

FSM-10H-01 - Pre-calibrated Module for LPG Gas

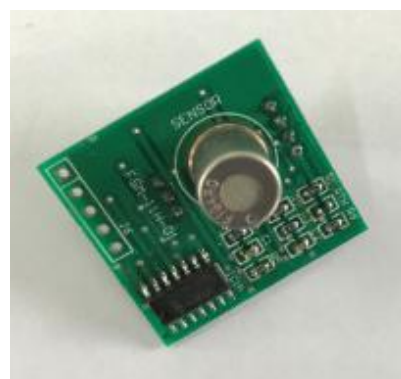
Features:

- *PWM, USART digital output proportional to gas concentration
- *Maintain Free
- *Compact size, low cost
- *Meets RoHS requirement

Applications:

- Detect flammable gas leakage
- Flammable gas leakage Detector
- Industrial detector

FSM-10H-01 is pre-calibrated module for LPG gas alarm which applies TGS2610-D00 sensor together, it features durability and stability. The module outputs PWM signal which is proportional to LPG gas concentration (The module has a memory which is stored with factory calibration data), also is capable of detecting sensor wire breakage and short. The module can operate at wide temperature from -10~70°C.



Furthermore, the unit is less sensitivity to VOCs gas, it immunes poison by silicon compounds, it suits to work at rugged environment.

Output characters:

The module outputs PWM and USART signal which is proportional to LPG gas concentration

1. PWM output(Frequency is 2KHz),
 $V_o = V * DUTY$ (V_o is output voltage, V is input voltage, DUTY is duty cycle)

2. USART output

The module output data every 100ms, the data format:

01H	03H	00H 01H	gas concentration(2 bytes)	CRC
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Pins and connection:

Pins	Name	Description
1	NC	/
2	NC	/
3	SDA	USART output
4	5V	Input voltage
5	PWM	PWM output
6	GND	Ground
7	Fault	Fault output

Specification:

Product name	Combustible gas sensor module	
Model No.	FSM-10H-01	
Gas sensor	TGS2610-D00 (Semiconductor)	
Detection range	0 ~ 4,000ppm H ₂ (also can detect methane, iso-butane, and propane)	
Error	± 300ppm	
Output voltage (V _{conc})	PWM (2KHz)	
	Trouble	Trouble:H, Normal:L
Response time (T ₉₀)	≤30S	
Operating conditions	-10°C ~+70°C, 20~95%RH (No condensing)	
Storage conditions	-10°C ~+80°C, 20~95%RH	
Input voltage (VIN)	5.0±0.2V DC	
Power consumption	≤1.5W	
Weight	15g or less	
Dimensions	26*27mm	
Standard test conditions	Ambient conditions	20±2°C, 65±5%RH
	Circuit conditions	5.0±0.2V
	Conditioning period prior to test	≥10 minutes

Dimensions(mm):

