

MNS-QT331 Infrared methane gas sensor

Product Description

The MNS-QT331 infrared methane gas sensor utilizes the non-dispersive infrared (NDIR) principle to detect methane gas present in the air. The sensor exhibits excellent selectivity, is oxygen-independent, and boasts stable and reliable technical parameters, along with a long product lifespan. It also features a built-in temperature compensation function.

The MNS-QT331 infrared methane gas sensor utilizes infrared spectral absorption technology. It features a built-in micro precision gas circuit, crafted through meticulous post-processing, along with exquisite circuit design and precise academic algorithms to ensure accurate and stable signal data collection from the sensor. The product is easy to use and has a lifespan of over 5 years.



Key Features

- ◆ High sensitivity, high resolution, low power consumption, and fast response time
- ◆ Provides multiple output modes such as UART and analog voltage
- ◆ Temperature compensation, excellent linear output, superior stability, and long service life
- ◆ Resistance to water vapor interference and poisoning
- ◆ Use in online monitoring of industrial instruments
- ◆ Monitoring of gas power generation equipment
- ◆ Monitoring and use of industrial pipe gallery

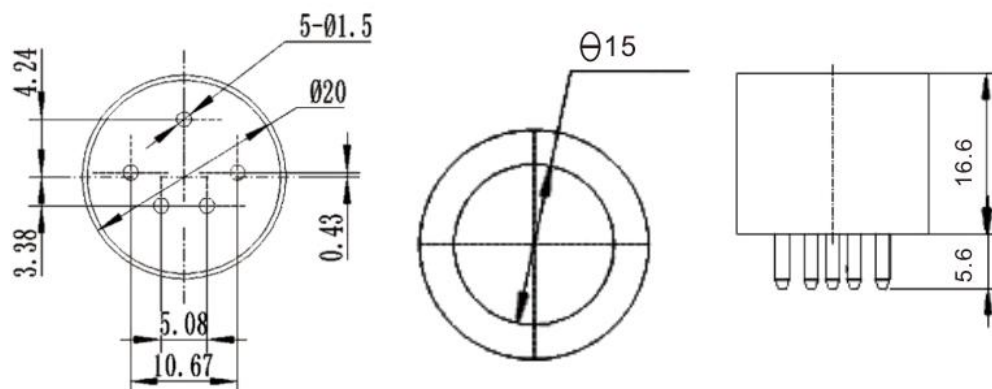
Main applications

- ◆ Detection of flammable and explosive gases

Technical specifications

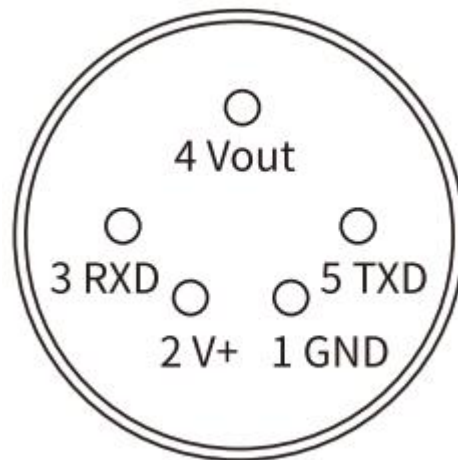
Operating Voltage	3.3~5VDC
Measurement range	0-100%LEL 0-5%vol 0-100%vol
Accuracy	±5%FS
Temperature compensation	Have
Average current	<85mA
Interface level	DC3.0V
Output signal	UART/0.4~2V
Warm-up time	180S
Response time	T90<30s
Operating Temperature	-40~70℃ (Customizable wide range)
Operating Humidity	0~95%RH(No condensation)
Lifespan	>5 years
Protection level	IP65
Weight	25g
Source terminal, communication terminal/ intrinsic safety parameters	Ui=7.5VDC, li=265mA, Pi=0.5W, Ci=10μF, Li=0mH

Structural dimensions



Pin definition

Pin Name	Pin Description
Pin 1	GND
Pin 2	Vin voltage input
Pin 3	UART(RXD)Data input 0 - 3.0V
Pin 4	Vout(0.4~2V)
Pin 5	UART(TXD)0~3.0V data output"



Usage Diagram

