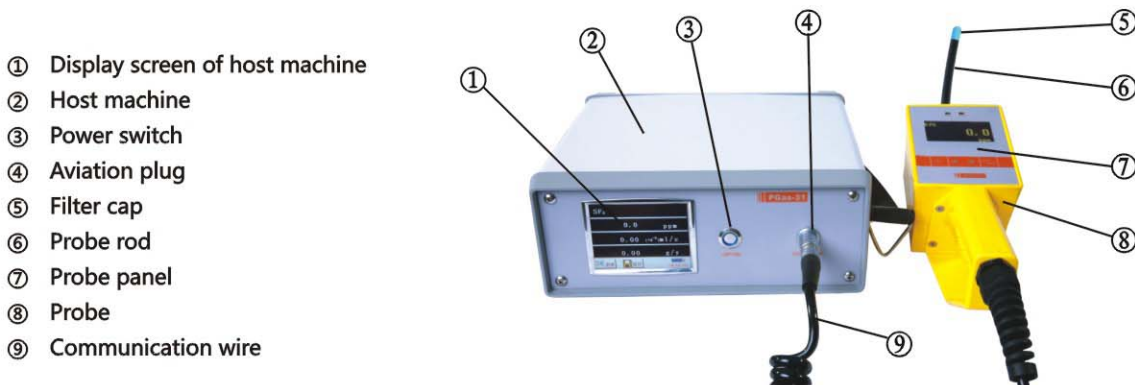


PGas-31 Infrared Gas Detector

Brief introduction

The measurement principle of (NDIR) Non-dispersive Dual-wavelength Infrared Spectrum" is adopted for PGas-31 gas infrared quantitative detector. There is no radioactive emitter and it is convenient to carry; the screen of hand-held probe uses OLED, it is self-luminous with high brightness, with no visual angle problem; high precision, good stability and sensitivity, and the resolution of leakage detection can reach 1ppm; the response time is fast; with no consumable parts, life time of the sensor is extra long; it can detect gases include C_2H_2 , CH_4 , C_4H_{10} , C_2H_4 , C_2H_6 , C_3H_8 , CO_2 , CO and SF_6 , etc.

PGas-31 Infrared Gas Detector is mainly composed of two parts: the host machine and hand-held probe.



Hand-held probe is embedded with microcontroller, besides the function of gas sampling, detecting and displaying the concentration of gas, the controller also have functions of calibration, alarm value setting and acousto-optic alarm, etc., the operation is simple and the using is convenient. The hand-held probe is connected with the host machine through a cable to transfer the data.

Host machine besides power supply to the hand-held probe, the host machine can also receive the measurement data transmitted from the hand-held probe, so as to perform display and storage, meanwhile, it can also realize the functions of alarm setting, storage mode setting and display mode setting, etc., the operation is simple and the using is convenient. When the concentration exceeds the alarm value, the detector shall issue alarm signal, prompting gas leakage, and reminding people of adopting measures early.

Main features

- ◆ OLED screen, self-luminous with low power consumption and high brightness
- ◆ With no problem of visual angle
- ◆ High sensitivity, the precision can reach to 0.1 ppm
- ◆ Good stability
- ◆ Quick response
- ◆ Acousto-optic alarm
- ◆ Easy to carry
- ◆ Storage system of measure data
- ◆ Long service life of sensor

Technical parameters

Parameter	Characteristics
Measurement principle	NDIR
Measurement range	Refer to lectotype table
Sampling method	Pumping type
Working temperature	-10~60°C
Power supply	7.2V DC, internal battery power supply
Response time (T90s)	1~5 second(s)
Warm-up time	100 seconds
Probe unit rod length	22cm
Service life of sensor	> 10 years
Calibration time	Calibration once every six months
Alarm mode	Buzzer

Lectotype table for detected gas (part gas)

Model	Detectable gas gas	Measurement range (volume content)	Measurement precision
PGas-31-CO ₂ -1	CO ₂ gas	0-5000ppm	±1%F.S
PGas-31-CO ₂ -2	CO ₂ gas	0-2%	±1%F.S
PGas-31-CO ₂ -3	CO ₂ gas	0-20%	±1%F.S
PGas-31-CO ₂ -4	Co ₂ gas	0-100%	±1%F.S
PGas-31-CO-1	CO gas	0-20000ppm	±2%F.S
PGas-31-CO-2	CO gas	0-10%	±1%F.S
PGas-31-SF ₆	SF ₆ gas	0-1000ppm	±1%F.S
PGas-31-CH ₄	CH ₄ gas (methane)	0-4.4% (0-100%LEL)	±1%F.S
PGas-31-CH ₄ -2	CH ₄ gas (methane)	0-100%	±1%F.S
PGas-31-C ₂ H ₆	C ₂ H ₆ gas (ethane)	0-2.4% (0-100%LEL)	±1%F.S
PGas-31-C ₃ H ₈	C ₃ H ₈ gas (propane)	0-1.7% (0-100%LEL)	±1%F.S
PGas-31- C ₄ H ₁₀	C ₄ H ₁₀ gas (butane)	0-1.4% (0-100%LEL)	±1%F.S
PGas-31- C ₂ H ₂	C ₂ H ₂ gas (acetylene)	0-2.3% (0-100%LEL)	±1%F.S
PGas-31- C ₂ H ₄	C ₂ H ₄ gas (ethylene)	0-2.4% (0-100%LEL)	±2%F.S

Executed standard

GB12358-2006 "Gas monitors and alarms for workplaceGeneral technical requirements