

1.OC-F08 Fixed Gases detection



Description:

[OC-F08 series online gas detector](#) used the original imported sensor and the ultra low power 32 bit microprocessor, so with the advantages of high precision, good repeatability, stable signal, respond quickly, etc. Possible connected with many controller system, such as PLC, DCS, computer and other, with the function of remote monitor and alarm, data logger and analysis.

Common applications is gas safety inspection and alarm for industrial scene, such as petroleum refinery, chemical plants, LPG stations, boiler rooms, gas stations, paint spray booths, metallurgy, mining, fire, environmental protection, etc., where need to inspect the Methyl mercaptan (CH₄S) gas concentration.

Features:

4-20mA standard analog signal and RS485 digital signal output, 200~1000HZ signal output, relay output, data restore, data logger(optional);

LED screen displaying the gas concentration, gas type, unit, instrument status etc.

Independent air chamber, the sensor is not required to replace the sensor calibration, automatic identification of key parameters of the sensor

Protection function to prevent high gas concentration attack.

Display the gas concentration in ppm and mg/m³ is selectable.

Infrared remote controller operation;



With the 16bit ADC acquisition chip, designed with four-layer circuit board, so with high anti-interference ability.

With the Ex-proof certificate, the Ex-proof grade is Exd II CT6.

Applicable Gas	Depend gas
Model	OC-F08
Detecting Range	Depend gas customized
Sampling	Diffusion or pump-suction, circulation selectable
Accuracy	$\leq \pm 3\%F.S$
Repeatability	$\leq \pm 1\%$
Zero drift	$\leq \pm 1\%(F.S/year)$
Sensor Type	Electrochemical sensor
Sensor Life	2~3 years
Response Time (T90)	$\leq 20s$
Alarming mode	Audible-visual alarm (Optional)
Operating Environment	Temperature: $-30^{\circ}C \sim 60^{\circ}C$ (Customized for special demands) Humidity: $\leq 95\%RH$ (non-condensing); if $>90\%RH$, can add the filter Pressure: 86kPa~106kPa
Working Voltage	24V DC(16~30VDC)
Output Signals	(Standard)Three-wire system 4~20mA standard signals output, available for PLC, DCS, etc; (Optional) Four-wire system RS485 digital signal output; (Optional) Frequency signal 200~1000Hz output; Two-level relay output:220VAC 0.5A, 5VDC 0.5A
Installation Means	Wall mounted, Pipe type(Thread:M40*1.5)
Material of Body	Cast aluminum
Explosion-proof Index	Ex d IIC T6
Protection Grade	IP66
Electrical Interface	3/4"NPT(Female Screw)、1/2"NPT(Female Screw)
Transmit Distance	$\leq 2000m$
Dimension	210 mm×140 mm×92 mm (L×W×H)
Weight	About 1.5Kg
Standards	GB15322.1-2003, GB3836.1-2010, GB3836.2-2010, GB3836.4-2010

Gas type	model	Remark
O2	OC-F08 O2 (0~25% vol) OC-F08 O2 (0~30% vol)	5 years life, not affected by the CO2, CO, H2S, NOX H2 gas.
	OC-F08 O2 (0~20% vol) OC-F08 O2 (0~100% vol)	High temperature place, at most 700°C
Ex	OC-F08 Ex (0~100%LEL)	Normal temperature
		High temperature,250°C
CO	OC-F08 CO (0~500ppm) OC-F08 CO (0~1000ppm) OC-F08 CO (0~2000ppm)	
	OC-F08 CO (0~5000ppm)	
	OC-F08 CO (0~10000ppm)	
CO2	OC-F08 CO2 (0~5000ppm) OC-F08 CO2 (0~10000ppm)	Infrared sensor
H2S	OC-F08 H2S (0~100ppm)	
	OC-F08 H2S (0~1000ppm)	
H2	OC-F08 H2 (0~1000ppm)	
	OC-F08 H2 (0~40000ppm)	
CH4	OC-F08 CH4 (0~200ppm) OC-F08 CH4 (0~10% vol)	Infrared sensor
	OC-F08 CH4 (0~10% vol) OC-F08 CH4 (0~50% vol) OC-F08 CH4 (0~100% vol)	Laser sensor
C2H4O	OC-F08 C2H4O (0~100ppm)	
	OC-F08 C2H4O (0~500ppm)	
SO2	OC-F08 SO2 (0~20ppm)	
	OC-F08 SO2 (0~2000ppm)	
Cl2	OC-F08 Cl2 (0~10ppm) OC-F08 Cl2 (0~20ppm) OC-F08 Cl2 (0~50ppm)	
	OC-F08 Cl2 (0~200ppm)	
HCl	OC-F08 Cl2 (0~50ppm) OC-F08 Cl2 (0~100ppm)	

HBr	OC-F08 HBr (0~50ppm) OC-F08 HBr (0~100ppm)	
ClO2	OC-F08 ClO2 (0~50ppm)	
O3	OC-F08 O3 (0~1ppm)	
	OC-F08 O3 (0~10ppm) OC-F08 O3 (0~50ppm) OC-F08 O3 (0~100ppm)	
	OC-F08 O3 (0~1000ppm) OC-F08 O3 (0~2000ppm)	
NO	OC-F08 NO (0~200ppm) OC-F08 NO (0~500ppm)	
	OC-F08 NO (0~2000ppm)	
NO2	OC-F08 NO2 (0~20ppm) OC-F08 NO2 (0~100ppm)	
	OC-F08 NO2 (0~500ppm) OC-F08 NO2 (0~2000ppm)	
PH3	OC-F08 PH3 (0~20ppm) OC-F08 PH3 (0~100ppm) OC-F08 PH3 (0~1000ppm)	
NH3	OC-F08 PH3 (0~100ppm) OC-F08 PH3 (0~500ppm)	
HCN	OC-F08 PH3 (0~30ppm) OC-F08 PH3 (0~50ppm) OC-F08 PH3 (0~100ppm)	
HF	OC-F08 HF (0~10ppm)	
SF6	OC-F08 SF6 (0~1000ppm)	Infrared sensor
CH2O	OC-F08 CH2O (0~10ppm)	
Methyl mercaptan CH4S	OC-F08 CH4S (0~20ppm)	
TVOC	OC-F08 TVOC (0~20ppm) OC-F08 TVOC (100ppm) OC-F08 TVOC (1000ppm)	PID
THT	OC-F08 THT (0~50mg/m3)	
SiH4	OC-F08 SiH4 (0~50ppm) OC-F08 SiH4 (0~100ppm)	
Ar	OC-F08 Ar (0~5% Vol) OC-F08 Ar (0~25% Vol) OC-F08 Ar (0~30% Vol) OC-F08 Ar (0~100% Vol)	
CS2	OC-F08 CS2 (0~10ppm) OC-F08 CS2 (0~20ppm) OC-F08 CS2 (0~50ppm) OC-F08 CS2 (0~100ppm) OC-F08 CS2 (0~500ppm) OC-F08 CS2 (0~1000ppm)	
CH3Br	OC-F08 CH3Br (0~20ppm) OC-F08 CH3Br (0~100ppm) OC-F08 CH3Br (0~200ppm) OC-F08 CH3Br (0~25000ppm)	
AsH3	OC-F08 AsH3 (0~1ppm) OC-F08 AsH3 (0~5ppm) OC-F08 AsH3 (0~10ppm)	

	OC-F08 AsH3 (0~50ppm) OC-F08 AsH3 (0~100ppm)	
C2H5OH	OC-F08 C2H5OH (0~100ppm) OC-F08 C2H5OH (0~1000ppm) OC-F08 C2H5OH (0~5000ppm) OC-F08 C2H5OH (0~10000ppm) OC-F08 C2H5OH (0~5.5% vol)	
(Optional) Four-wire system RS485 digital signal output for Gas detector		
(Optional) Frequency signal 200~1000Hz output t for Gas detector		
Option alarm light		
Option Wireless transmission module		
Note: normally Sensor Life 2~3 years(Catalytic combustion, Electrochemical, Semiconductor) 3~5 years(PID, Infrared)		
Controller	OC-4000 (1/2channel)	OC-4000 4~20mA input 
	OC-4000 (4 channel)	
	OC-4000 (8 channel)	
	OC-8000 (4 channel)	OC-8000 with RS485 signal input 
	OC-8000 (8 channel)	
	OC-8000 (16 channel)	
	OC-8000 (32 channel)	

2. Gas detection controller OC-8000

Introduction

[OC-8000 gas detection controller](#) with new design of Touch screen, simple operation. It could connect the OC-F08 gas detector to make up as the industrial gas detection system. It will display the all gas concentration for each gas detector, when the gas concentration level up to the preset data, the controller will alarm with acoustic and light signal. Synchronously, the actuator will begin to drive the exhaust or the cut off valve and other equipment, in order to prevent the poisoning accident, explosion or fire. The [OC-8000 Gas detection controller](#) could guarantee the security of the industrial working place.

Technical Parameter:

Item	Description
Product name	Gas detection controller
Display	8 inch TFT LCD touch screen
Power supply	AC220V±15%, 50Hz±1%
Consumption	≤10W(according to different channels)
Output voltage	DC24V±15%
Input signal	RS-485
Relay output	4 relay output with optional NO or NC
Relay contact capacity	5A, 30VDC or 5A, 220VAC
Alarm mode	Audible, visual
Installation mode	Wall-mounted
Suitable gas detector	OC-F08 Fixed gas detector with RS485 signal output
Gas detector quantity	≤64pc
Communication distance	≤2000m
Working temperature	-10°C~+50°C
Working humidity	10~95%RH (Non-condensation)
Size	400mm*280mm*80mm
Weight	About 3.6kg
Protection grade	IP54
Quality standard	GB 16808-2008 GB 15326-1994
Certificate	CE, RoHS

Applications:

The OC-8000 Gas detection controller used to connect with the fixed gas detector and the related equipment in industrial scene, such as petroleum refinery, chemical plants, LPG stations, boiler rooms, gas stations, paint spray booths, metallurgy, mining, fire, environmental protection, etc.

Structure

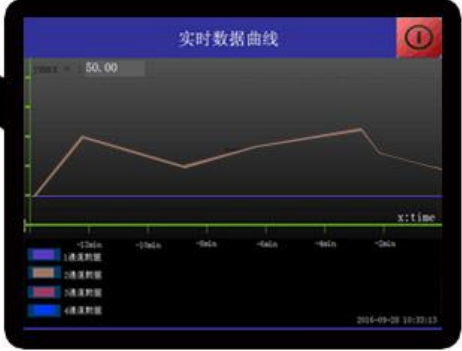


Data explorer function

History data



Real-time data curve



Different channels display

设备号	气体浓度	单位	气体类型	是否在线	报警
1	0.00	PPM	O3	●	●
2	0.00	PPM	O3	●	●
3	0.00	PPM	O3	●	●
4	0.00	PPM	O3	●	●

1~4 channels

设备号	气体浓度	单位	气体类型	低报	量程	状态
1	0.00	PPM	O3	0.00	0.00	●
2	0.00	PPM	O2	0.00	0.00	●
3	0.00	PPM	CO	0.00	0.00	●
4	0.00	PPM	H2S	0.00	0.00	●
5	0.00	PPM	CO2	0.00	0.00	●
6	0.00	PPM	CH4	0.00	0.00	●
7	0.00	PPM	O3	0.00	0.00	●
8	0.00	PPM	NH3	0.00	0.00	●

5~8 channels

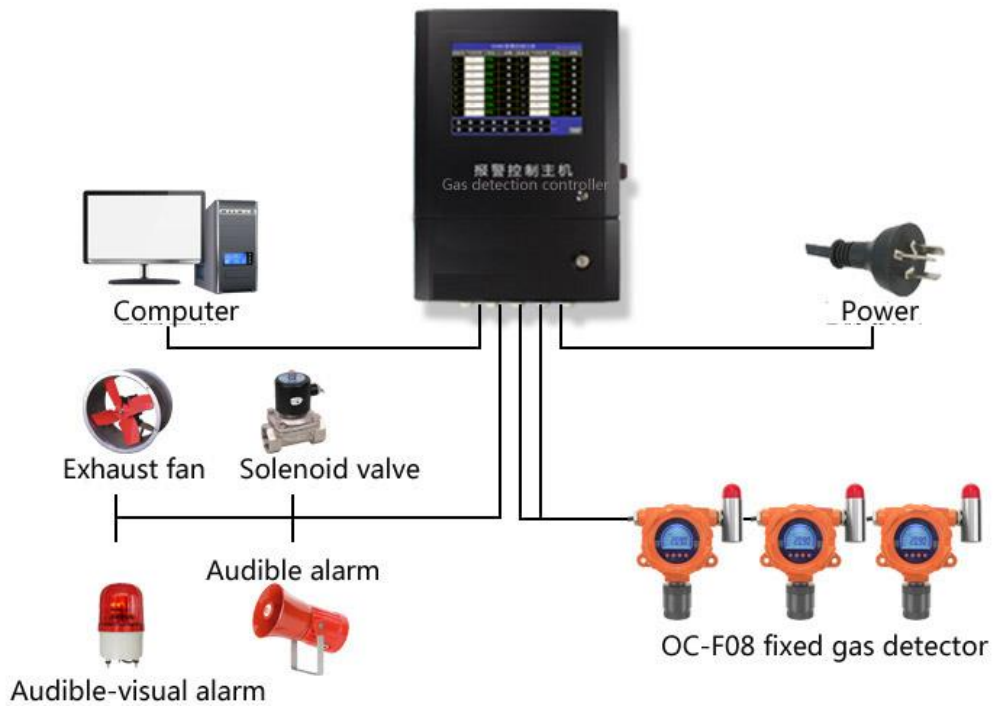
设备号	气体浓度	单位	报警	设备号	气体浓度	单位	报警
1	0.00	PPM	●	9	0.00	PPM	●
2	0.00	PPM	●	10	0.00	PPM	●
3	0.00	PPM	●	11	0.00	PPM	●
4	0.00	PPM	●	12	0.00	PPM	●
5	0.00	PPM	●	13	0.00	PPM	●
6	0.00	PPM	●	14	0.00	PPM	●
7	0.00	PPM	●	15	0.00	PPM	●
8	0.00	PPM	●	16	0.00	PPM	●

9~16 channels

通道号	气体浓度	单位	状态	通道号	气体浓度	单位	状态
1	0.00	PPM	●	17	0.00	PPM	●
2	0.00	PPM	●	18	0.00	PPM	●
3	0.00	PPM	●	19	0.00	PPM	●
4	0.00	PPM	●	20	0.00	PPM	●
5	0.00	PPM	●	21	0.00	PPM	●
6	0.00	PPM	●	22	0.00	PPM	●
7	0.00	PPM	●	23	0.00	PPM	●
8	0.00	PPM	●	24	0.00	PPM	●
9	0.00	PPM	●	25	0.00	PPM	●
10	0.00	PPM	●	26	0.00	PPM	●
11	0.00	PPM	●	27	0.00	PPM	●
12	0.00	PPM	●	28	0.00	PPM	●
13	0.00	PPM	●	29	0.00	PPM	●
14	0.00	PPM	●	30	0.00	PPM	●
15	0.00	PPM	●	31	0.00	PPM	●
16	0.00	PPM	●	32	0.00	PPM	●

17~32 channels

Gas detection control system



Multi ways of data transmission (Optional function)

Three mode: U disk, cable network, wireless network.



3. OC-4000 Gas Detection Controller

Description:

[OC-4000 gas detection controller](#) with different channels for choice: 2 channels, 4 channels and 8 channels, it composed of the metal shell, Power key, main board, interface board, alarm, etc.

The display screen is the 0.8 inch Nixie tube, for displaying each gas concentration, also with the indicate light for the each channel. When press the key, if press less than 20ms, the key signal will be invalid, when the time between the 20ms~3s, the key signal is normal. If more than 3s, the key signal will be long-press.



Features:

Power supply: AC220±20%, 50Hz; output voltage is DC24V, consumption is less than 2W;

Quickly process the signal from gas detector and display the real-time data;

With the optional audible-visual alarm function, low alarm and high alarm with different frequency audible alarm;

Four group relay output, suitable for different application;

The communication is 4~20mA or RS485;

With the function of erasure, if mis-operation, pressing the reassure key will be ok;

The shell with the function of waterproof and resist compression;

Technical parameter:

Item	Description
Display	LED display
Output voltage	AC220V±20%, 50HZ
Consumption	<2W
Channel quantity	Two channels, Four channels, Eight channels
Detector power supply	DC24V, 300mA/channel
Input signal	4~20mA (Optional RS485)
Relay output	AC220V/2A, DC24V/2A
Audible-visual alarm	Audible alarm > 80dB(1m), visual is optional
Working temperature	-20°C~+50°C
Working humidity	≤95%RH(non-condensing)
Body material	Metal
Installation type	Wall-mounted
Dimension	L263mm*W180mm*H70mm(2/4 channels)
	L325mm*W220mm*H74mm(8 channels)
Weight	4.0kg
Standards	GB 16808-2008