After being powered-on, the module needs approximate 10 minutes to warm up. Once the process is complete, the module enters into normal monitoring state.
- USART Digital Output: The module sends a set of data every 300ms;

01 H	03H	00 H 01H	Concentration (2 bits)	CRC
------	-----	----------	------------------------	-----

Baud rate: 9600, data bits: 8bit, stop bits: 1bits, parity bit: no parity (can be modified according to user requirements).

### Application Notes

- 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.
- Exceeding the module power supply voltage range may cause damage to the module or the module may fail to operate properly.
- Please follow precautions specific to the sensor when using the module.
- For detailed information on sensor operation, please refer to the application manual.