PSS-21H0D3

CL2 Gas Sensor

Related Products

Product No.	Interf.	Descriptions
PSS-21H0D1	Uart	Electrochemical CL2 Gas Sensor (Range: 0-20PPM,Resolution: 0.1PPM)
PSS-21H0D2	RS485	Electrochemical CL2 Gas Sensor (Range: 0-20PPM,Resolution: 0.1PPM)
PSS-21H0D3	Uart	Electrochemical CL2 Gas Sensor (Range: 0-20PPM,Resolution: 0.1PPM) Aluminum Sleeve

Product introduction

PSS-21H0D3 Chlorine gas sensor, with built-in temperature sensor for temperature compensation, can accurately measure the concentration of chlorine gas in the environment. With digital output and analog voltage output, it is convenient for users to use and debug, and greatly shortens the design and development cycle of users. It perfectly combines electrochemical sensors and circuits to meet the needs of customers in different occasions.

Detection principle

The electrochemical structure is a three electrode structure. According to the electrochemical detection principle, the compounds on the sensor change according to the concentration of the ambient gas, the conductivity changes, and the voltage value output by the module changes accordingly, so as to obtain the concentration data.

Product features

- Detection item of intelligent sensor: CL2
- High sensitivity and resolution
- Low power consumption
- Provide RS485,UART and analog voltage signal output mode
- High stability and strong anti-interference ability

Product parameters

Parameters	
Monitoring gas	Chlorine
Chemical formula	CL2
Detection principle	Electrochemistry
Detection range	(0-20) ppm
Resolving power	0.1ppm
VO voltage output range	(2-0) V
Response time	≤60S
Communication	
Output signal	RS485 output UART output (TTL level, 3 V) Analog voltage signal output
Upgrade	

Upgrade	Main serial port or DFOTA
Warranty	
Warranty period	3 months (the gas sensor is a consumable, and its service life is related to the tested environmental concentration)
Design life	2 years (related to the tested environmental concentration)
Machinery	
Size	ø23.5mm*24.5mm
Operating temperature	-20℃～50℃
Operating humidity	15% ～ 90%RH (no condensation)
Storage temperature	- 20℃～50℃
Storage humidity	15% ~ 90% RH no condensation
Power	
Power	DC 5±0.1 V
Working Current	＜5mA

Expansion

The gas module can hold any 2 of 14 types gases of CO, O2, NH3, H2S, SO2, DG, TVOC, H2, PH3, NO2, O3, CL2, HCL, HF which are all in ppm level and based on electrochemical principal and with product no. PSS-21H. Except NO2, any of another gas from above can be mixed into the module to detect at the same time.

Application

It is widely used in portable and fixed gas detectors, as well as various gas detection occasions and equipment.

Ordering Guide

- PSS-21H0D3 sensor is a sensor only, it needs to use with WxS terminals to combine to different product series; On the basis of the combination, multiple PSS sensors can be loaded through the Multiple Purpose Interface (MPI) of the intelligent IoT terminal.
- According to the specific scenario of use case, the enclosure and antenna of intelligent IoT terminal will be replaced to ensure the product quality and performance.
- PSS sensors can be integrated with the WxS terminal via the MPI interface to form different product series.
- Example of products are as follows:

  - WxS7800-21H0D3 WiFi Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
  - WxS8800-21H0D3 LoRaWAN Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
  - WxS9800-21H0D3 NB-IoT (China) Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
  - WxS9900-21H0D3 NB-IoT (Global) Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
  - WxSC800-21H0D3 LTE Cat1 Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
  - WxSC900-21H0D3 LTE Cat1 w/GPS Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal

- WxSD800-21H0D3 LTE Cat4 Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal
- CxS1800-21H0D3Ethernet (RJ45) Series Electrochemical CL2 Gas Smart Sensor & RTU 2-in-1 Terminal