





AMMONIA GAS DETECTORS



GAS DETECTOR SF 100N, SF 100T, SF200N and SF200T

Introduction

SUPERFREEZE SF Series is a fixed gas detecting transmitter, with 4-20mA or RS485 ModBus RTU output proportional to the gas leakage concentration with original imported catalytic combustion sensor. It monitors gas leakage by natural diffusion.

It is flexible, durable, accuracy, stable and it can be directly connected with DCS system or central unit.

With relay output, once the concentration exceed the preset alarm pointer(threshold) it will start the acoustic-optical alarm on the central unit and the external equipment like exhaust fans etc.



SF 100/200N

SF 100/200T

Technical Details of SF - Series Gas Detectors

Gas : Combustible gas, toxic gas and Oxygen

Accuracy : 3% F.S. Response time : 90<30s

Operating Temperature : -20° to +60°C

Humidity : 90% RH no condensation

Working current : <=50mA

Output signal : 4-20mA standard and RS485 output optional

IP grade : Ip66

Net weight : About 1200g
Mounting Screw thread : M12 x 1.5 or G1/2
Transition distance : <=1000 meter

Power supply : 16-30V DC

Alarm indication : 85dB the higher of buzz frequency the higher gas concentration is

Explosion Class : Ex d IIcT6Gi5

SF100N/T is for single gas (combustible or toxic gas)



GAS DETECTOR

Features

- 4-20mA analog output for direct communication to DCS or RS485 ModBus RTU optional.
- · Relay output for connecting external device.
- LCD display screen in SF 200N, SF 200T without digital Display Screen.
- Advantage-Sensor module(block) design on spot replacement and automatically distinguish sensor fault and current display fault simultaneously.
- When the sensor out of service or sensor fails, the user can check and solve the problem by replacing spare modules this saves time and money.
- The LCD display and LED display module can be interchanged, supporting swift swap, support plug and play functionality.
- The sensor module and the connection interface in the detector have jack and plug prevent improper insertion. Just spin and press the plug gently, the plug can be inserted in the jack.
- The sensor module of the detector can be replaced by the same type module and the different gas sensor module and different range sensor module. The detector can distinguish and operate itself.
- Whatever the sensor module is chosen to replace the original one, there is no need to
 re-calibrate it. The detector automatically distinguish the sensor module, reads the exfactory calibration value and related setting value and operates detecting when the
 self inspection is done.
- Password verification for repeat operation, avoid fault operations.
- -40 to +70°C following compensation for accurate detecting.
- Two grade visual alarms on-site and relay (connected with audible/visual alarms or drive exhaust device).
- User selectable alarm set-point(s).

Note: SF100N/T only sensor module is replaceable and no calibration is needed.

In case of SF 200N/T all parts are replaceable except enclosure.



SF10 VISUAL and AUDIBLE ALARM



- · Stainless steel, anti corrosion, water proof
- · LED cover is made of bullet proof glass, strong and clear.
- Stable and long working life span
- Eight revolving high light LED

Technical Details

Temp range : $-40 \text{ to } +70^{\circ}\text{C}$

Humidity : 0 to 95%RH no condensation

Atm Pressure : 80 to 106 Kpa

Ambient condition : <75dB

Relay output : DC24V \pm 20%

Working current : <100mA

Alarm light : 2400 ± 200 mcd

Alarm of sound : >85dB

Shell : Stainless steel

Electric connector : M20x1.5, G3/4, G1/2

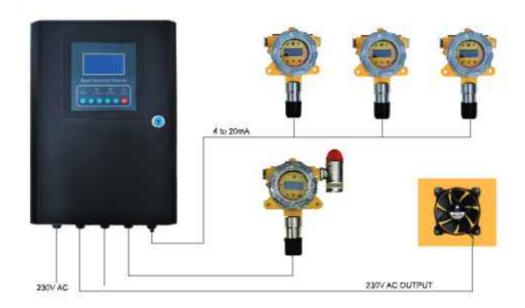
IP Grade : Ip65

Explosion proof grade : Ex d IIcT6Gi5 Size : 102x42x65mm

Weight : <1kg.



GAS DETECTING SYSTEM



SF 2000 Gas Detector Control Panel

Features

- 128 x 64 dot matrix big screen liquid digital display
- · Various gas detector together to fix
- · The up and low alarm points of each channels can be set separately
- · 4/8 channel 4-20mA 48 channel RS485 output signal
- · RS485, RS232 communication port can upload data to computers & 4 relay output

Technical Details

Capacity : 1-8 detectors is available

Operational temperature : -20 to +50°C

Humidity : <90%RH no condensation

Accuracy : $\pm 3\%$ FS Response : T90<30s

Alarms : Audible& visual
Alarm values : Could be set by users
Alarm output : Two relay output 230V
Supply Volt : 220V, 50 Hz, <5W

IP grade : Ip54 Explosion proof grade : IIC T6

Size : 250 x 380 x 100mm

Weight : <3 Kg.



SF210 PORTABLE AMMONIA GAS DETECTOR

Features

- Reliable and durable fixed life by the imported sensor
- · Automatic calibration and zero set
- English menu, Display real time and battery capacity.
 Low battery indication and automatic turn off for low voltage
- Advance self test of complete functions automatically when turned ON, 1000 record capacity
- Rapid and effective warning with audible alarm and extremely bright visual light alarm and vibrating alarm as standard



Technical Details

Model : SF210

Gas : Single gas (combustible gas, toxic gas, oxygen)

Accuracy : ±3% FS Response : T90<30s Operating temp. : -30 to +50°C

Humidity : <95%RH no condensation

Voltage : DC3.7V Li- ion battery 1200mAh

Charging : 4 to 6 hrs IP grade : Ip66

Weight: about 120g including battery

Dimensions : 102 x 56 x 26 mm

Duration of operation : Flammable gas 8h (non stop), toxic gas 300h (non stop)
Indication : Large STN LCD indicates real time and system state
Alarm indication : Wide angle light emitting diode, 85dB buzz(The frequency

of buzz depends on density.) vibration

Fault indication : Indication of zero point drift and sensor failure.

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