

## AG-3-CHX-CHA3(D)

### Features

- ✓ Digital output UART/TTL/ RS232
- ✓ pre-calibrated before leaving the factory

### Product Description



The AG-3-CHX-CHA3(D) is an embedded type module equipped with the Alphasense CH-A3 Catalytic Sensor, capable of detecting combustible gases such as methane (CH<sub>4</sub>), LP gas, and Hydrogen (H<sub>2</sub>) 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 through a UART bus output for gas concentration readings, which allows users to easily and quickly integrate the module into various systems. This makes it suitable for industrial gas detection applications.

### Technical Specification

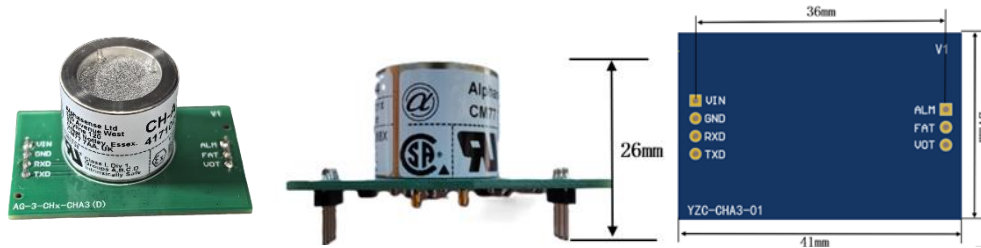
Item	Specification
Model Number	AG-3-CHX-CHA3(D)
Target Gases	CH <sub>4</sub> , C <sub>3</sub> H <sub>8</sub> , H <sub>2</sub> etc.
Sensing Principle	Catalytic
Detection Range	0-100% LEL
Resolution	1% LEL
Measurement Error	< ±5% FS
Operating Voltage	5-12V DC
Operating Current	≤ 100mA@5V
Output Signal	UART (+3.0V TTL)
Temperature Range	-40 - 70°C
Humidity Range	0% -90%RH
Pressure Range	900.0 to 1120 mbar
Storage Temperature	10 - 40°C
Size	L*W*H=49mm*34mm*26mm
Expected Life	≥ 2years

深圳市新世联科技有限公司

## Application

- LNG and LPG alarms
- detectors for LNG and LPG

## 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.