AG-2-H2-M2616(D)

Features

- ✓ High selectivity to hydrogen
- ✓ CO-Interference-Free
- ✓ UART RS232 digital output
- ✓ pre-calibrated before leaving the factory

Product Description

The AG-2-H2-MA2616(D) is an embedded type module equipped with the Figaro's semiconductor Sensor TGS2616-C00, capable of detecting Hydrogen (H_2) in diverse environments. The module has been pre-calibrated before leaving the factory and has good durability, stability, and anti-poisoning. It utilizes digital communication allows users to easily and quickly integrate the module into various systems. This makes it suitable for Hydrogen leak detection applications.

Technical Specification

Item	Specification
Model Number	AG-2-H2-M2616(D)
Target Gases	Hydrogen
Sensing Principle	Semiconductor
Detection Range	30 ~ 3,000 ppm
Measurement Error	< 3% FS
Operating Voltage	5V±0.2V DC
Output Signal	UART PWM (2kHz)
Temperature Range	-20 ~ 50°C
Humidity Range	20% -95%RH
Pressure Range	1 ± 0.1 atm
Storage Temperature	-10 ~ 50°C
Expected Life	⩾ 10years
Size	L*W*H=26mm*27mm*20mm (TGS2616-C00)

Technical Specification

Item	Specification
Power consumption	⩽ 1.5 W
Response time(T90)	⩽ 30 second
Warm up time	4 minutes
Resolution USART	1 ppm
Resolution PWM	$V_O = V \times DUTY^2$
Electrical interface	2.0 mm pitch 2-row pin header

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.
3) UART serial port:
   Baud rate: 4800, data bits: 8bit, stop bits: 1bits, parity bit: no parity
4) communication protocols are only for module testing, and can also be customized according to customer requirements.