



Alcohol Breathalyzer



Home Gas Alarm



Industrial Gas Detection



Home Power Control



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PESV International

Powered by Henan Huoyan Biotech Co., Ltd

To provide Professional Equipment & Safety Values for global partners

ISO14001

ISO9001

OHSAS18001





Smart Sensing Active Protection

PE
SV

PESV International

P-Professional

- We act with Professional Rigor

E - Equipment

- Every piece of equipment matters

S - Safety First

- Safety is our bottom line

V - Value Creation

- We create value through service

PESV Professional Equipment & Safety Values

PESV is dedicated to being the bridge connecting global industrial needs with China's premium manufacturing resources. Our name reflects our founding principles: Professional Equipment and Safety Values.

Our Foundation

Currently, we specialize in two core sectors: "Smart Sensing", represented by gas detection and alcohol testing; and "Active Protection", represented by circuit breakers and fire suppression systems. These constitute our first line of defense for you and serve as the cornerstone where we demonstrate our rigorous selection standards.

Our Possibilities

But this is just the beginning. As a dynamic integrator, we do not set rigid limits on our boundaries. China possesses the world's most complete industrial categories, and PESV's mission is to be the insightful "curator" for you.

We maintain an open horizon, always ready to respond to your diverse needs. From precision instruments to general industrial equipment, as long as it meets PESV's quality standards, it has a place in our portfolio.

We provide more than just products; we provide certainty—Whatever industrial equipment you need, PESV is your trusted gateway to quality in China.



Industrial Gas Detection Products Overview

www.pesv.com

Combustible gas leak detectors

Home inspection



BX166

Quick detection
for home users



JL269

Good sensitivity for gas
company staff use

Pipeline inspection



BT-BX172

Pumped full range
detection of
Methane from
1ppm to 100%VOL



HRLD

Laser remote Methane
detector (maximum
150m)



EGC200

Ethane identifier to
distinguish between
natural gas and
biogas



PLD6

Pumped laser detector
Full range CH₄ detection
Multiple application



VMLD800

Pumped mobile
laser detector with
wireless
communications



VMLD700II

Vehicle-mounted
detectors check leaks
in front and at the side
of the driving path

Site monitoring



GTYQ-WD6200IRII

Double-source and
double-beam infrared
sensor with heating
function



XT-OPGD1000II

Open path laser
detector suitable
for harsh
environment



FRLD200

PTZ-scanning laser
detector with 360
degree detection

Portable gas detectors

Single gas



BX171
ATEX approved
disposable detector
for H₂S, CO, O₂
(2-year)



BX176
Economical
rechargeable detector
for LEL and
toxic detection



E1000
Smart sensor
design, for detection
for LEL, toxic, VOCs,
CO₂



E110
Compact and light weight
Wireless communications
LEL, O₂, toxic gases



BZ100
Chinese smallest
disposable gas detector
with ATEX and IECEx
approval



VC205
Portable pumped VOC
gas detector with
sensitivity of 0.01ppm

Multi gas



BX616
Economical 4-gas
detector for LEL,
CO, H₂S, O₂ with
1-button operation



E4000
Smart sensor;
4-gas detector for
LEL, toxic, VOCs,
CO₂; optional
pump



E6000
Smart sensor;
6-gas detector for
LEL, toxic, VOCs,
CO₂; optional
pump



E410
Diffusion and
pumped option
4 sensors for 5 gases
Long-lifespan
O₂ sensor



PP01
Sampling pump
for using with
portable gas
detectors

Fixed gas detectors

No display



CXE
Compact combustible
gas detector with
LED indicators



GTQ-BS01
Economical combustible
gas detector with LED
indicators



TC100N
ATEX approved
combustible gas
detector with 2
relays

LED display



CXF
AC220V powered
standalone gas
detector with
buzzer and
flasher



GTQ-BS02
Combustible gas detector
with LED display and LED
indicators



BS03
ATEX approved fixed
gas detector for LEL,
toxic, VOCs, CO₂

LCD display



GTQ-BS03
New gas detector
with smart sensor,
3 relays and color
backlight



GTQ-WD2200
High-class gas detector
with smart sensor, Hart
and 3 relays



GTQ-WD6200
High-class gas
detector with smart
sensor, Hart and 3
relays for harsh
environment

VOC Gas Detectors



VOCScan800
VOC gas detector
with automatic
cleaning and zeroing

Accessories



RS166
Explosion-proof
annunciator with
bright light and
big sound



IR REMOTE
For setting and
calibration of fixed
gas detectors

Flame detectors



FD10-UV
Ultraviolet type
flame detector for
indoor use



FD10-IR2
Double IR flame
detector with reliable
performance



FD10-IR3
Triple IR flame
detector with
excellent
performance



FD10-UVIR2
UV and IR composite
flame detector for
wide range of
detection



INFD-01
Test lamp for both
UV and IR type of
flame detectors

Gas alarm control panels

4-20mA type



KB2160
Single-channel
panel with abundant
functions



KB180
Compact design
Connect 3 detectors
Modbus data upload

RS485 TYPE



KB100
Compact and
economical control
panel for commercial
applications



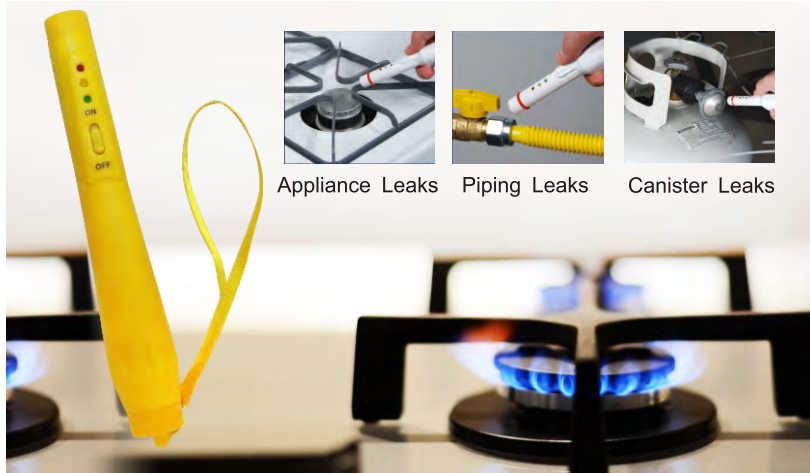
KB500
Large-capacity
control panel with
cascading function

Combined type



KB9000
Composite control
panel with 4-20mA
(16 channels) and
RS485 (64 channels)

Combustible gas leak detectors



BX166 pen-type gas leak detector

FEATURES

- Auto zero calibration
- Fast response and resume
- Easy to operate
- Visual and audible alarming signal
- Low battery voltage alert
- Variable sounds for different status

APPLICATION

Personal use at home.

SPECIFICATIONS

Measuring gas	Natural gas (CH4), LPG (C3H8)	Humidity	< 95%RH (no condensation)
Measuring range	0-100%LEL	Power supply	2pcs of 1.5V AA batteries
Preset alarm level	Low alarm: 20%LEL; High alarm: 50%LEL	Operating current	139mA
Response time	T90<5s	Alarm method	Visual and audible signal
Measuring type	Diffuse naturally	Sensor lifespan	More than 3 years
Working temperature	-20 ~ 55℃	Dimension	105*232*33mm
Working time	More than 3 hours (no alarming status) continuously	Weight	About 75g

JL269 Portable Gas Leak Detector

JL269 is an industrial type portable gas leakage detector with simple operation, fast response and wide measuring range. With flexible goose-neck, it is easy to use and carry. It is specially made to measure the leakage of natural gas, LPG, H2 etc. combustible gases.

FEATURES

- Fast response and resume
- Flexible goose-neck
- Battery low voltage alert
- Sensor fault detection
- Automatic zero calibration

APPLICATION

Daily inspection and maintenance of the gas pipelines by the gas companies.

SPECIFICATIONS

Measuring gas	Natural gas (CH4), LPG (C3H8), H2	Working temperature	-10℃ ~ 55℃
Measuring gas range	CH4:0-30000ppm LPG:0-20000ppm H2:0-10000ppm	Humidity	<93%R.H.(no condensation)
		Power supply	DC3.7V 2200mAh Lithium-ion battery
Sensitivity	Better than 50ppm	Housing	Rubber enclosure
Response time	T ₉₀ <5s	Dimension	180mm*72mm*35.5mm
Measuring type	Diffuse naturally	Weight	About 300g
Working time	More than 8 hours (no alarming status) continuously		

Combustible gas leak detectors



BT-BX172 Gas Leak Detector with Built-in Pump

BT-BX172 is an intrinsically safe instrument that can continuously detect Methane concentration in the environment from 1ppm to 100%VOL. With built-in pump and probe & tubing, it can check the gas leakage where human hands cannot reach.

FEATURES

- Wide-viewing-angle and bright LCD screen display
- With built-in pump, suitable for long-distance detection
- 3-level adjustable pump speed, intelligent pump blocking detection
- Multiple-filter design ensures the reliable detection
- Stable performance, high precision, fast response
- Audible, visual and vibration alarming signals
- Smart user-operated calibration design
- Low voltage alert function
- Real-time clock display
- Zero calibration function to reduce detection error
- Self-test function after power-on, self-diagnosis function
- Password management to avoid wrong operation

APPLICATION

It is widely used in urban natural gas, petrochemical, fire protection, shipbuilding industry, oil depots, gas stations, etc. Gas concentration detection in places with combustible gas.



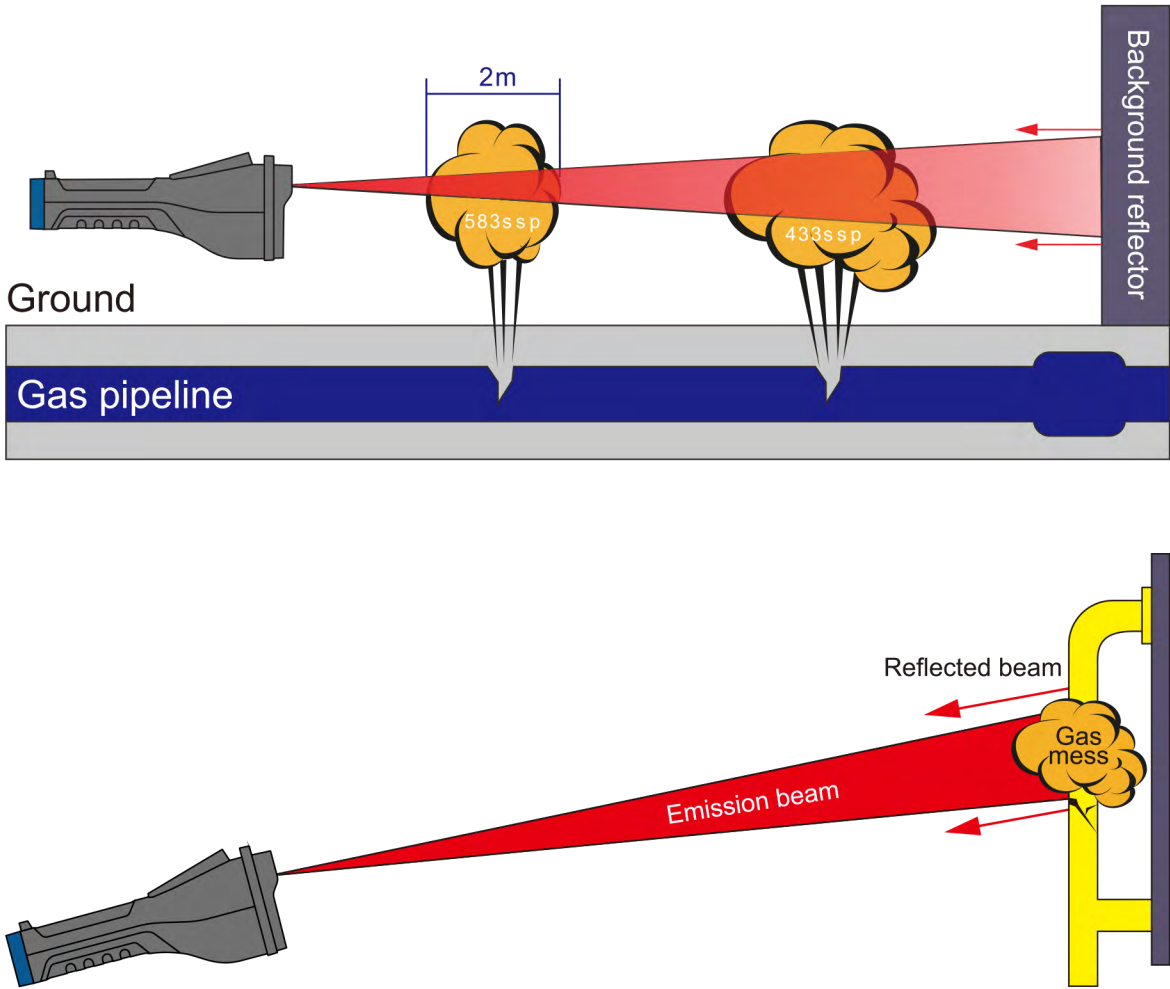
SPECIFICATIONS

Measuring gas	Methane	Alarming signal	Audible, visual and vibration
Sensor type	Semi-conductor, infrared	Ambient temp	-20℃~50℃
Measuring range	0~10000ppm~100%LEL~100%VOL	Humidity	<95%RH (no condensation)
Preset alarm value	ppm level: Low: 2000ppm, High: 5000ppm	Power supply	DC3.7V rechargeable Lithium battery
	LEL level: Low: 20%LEL, High: 50%LEL	Charging time	4 to 6 hours
Response time	T90<30s	Working time	Not less than 8 hours (20℃)
Accuracy	0~10000ppm: ±1500ppm	Explosion proof	Ex ia IIC T3 Ga
	0~100%LEL: ±5%LEL	Dimension	134.6mm×78.4mm×44.4mm
	0~100%VOL: ±3%VOL	Weight	About 300g

Handheld laser methane detectors



MAIN APPLICATION



Handheld laser methane detectors

Handheld laser Methane detector is a gas pipeline inspection equipment independently developed by our company. By adopting the world's leading laser technology and non-contact measurement, it can realize remote measurement and accurate location of the leakage point where cannot be reached by inspectors. This product can greatly improve the efficiency of personnel detection and reduce labor intensity. The telemetry distance is 0 to 150 meters, and the location information of the leakage point can be accurately recorded through GPS positioning. Continuous working time of the product is 8 hours. It is mainly used to detect possible gas leakage pipelines under the road, on both sides of the green belt, isolation belt, and alley.

FEATURES

- Small size and lightweight design, easy to carry
- Good selectivity, response only to Methane
- Sensitivity of 5ppm.m
- Fast response, no alarm delay
- Select-able unit of PPM.M, LEL.M and VOL.M
- Adopts spotter beam to improve visibility of long distance
- Self -Test function
- Low voltage alert
- Low consumption

APPLICATION

It's used to remotely check the Methane gas leakage in the industries of municipal gas pipeline, oil refineries, chemical plants in petroleum and petrochemical industry, metallurgical industry, power industry etc.

SPECIFICATIONS

Measuring gas	Methane	Power supply	Rechargeable Lithium battery
Detection range	0~100000ppm.m	Display	LCD screen
Sensitivity	5ppm.m	Alarm mode	Audible, visual and vibration alarm
Response time	HRLD200: T90<0.1s	Penetration	Objects that can be penetrated by light without affecting detection
	HRLD300: T90<0.1s	Ingress protection	IP66
	HRLD600: T90<0.05s	Ex grade	Ex ib IIB T4 Gb
Humidity	≤99%RH	Detection distance (can be OEM)	HRLD200: 0~50m
Working temperature	HRLD200: -20℃~50℃		HRLD300: 0~100m
	HRLD300/ HRLD600: -30℃~50℃		HRLD600: 0~150m

DETECTION



PLD6 Pumped full-range laser Methane detector

This product is normally used by the gas company to check the Methane leakage from where human hands cannot reach. By using TDLAS technology, this product can solve the problems where the traditional detectors are encountered with, including but not limited to below problems:

- Slow detection speed and susceptibility to noise interference
- Small leaks cannot be detected, and hidden dangers are difficult to remove
- Zero drift, short sensor lifespan, and easy poisoning

PRODUCT ADVANTAGES

- Large flow sampling pump, can quickly locate the leakage point
- Adopting advanced TDLAS technology and using semiconductor laser diodes as light sources, it has good monochromaticity and achieves zero cross interference
- Adopting unique FOS technology, the instrument comes with a built-in reference chamber, which can lock the center wavelength of the laser in real-time, improving the accuracy and stability of system measurement
- The gas sample contained in the reference gas chamber, a portion of the laser beam passes through the reference gas chamber, and the center wavelength of the laser is locked by detecting the information of the reference optical path
- By using multiple reflection laser cavities, the effective optical path of the laser is greatly increased, thereby improving sensitivity, and even small leaks can be detected.
- Full range detection from 0.1ppm to 100%VOL, adjustable range, optional for automatic or manual unit switching



APPLICATION SCENARIOS



APP APPLICATION



MONITORING PLATFORM



TECHNICAL PARAMETER

Measuring gas	CH ₄	Ingress protection	IP65
Sensitivity	0.1ppm	Power source	DC3.7V rechargeable Lithium battery
Measuring range	0.1ppm-100%VOL (ppm, %LEL, %VOL)	Working time	8 hours after full charge
Display unit	Auto switching between ppm, %LEL and %VOL	Calibration method	By built-in gas chamber
Response time	T ₉₀ <0.5s	Lifespan	10 years
Working temperature	-20℃~50℃	Alarm method	Audible and visual signals, voice speaker
Humidity	<95%RH (no condensation)	Output	Bluetooth
Explosive-proof	Ex ib IIB T4 Gb	Weight	About 750g

JL368 Pushcart laser Methane detector

JL368 pushcart gas leak detector uses a pump suction method to detect gases leakage. By adopting high-quality gas sensor, it's with excellent sensitivity and response time. It is suitable for detecting gas leaks in municipal natural gas underground pipelines and can effectively detect small leaks in pipelines, thereby avoiding serious accidents.

PRODUCT ADVANTAGES

- High sensitivity
- Fast response
- LCD screen display
- Built-in pump suction
- Aluminum alloy chassis
- Auto zero calibration
- Ultra long battery life mobile power bank

TECHNICAL PARAMETER

Target gas	Methane (CH ₄)
Detection range	0-9999ppm-100%LEL
Sensor type	TDLAS sensor
Sampling method	Pump suction
Response time	T ₉₀ ≤30s
Indication method	LCD screen displays real-time data and detector statue
	Audible, visual alarm signals
Accuracy	≤±5%F.S
Dimension	1000*7004*300mm
Weight	About 5.5kg (battery included)
Power source	Rechargeable Lithium battery

APPLICATION SCENARIOS



Leak detection of gas buried pipelines used for auxiliary roads, courtyards, and roads inaccessible to vehicles.

Combustible Gas Leak Detectors

XT-OPGD1000II Open Path Laser Detector

XT-OPGD1000II is a line-beam combustible gas detector for industrial and commercial use. The product design complies with the SIL II standard requirement. With high-performance large-surface photosensitive detector and micro-control technology, combined with sophisticated SMD process, it has good repeatability, temperature and humidity characteristics, and has the advantages of long service life and convenient operation.

APPLICATIONS

The detector is widely used in natural gas gate stations and storage stations, oil and petrochemical industry refineries, chemical plants, metallurgical industry, power industry and other places. Compared with traditional fixed gas detectors, it has the advantages of wide coverage, fast response, and the ability to detect omissions or undetected gas leaks caused by traditional point detectors due to installation, wind direction, etc.

FEATURES

- High accuracy, stable performance and long lifespan
 - Separate relay output for detection alarm and fault
 - High-performance LCD display, intuitive and clear
 - Easy installation with professional mounting bracket
 - Fast response and high sensitivity to Methane gas
 - Remote upgrade function available (optional)
- 3-wire 4-20mA analog signal output
 - Simple operation through magnetic rod
 - Long detection distance: Maximum 100m
 - Bluetooth interface available (optional)
 - HART output available (optional)

SPECIFICATIONS

Target gas	CH4	Installation method	Wall-mounted or column installation
Detection range	0-100%LEL.m	Enclosure material	316L stainless steel
Preset alarm value	50%LEL.m	Display method	LCD screen
Detection principle	TDLAS	LED indicators	Yellow-Fault, Red-Alarm, Green-Power
Response time	T90≤3s	Operation method	By magnetic rod
Protection distance	≤100m	Electrical entry	NPT3/4 (F)
Flare size	0.5m	Protection grade	IP66 / IP67
Working voltage	DC24V±6V	Explosion proof	Ex d IIC T6 Gb
Signal output	4-20mA (optional RS485-RTU)		Ex tD A21 IP66/IP67 T80℃
Installation method	Wall-mounted or on the pole	Dimension & weight	280×155×222mm, about 33kg (with installation bracket)
Relay output	2 relays for low alarm and fault		
	Capacity: DC30V@ 3A or AC250V@3A	Ambient temp.	-40℃ ~ +70℃
		Ambient humidity	0-95%RH (25℃, no condensation)

Combustible Gas Leak Detectors

FRLD200 PTZ Scanning Methane Detector

FRLD200 PTZ scanning laser Methane detector is an area-detection product for outdoor use. By adopting high-performance and large-light-surface photosensitive optics and micro-control technology, combined with sophisticated SMD technology, this equipment has good repeatability, lower influence by temperature and humidity, long lifespan, easy-to-operate and other advantages.

FEATURES

- Remote detection of gas leakage
- Longer detection distance (Max. 150m)
- Fast response, high sensitivity
- High accuracy, stable performance and long lifespan
- Multiple signal output (RS485, Ethernet, 4-20mA)
- Professional mounting bracket, easy and convenient to install on site
- Flameproof head, horizontally 360 degree continuous rotation, vertically ±90 degrees
- Night vision infrared system, 2 megapixels, 20 x optical zoom
- Visual monitoring platform, real-time and effective location of leakage point.

APPLICATION

The equipment is widely used in gas detection of natural gas gate station and storage station, oil refinery, chemical plant, metallurgy industry, electric power industry and other places that may produce harmful gas to human body.

APPLICATION SCENARIOS



Natural gas border station



Natural gas storage station



Petrochemical plant



Electrical industry

SPECIFICATIONS

Detecting gas	Methane (CH4)	Operation mode	RS485 control unit
Principle	Laser spectral absorption technology	Cable entry	NPT3/4 (F)
Detection range	0-50000ppm.m	Explosive proof	Ex d IIC T6 Gb / Ex tD A21 IP66/67 T80℃
Threshold	100ppm.m	Ingress protection	IP66 / 67
Response time	T90≤1s	Working temperature	-40℃ ~ +60℃
Detection distance	≥100m	Humidity	<95%RH (no condensation)
Rated voltage	14VDC~32VDC	Wind speed	No more than 8m/s
Rated voltage	RS485, Ethernet, 4-20mA	Dimension	498*378cm
Enclosure material	Stainless steel	Weight	30kg



Visual monitoring platform



R10 UNCOOLED
PORTABLE INFRARED GAS LEAK DETECTOR

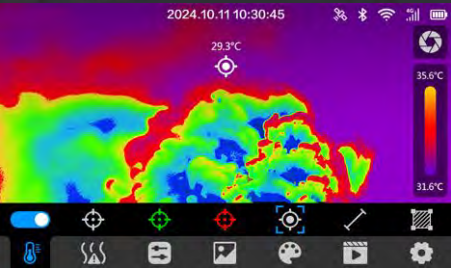
TDLAS & Infrared dual detection

- Trace methane gas leakage response detection within 0.5 seconds, real-time display of leaked gas concentration;
- Support module replacement, capable of detecting petroleum gas, ammonia gas, etc.
- 640×51 Uncooled infrared detector, customized infrared lens, clear traceability of gas leakage points.
- Measuring gases include CH₄, SF₆, ethylene, NH₃, NO and SO₂ etc.



Temp. measurement

± 2% temperature measurement accuracy, easily meeting the dual tasks of gas leak detection and temperature measurement.



Natural gas inspection



Environmental law enforcement



Ammonia leakage inspection



Oil and petrochemical inspection

TECHNICAL PARAMETER

Model		R10
Thermal imaging	Detector type	Uncooled vanadium oxide
	Resolution	640 × 512
	Infrared response band	7.0–8.5um/9.5–12um
	Thermal sensitivity	25mk
	Detector frame rate	25Hz
	Focal length	18mm
	Field of view angle	29.8° x22.6°
	Detector pixel size	12um
	Zoom ability	Digital zoom
	Focusing mode	Manual focusing
Remote laser detector	Detection object	Methane
	Detection principle	Laser absorption spectroscopy
	Static detection limit	5ppm.m
	Response time	0.5s
	Detection range	0~50,000ppm.m
	Working temp.	-20~45℃
	Humidity	<90%RH, No condensation
Temp. measurement	Temp. range	-20° C ~ 150° C
	Accuracy	± 2% or ± 2℃
	Resolution	0.1° C
	Detection method	Center point / hotspot tracking and temperature display
	Area setting	Point, line, and area selection; Temp. measurement grading
Image display	Visible light camera	5 million pixels
	Display screen	4.3" LCD touch screen
	Display resolution	800 × 400 pixels
	Image mode	Infrared, visible light, picture in picture, detail enhancement
	Color palette	10 types
Storage and transmission	Storage medium	MicroSD card, supports up to 128GB
	Image format	Jpg
	Video format	MP4
	External interface	USB3.0、HDMI
	WIFI	support
Power system	Bluetooth	Bluetooth 5.0
	Battery type	Rechargeable Lithium battery
	Working time	Not less than 3 hours
	Charging method	TYPE-C direct charging, base charging
Environmental factors	Charging time	2.5 hours to fully charge 90%
	Working temp.	-10 ~ +50° C (TDLAS not working)
	Storage temp.	-20 ~ +60° C
	Relative humidity	10% to 95%, no condensation
Features	Ex grade	IIC T4 level
	Ingress protection	Ip54
	Laser focal length	Range: <=20m Accuracy: 0.2m
	Audio	Support voice annotation and playback
Physical parameters	Positioning module	Beidou
	Weight	About 1kg
	Dimension	287*125*120
	Installation	Universal UNC%-20 nut interface, with supporting tripod bracket
	Standard accessory	Power adapter, USB cable, HDMI cable, SD card, two batteries, Starting guide, battery base charger, packing list

Combustible Gas Leak Detectors

VMLD700II+VRLD200 Vehicle Mounted Laser Methane Detector (pumped)

This system is used to check the gas leakage in urban areas. Leakage detection is easily carried out when driving along the street where the pipeline is underground at a normal driving speed. With 2 separate laser detectors, the system can detect the leakage in front and at the side of the street. The system consists of VMLD700II pump sampling laser detector in the front, VLD100 on the roof, controller in-car and remote monitoring platform. GPS and GIS technologies are adopted to exactly locate the leakage point and to upload the detection result to the remote monitoring platform.



FEATURES

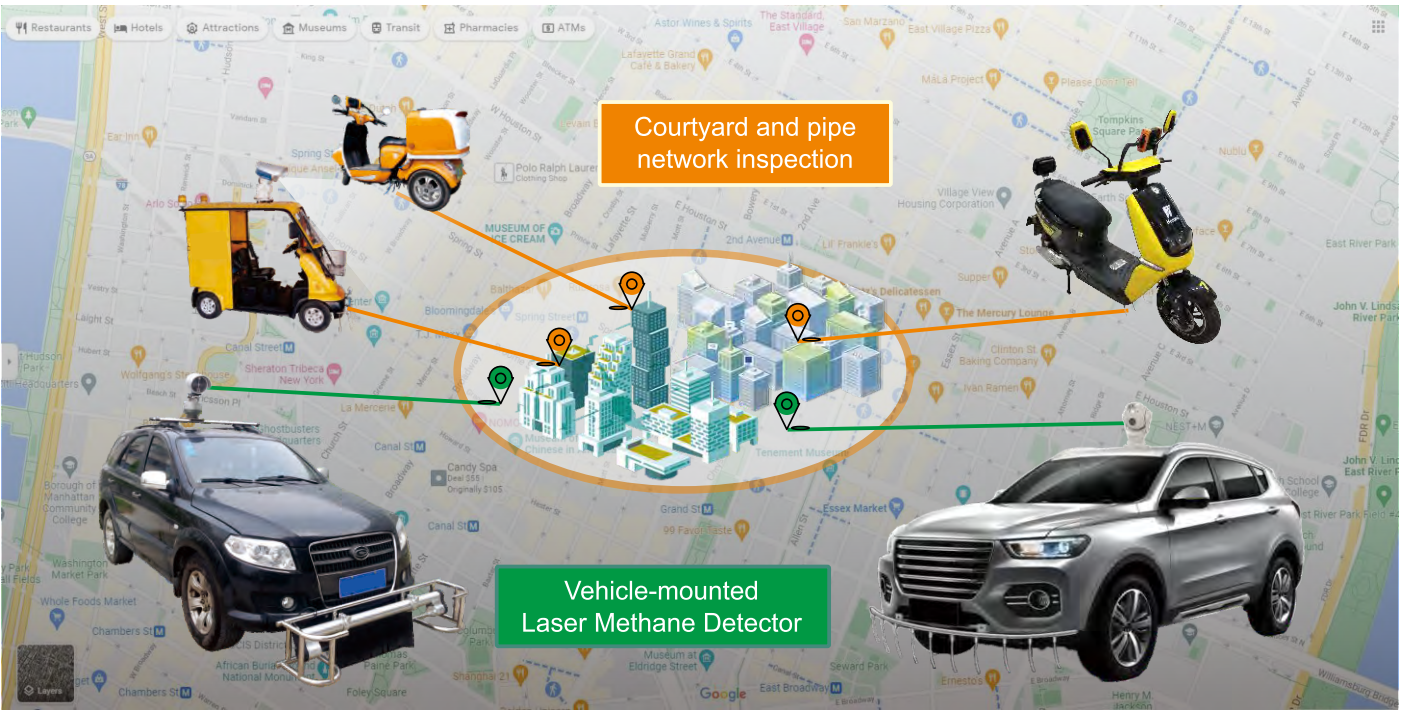
- Fast response with no delay
- High sensitivity for tiny leakage
- Good selectivity: Only reacts to Methane that will avoid the interference from vehicle exhaust.
- Large pump absorption, wide detection range
- Data display: Real-time display concentration curve and patrol path by PAD.
- Adopt optical absorption method, remotely detect gas leakage with no contact.
- Detect the places that worker cannot approach to.
- Speed: Max 50km/h
- Mounted with HD camera, operator can see the detection clearly at real time.
- Cooperate with cradle and rocker, it will be convenient for scanning detection and quick positioning.

APPLICATION

It is suitable for street patrol monitoring of urban courtyard pipe network and gas transmission and distribution pipelines, and it is also suitable for street patrol monitoring of long-distance pipeline transmission and distribution streets in suburbs.

SPECIFICATIONS

Name	Detecting gas	Sensitivity	Detection range	Response time	Working temperature	Humidity
VMLD700II	Methane	1ppm	0-2000ppm	<1s	-35℃~70℃	0-99%RH
VRLD200	Methane	10ppm.m	0-500000ppm.m	<0.1s	-35℃~70℃	0-99%RH



VOC Gas Detectors

VC205 Portable VOC Gas Detector

FEATURES

- **Advanced PID detection technology**
Long-lifespan UV lamp which can work for more than 10000 hours
Built-in temperature and humidity sensors for automatic compensation
- **Rich gas library**
Including over 700 VOC gases, meeting the needs of multiple scenarios
- **Large capacity data storage**
More than 1.3 million memory, 60-second storage interval, at least 2-year storage
- **Long battery life**
Can work for 16 hours after full charging
- **Easy-to-use PC analysis software**
PC software can read instrument data and display it graphically
- **Wireless transmission**
Support Cat1, 4G, Blue-tooth etc.
- **Multiple alarms**
Audible, visual, and vibrative alarming signals
With fall-down alarm function
- **Satellite positioning**
Can be extended with dual module of GPS+Beidou



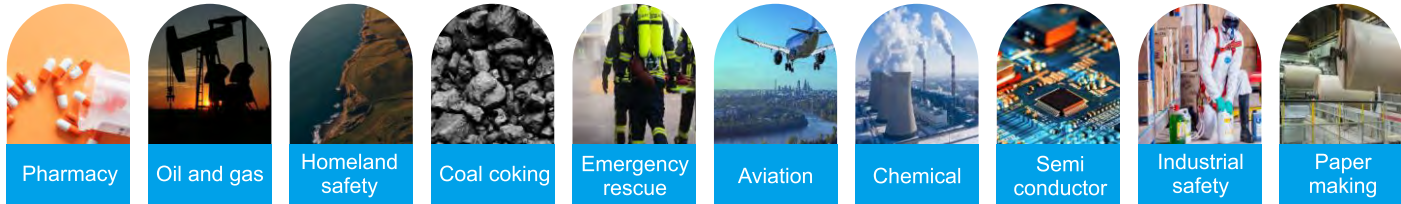
USER VALUE

- **Integrated detection solution**
Built-in sampling pump with a maximum 30-meter tube ensures detection accuracy
No need for other accessories to meet multiple scenario applications
Built-in lighting for easy use in low light environments
- **Easy-to-use and durable**
No tools required for easy maintenance of UV lamp and sensors
Automatic cleaning technology reduces maintenance time and cost
Engineering enclosure with hard material, suitable for complex industrial applications
IP66 protection level for easy cleaning
Free selection of display units: ppm, μmol/mol, and mg/m³

- **Mature and reliable PID sensor technology**
Automatic zero calibration
- **Cost-effective**
Universal platform for easy future expansion
Reduction of spare parts
One year warranty

APPLICATION

VC205 adopts a self-developed PID Photo Ionization sensor with a clever structure, convenient operation, and precise detection. It is suitable for petrochemical refining, Synthetic fiber manufacturing, gas leakage collection, environmental protection information detection and other scenarios.



SPECIFICATIONS

Principle	PID photoionization	Transmission	Cat1, Blue-tooth (optional)
Sensor type	10.6eV	Ambient temp.	-20℃ ~ +50℃
Gas sampling	Pumped	Humidity	<95%RH (no condensation)
Working method	Continuous monitoring	Battery type	DC3.7V rechargeable Lithium
Response time	T90<3s	Working time	≥16h (no alarming)
Error rate	<±3%	Ex type	Ex ib IIC T4 Gb
Detection range	0.01-5000ppm	IP class	IP66
Resolution	0.01ppm	Language	English and Chinese
Display unit	ppm, μmol/mol or mg/m³	Dimension	257.5 x 77.7 x 62.2mm
Lamp lifespan	> 10000 hours	Weight	About 890g
Data storage	Store once per minute, capable of continuously storing data for 24 months, with adjustable storage intervals		

VOC Gas Detectors

VOCScan800 Fixed VOC Detector

APPLICATION

VOCScan800 is used to detect a wide range of potentially hazardous volatile organic gases, including toxic and explosive gases. In addition to other basic features common to PID detectors, the product features dual air inlets, on-site auto-cleaning and auto-zeroing to keep the device in top working condition. The built-in menu allows the user to select and configure many functions to meet different requirements and applications.

FEATURES

- Good accuracy and long lifespan by adopting bigger size PID lamp (10.6ev)
- Automatic cleaning to ensure reliable operation and improved service life
- Automatic zeroing for fast response and accuracy
- Built-in high-performance vacuum diaphragm air pump with multiple filters
- Dual air intake system
- Real-time temperature and humidity compensation
- Built-in response coefficients of various VOCs
- Interchangeable display units of mg/m³, ppm and umol/mol
- Modular design, easy maintenance and replacement



SPECIFICATIONS

Measuring gas	VOCs	Detection principle	PID sensor
Accuracy	±3%F.S	Detection method	Pumped type (with self-test function)
Response time	T90 < 10s	Alarming signal	LED lights
Measuring range	Standard: 0-100ppm (resolution 0.1ppm)	Rated voltage	DC24V ± 6V
	Smaller: 0-10ppm (resolution 0.01ppm)	Consumption	≤5W
	Bigger: 0-1000ppm (resolution 0.1ppm)	Ambient temperature	-40℃ ~ +70℃
Signal output	4-20mA (Hart), MODBUS	Ambient humidity	0~99%RH (no condensation)
	Dry relays (for low alarm, high alarm and fault alert)	Ex grade	Ex d IIC T6 Gb
	24VDC relay output (to connect annunciator)	Ingress protection	IP66
Indication method	Dot matrix LCD screen	Cable entry screw	NPT3/4
	LED indicators	Enclosure material	Aluminum alloy / Stainless steel (optional)
Transmission cable	≤1000m: RVVP3 × 1.5mm²;	Dimension	133×265×123mm
	≤1500m: RVVP3 (4) × 2.5mm²	Weight	Around 3.5kg

PID technology:

The PID uses an ultraviolet (UV) light source to ionize organic molecules into positive and negative ions (ionization) that can be detected by the detector. The detector captures the positive and negative charges of the ionized gas and converts it into a current signal to measure the gas concentration. When the gas to be tested absorbs high-energy ultraviolet light, the gas molecules are excited by the ultraviolet light to temporarily lose electrons and become positively charged ions. After the gas ions are detected on the electrodes of the detector, they soon combine with electrons to reconstitute the original gas and vapor molecules. **PID is a non-destructive detector, and it does not "burn" or permanently change the gas molecules to be measured**, the gas detected by PID can still be collected for further measurement.

Combustible Gas Leak Detectors

EGC200 Ethane Identifier

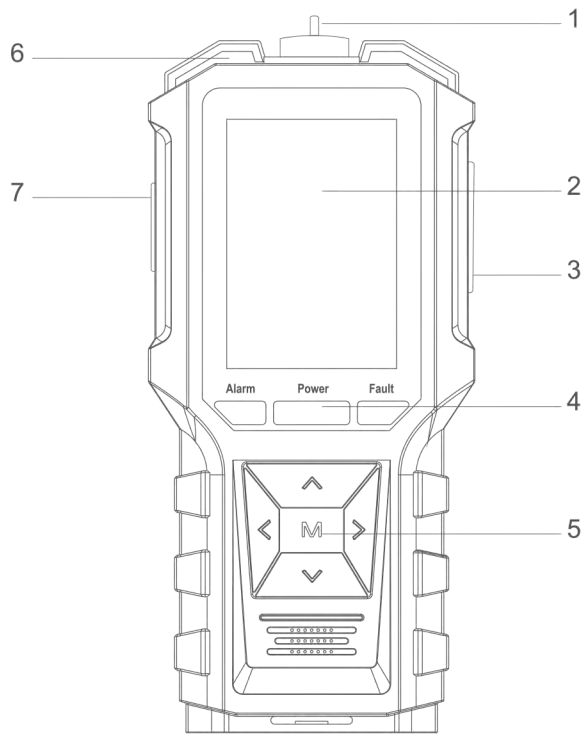
FEATURES

- With self-patented miniature chromatography column, it's more accurate and faster to identify the Ethane gas
- Extendable to IR sensor, full-range detection is possible
- Big-flow pump sampling to realize intelligent self-adjustment
- Multi-stage filtration, suitable for complex environment using
- Compact handheld design, no carrier gas required
- Audible and visual alarming signals
- High-brightness color screen display, convenient operation
- Explosive proof and IP65 design

APPLICATION

This product is designed for the gas company to identify if the leaked gas is natural gas or Biogas, because natural gas contains Ethane, while Biogas doesn't. Also, this product can be a Methane gas detector for full range from 1ppm to 100%VOL.

PRODUCT STRUCTURE



1	Gas inlet
2	Display screen
3	Data upload
	Charging
4	Fault indicator
5	Functional button
6	Alarm indicator
7	Power button

SPECIFICATIONS

Measuring gas	Methane, Ethane (Propane)	Working temperature	−20 to +50°C
Detection range (Methane)	0-10000ppm, accuracy: ±1ppm	Humidity	0-90%RH (no condensation)
	0-100%LEL, accuracy: ±1%LEL	Air pressure	800-1200kPa
	0-100%VOL, accuracy: ±3%VOL	Power supply	3.7V, 6600mAH Li-ion battery
Response time	T90<12s	Working time	Battery: >8h (full charger @ 25°C)
Identifying time	<180s		Built-in pump: >10,000h
Ethane resolution	10ppm	Ingress protection	IP65

Portable Gas Detectors

BZ100 Mini Portable Gas Detector

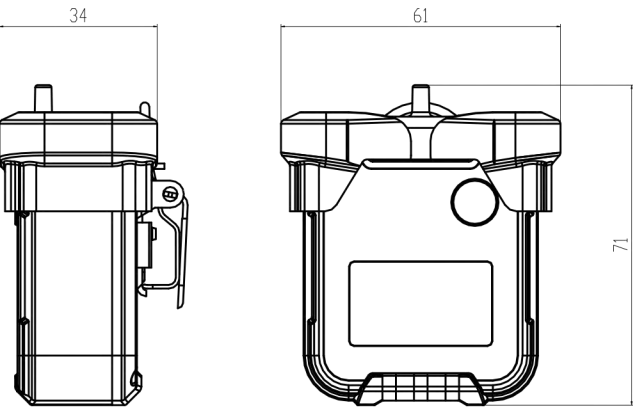
FEATURES

- The smallest gas detector from China (palm size)
- Disposable type, battery can work for at least 2 years
- With lifespan indication function, support data & log exporting
- ATEX and IECEx approved
- IP66 design, suitable for use in harsh environments such as rain, snow, dust etc.

APPLICATION

BZ100 is mainly used for personal safety monitoring in working environments such as petroleum, chemical industry, metallurgy, mines or underground pipelines, tunnels, etc. It is the first mini portable disposable single gas detector in China with ultra low-consumption, compact and lightweight design. Measuring gases include H2S, CO and O2 only.

APPEARANCE



WEARING METHODS



SPECIFICATIONS

Measurement	Diffuse naturally			Sensor type	Electrochemical sensors
Response time	T90 < 30s			Approval	ATEX: II 1 G Ex ia IIC T4 Ga
Power supply	Lithium battery, DC3.6V 1200mAh				IECEX: Ex ia IIC T4 Ga
Lifespan	2 years (2 minutes of alarm per day)			Ingress protection	≥IP66
Alarm signal	Audible, visual, and vibrative			Alarm sound	90dB @10cm
Ambient temp.	-20°C ~ 50°C			Humidity	<95%RH (no condensation)
Event log	Recent 200 alarms			Housing material	Rubber
Dimension	61.5mmx52.8mmx27mm			Weight	About 85g (with battery and clip)
Indication method	LCD screen: displays the real-time data and states				
	LED indicators: different color shows different states of the detector				
	Backlight: illuminates on command or alarm status in low light				
Sensor specification	Gas	Detection range	Low alarm	High alarm	Indicative error
	CO	0-500ppm	35ppm	70ppm	Absolute: ±5ppm, Relative: ± 10%
	H2S	0-100ppm	6ppm	12ppm	Absolute: ±2ppm, Relative: ±10%
	O2	0-25%VOL	19.5%VOL	23.5%VOL	± 2%FS

Portable Gas Detectors

BX171 Portable Single Gas Detector

BX171 is a disposable intrinsically safe type portable single gas detector which can monitor the concentration of O2, CO, H2S. Send alarms when exceeding gas concentration is detected, protesting the workers from danger caused by O2 deficiency, toxicity of H2S and CO.

FEATURES

- Intrinsically safe
- Explosion-proof design, ATEX approved
- Water and dust proof
- Compact and light weight
- Operates for 2 years
- Visual, audible and vibration alarm
- Optional function of IR upload

APPLICATION

Oil and gas industries, Power plants, Petrochemical plant, Steelworks, Refinery, Marine, Mine, Sewage treatment plant, Confined spaces, Labs etc.

SPECIFICATIONS

Measuring gas	CO, H2S, O2	Power supply	DC3V CR123A Lithium battery
Measuring range	Please refer to our gas list	Event log	256 events
Sensor type	Electrochemical sensor	Working temperature	-20℃~55℃
Sensor life	2 years	Humidity	<95%R.H.(no dews)
Measuring type	Diffusion naturally	Housing	Rubber enclosure
Response type	T90<30S	Dimension & Weight	91mm*58mm*34mm About 130g
Alarm method	Visual, audible and vibration signals	Ingress protection	IP66
Audible	≥80dB @ 1m	Ex grade	Ex ia IIC T4 Ga



BX176 Portable Single Gas Detector

BX176 portable single gas detector is an intrinsically safe equipment which can continuously detect combustible gases and toxic gases in underground pipes or mines. By adopting excellent-quality sensor, it has good sensitivity and repeatability.

FEATURES

- LCD display
- Audible, visual and vibrative alarming
- Adjustable alarm value and span calibration value
- High concentration protection for combustible gas sensor
- Low voltage alert
- Real time clock display
- STEL and TWA alarm for toxic gases

APPLICATION

Oil and gas industries, Power plants, Petrochemical plant, Steelworks, Refinery, Marine, Mine, Sewage treatment plant, Confined spaces, Labs etc.

SPECIFICATIONS

Target gas	LEL, O2, toxic gases etc.	Working temperature	Combustible gas: -40℃~70℃ Toxic and O2: -20℃~50℃
Accuracy	±5% F.S.		
Response time	LEL, CO, H2S: T90 <30s (LEL, CO, H2S)	Ingress protection	IP65
	O2: T90 <20s (Oxygen)	Power supply	DC3.7V, 1300mAh Li-ion battery
Alarm method	NH3, HCL: T90 <120s (NH3, HCL) Other toxic: T90 <60s	Operating time	≥ 8h
Indication	Audible, visual, and vibration alarm	Charging time	4~6 hours
Humidity	LCD indicates the time and state	Dimension and weight	104.0×60.8×30.5mm about 125g
	<95%RH (no condensation)		



Portable Gas Detectors

E1000 Portable Single Gas Detector

E1000 is a rechargeable single gas detector and is suitable for monitoring the gas concentration of flammable gas, O2 and toxic gases in the environment. It measures a gas continuously and displays its concentration and raises an alarm when a risk occurs. By adopting smart sensor module, it's easy for replacement and maintenance by the user himself.

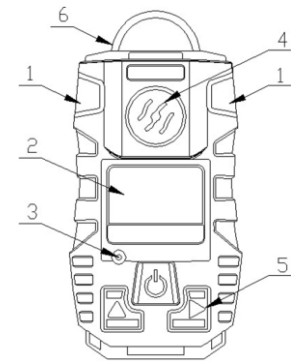
FEATURES

- Interchangeable smart sensor module
- Intrinsically safe
- Visual, audible and vibrative alarm
- Adjustable alarm levels and span calibration value
- STEL and TWA alarm for toxic gases
- Password management
- Real-time clock
- Self-test after power on
- Self-diagnostic and self-correction function

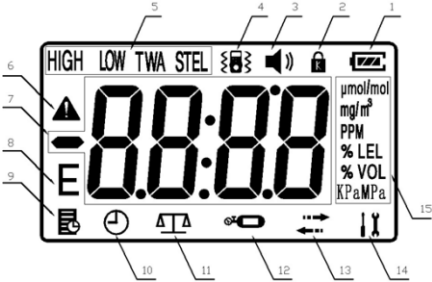
APPLICATION

Steelworks, petrochemical plant, oil industry, shipbuilding yard, sewage treatment plant, mine, power supply works etc.

APPEARANCE



NO	NAME	NO	NAME
1	Alarm light	4	Sensor Port
2	LCD Screen	5	Button
3	Buzzer port	6	Buckle



Note: only appear when your device has data uploading function.

NO	FUNCTION
1	Battery Condition
2	Lock on or Password
3	Buzzing Status
4	Vibrating Status
5	Alarm information
6	Warning or Max Value
7	Gas Concentration
8	Error
9	Record
10	Clock Icon
11	Zero Calibration
12	Calibration Point or Calibration Status
13	Communication icon
14	Data Setting
15	Unit



SPECIFICATIONS

Measuring gas	O2	CO	H2S	Combustible
Measuring range	0-25%VOL	0-500ppm	0-100ppm	0-100%LEL
Sensor type	Electrochemical			Catalytic
Measuring type	Diffuse naturally		Working temperature	Toxic gases: -20℃ ~ 50℃
Response time	T90<30s			Combustible: -40℃ ~ 70℃
Display	LCD screen		Humidity	<95%RH (no condensation)
Audible	≥85dB at 1m		Standard accessories	Operation manual, calibration cap,
Alarm method	Visual, audible and vibrative signals			charger, screwdriver
Power supply	DC3.7V 1800mAh Lithium battery		Housing	Rubber enclosure
Operating time	≥ 8h		Optional function	Data upload through USB cable
			Dimension and weight	108×61×36mm about 190g
Charging time	4-6h		Ex grade	Ex ib IIC T4
Event log	10000 events		Ingress protection	IP66

Note: For detecting other gases, please refer to our gas list.



Diffusion type E110

APPLICATIONS

E110 is an intrinsically safe portable gas detector that can continuously detect the concentration of combustible gases, toxic gases, or oxygen. It is suitable for explosion-proof, toxic gas leakage rescue, underground pipelines and other places, and can effectively ensure that the life safety of workers is not violated, and production equipment is not damaged.

The shell of the detector is made of high-strength engineering plastic and composite anti slip rubber, which has high strength, good hand feel, and is waterproof and dust-proof.

TECHNICAL FEATURES

- Advanced ultra-low power MCU
- Ultra wide viewing-angle graphic LCD display
- Self-check of combustible gas sensor fault
- Real-time clock display
- Automatic calibration function to reduce detection errors
- Audible, visual, and vibration alarming signals
- Multiple alarms of Low-alarm, High-alarm, TWA, STEL, over-range, and battery undervoltage alerts
- Capable of parameter settings, log storage, export, and other functions (optional)
- Self-check function after power on (self diagnosis and repair)
- Password management to avoid wrong operation
- ATEX and IECEx approved



E110
Diffusion type



APP
Demonstration



APPLICATION SCENARIOS



Petroleum and Petrochemicals



Emergency rescue



Offshore platform



Pharmaceutical
and Chemical Industry



Industrial waste gas



Incineration power generation

PARAMETERS

Detection method	Diffuse naturally	Power source	DC 3.7V rechargeable Lithium battery
Sensor type	Catalytic, electrochemical etc.	Working time	≥8h (continuous working after full charge; @20°C no alarming state)
Display deviation	Combustible: ±5 %FS	Charging environment	Temperature: 0°C ~ 45°C Humidity: < 95%RH (no condensation) Air pressure: 90kPa ~ 110kPa
	CO: Absolute deviation: ±5 ppm Relative deviation: ±10%		
	H2S: Absolute deviation: ±2 ppm Relative deviation: ±10%	Sensor lifespan	2 years
	O2: ±2%F.S.	Ingress protection	IP67/IP68
	Other gases: depends on the specific sensor. Please contact the dealer or manufacturer.		Note: IPX8: 1 m water depth for 60minutes
		Ex-proof grade	Catalytic sensor: Ex ia IIC T3 Gb / Ex ib IIIC T195°C Db Other sensors: Ex ia IIC T4 Ga / Ex ib IIIC T130°C Db
Response time	T ₉₀ <30s		
Indication method	LCD screen display of real-time data and system status; Visual/audible/vibration indication of alarm, fault and low voltage.	Certificate	ATEX and IECEx by CSA
		Dimension	97×53×22.5mm
Comm. method	Bluetooth/USB cable (optional)	Weight	About 115g
Working environment	Temperature: -20°C~55°C	Featured functions	Parameter settings, log storage & export functions (optional)
	Humidity: <95%RH (no condensation)		
	Air pressure: 90kPa~110kPa		

Portable Gas Detectors

BX616 Portable Multi-gas Detector

BX616 is a united gas detector measuring four (4) major gases, which result the most of the industrial accidents, to protect the disasters caused by the O2 deficiency, toxic gas poisoning and combustible gas explosion. It measures continuously four gases O2, CO, H2S and combustible gas (CH4), and displays their concentrations. Once the risk occurs, it also raises the alarm (visual, audible and vibrative).

FEATURES

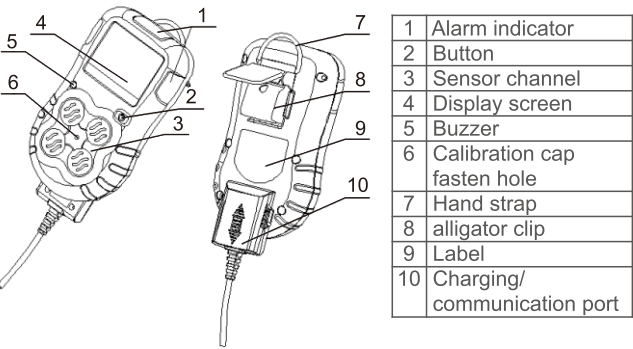
- Small size and light-weight
- Simple operation with only 1 button
- Adjustable alarm levels and span calibration value
- STEL and TWA alarm for toxic gases
- Self-protection for combustible gas sensor against high concentration
- Battery low voltage alert
- Confidence beep
- Self-test after power on
- Self-diagnostic and self-correction function



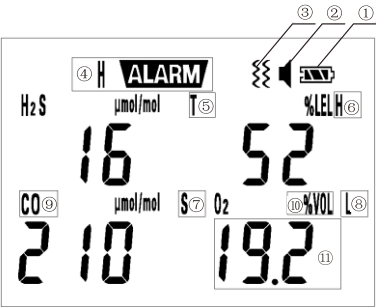
APPLICATION

Steelworks, petrochemical plant, oil industry, shipbuilding yard, sewage treatment plant, mine, power supply works, confined spaces etc.

APPEARANCE



1	Alarm indicator
2	Button
3	Sensor channel
4	Display screen
5	Buzzer
6	Calibration cap fasten hole
7	Hand strap
8	alligator clip
9	Label
10	Charging/communication port



①	Battery voltage indication
②	Sound indication
③	Vibration indication
④	Alarm indication
⑤	TWA alarm indication
⑥	High alarm indication
⑦	STEL alarm indication
⑧	Low alarm indication
⑨	Gas name
⑩	Unit
⑪	Gas concentration

SPECIFICATIONS

Measuring gas	O2	CO	H2S	Combustible
Measuring range	0-25%VOL	0-500ppm	0-100ppm	0-100%LEL
Sensor type	Electrochemical			Catalytic
Measuring type	Diffuse naturally	Working temperature	Toxic gases: -20℃ ~ 50℃	
Response time	T ₉₀ <30s		Combustible: -40℃ ~ 70℃	
Display	LCD screen	Housing	Rubber enclosure	
Audible	≥85dB at 1m	Standard accessories	Operation manual, calibration cap, charger, screwdriver, USB cable	
Alarm method	Visual, audible and vibrative signals			
Power supply	DC3.7V 1800mAh Lithium battery	Dimension & weight	120×68×30mm, about 220g	
Operating time	≥8h per charge (Charging time: 4-6h)	Ingress protection IP	IP66	
Event log	2000 events	Ex grade	II 2G Ex ia IIC T4 Ga or	
Humidity	<95%RH (no condensation)		II 2G Ex db ia IIC T4 Gb	

Note: For detecting other gases, please refer to our gas list.

Portable Gas Detectors

E4000 Portable Multi-gas Detector

E4000 is a united gas detector measuring maximum **four (4)** gases, to protect the disasters caused by the O2 deficiency, toxic gas poisoning and combustible gas explosion. It measures continuously maximum four gases of combustible gas, O2 and toxic gases, and displays their concentrations. Once the risk occurs, it also raises the alarm (visual, audible and vibrative). By adopting interchangeable smart sensor module, it can be made for detecting 2 gases, 3 gases and 4 gases.

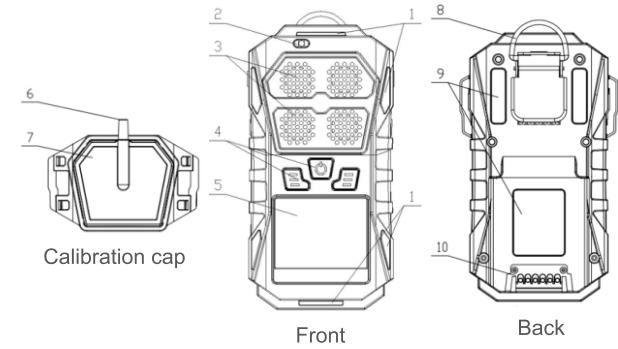
FEATURES

- Interchangeable smart sensor module
- Intrinsically safe
- MOS, catalytic, electrochemical, infrared, PID sensors selectable
- Built-in sampling pump (optional)
- Visual, audible and vibrative alarm
- Adjustable alarm levels and span calibration value
- STEL and TWA alarm for toxic gases
- Password management
- Real-time clock
- Self-test after power on
- Self-diagonstic and self-correction function
- GPS, GPRS and man down function (optional)

APPLICATION

Steelworks, petrochemical plant, oil industry, shipbuilding yard, sewage treatment plant, mine, power supply works, confined spaces etc.

APPEARANCE



No.	Name
1	Alarm light
2	Buzzer
3	Sensor
4	Button
5	LCD screen
6	Ventage
7	Calibration cap
8	Alligator
9	Label
10	Charging terminal

No.	Function
1	Calibration indication
2	Gas name
3	High/Low alarm
4	Sound
5	Battery voltage
6	Gas concentration
7	TWA(STEL)alarm
8	Gas unit

SPECIFICATIONS

Measuring gas	O2	CO	H2S	Combustible
Measuring range	0-25%VOL	0-500ppm	0-100ppm	0-100%LEL
Sensor type	Electrochemical			Catalytic
Measuring type	Diffuse naturally (pump sampling if pump is selected)	Working temperature	Toxic gases: -20℃ ~ 50℃	
Response time	T ₉₀ <30s		Combustible: -40℃ ~ 70℃	
Display	LCD screen	Housing	Rubber enclosure	
Audible	≥85dB at 1m	Standard accessories	Operation manual, calibration cap, charger, screwdriver, USB cable	
Alarm method	Visual, audible and vibrative signals			
Power supply	DC3.7V 2200mAh Lithium battery	Dimension	147×76×37mm	
Operating time	≥ 8h	Weight	about 350g	
Event log	100,000 events	Ingress protection IP	IP66	
Humidity	<95%RH (no condensation)	Ex grade	Ex ia IIC T4 Gb	

Note: For detecting other gases, please refer to our gas list.

Portable Multi-Gas Detector



E410: Diffusion type/ E410P: Pumped type

■ APPLICATIONS

E410 / E410P is mainly used in the fields of petroleum, petrochemical, chemical, food, pharmaceutical, emergency rescue, etc. It can achieve the simultaneous detection of 1-5 gases. The product supports Bluetooth (optional) and 4G (optional) wireless functions, and remote monitoring provides stronger security for on-site workers. Adopting 2 different sampling methods (natural diffusion and built-in pump suction), it can meet customers' different scenario requirements such as daily inspections and confined spaces.

■ TECHNICAL FEATURES

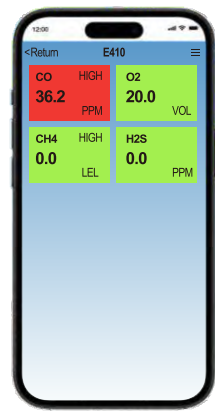
- **Compact and lightweight in size:**
The product is sturdy and durable, with a size only 4/5 of the size of the iPhone 15, suitable for one handed grip operation
- **One-click shortcut operation:**
Support one click mute, one click pump on/off (E410P), convenient operation effectively improves work efficiency
- **Multiple detection principles:**
Support various sensors such as infrared, electrochemical and PID, which can meet more than 10 gas detection needs
- **Long-life O2 sensor:**
Support O2 sensor with a service life of 5 years, effectively reducing the risk of leakage
- **Up to 5-gas detection:**
Supports dual-sensor (CO and H2S), which can meet customers' needs for simultaneously detecting five types of gases
- **Multiple wireless signal:**
Support Bluetooth / 4G networking mode, paired with a mobile app for convenient remote real-time monitoring
- **Large LCD screen display:**
Equipped with a 2.5-inch LCD screen with built-in high brightness backlight for more intuitive information display
- **Easy to operate and learn:**
4- button design and easy to learn interactive logic enable users to operate in a "foolproof" manner beyond the user manual
- **Long endurance working time:**
Large capacity lithium batteries meet the requirements of long endurance work, with E410 endurance time ≥ 14h and E410P ≥ 12h
- **Advanced temperature compensation algorithm:**
When the temperature of the sensor changes, it can automatically compensate and improve the accuracy and reliability of gas detection



E410
Diffusion type



E410P
Pumped type



APP
Demonstration

Portable Multi-Gas Detector



■ APPLICATION SCENARIOS



Petroleum and Petrochemicals



Emergency rescue



Offshore platform



Pharmaceutical
and Chemical Industry



Industrial waste gas



Incineration power generation

■ PARAMETERS

Sampling method	Diffusion type E410 / Pumped type E410P	Detection principle	IR,Electrochemical, PID.,etc.
Sensor channel	≤4	Working time	E410≥14h, E410P≥12h
Ex grade	Ex ib IIC T4 Gb/Ex ib IIIC T130°C Db	IP calss	E410 IP67, E410P IP66
Dimension	122.5 (H) x 68 (W) x 30.5 (D) mm (Without clip)	Weight	E410 204g, E410P 228g
Indication method	· LCD displays real-time data and detector status · Visual / audible / vibrative alarming signals for gas leakage, low battery voltage, over range, sensor fault etc.		
Ambient condition	· Temperature: -20℃ ~ 55℃ · Humidity: < 95%RH (No condensation) · Air pressure: 90kPa~110kPa		

Portable Gas Detectors

E6000 Portable 6-gas Detector

E6000 is a multi-gas detector up to measure the concentrations of 6 gases simultaneously. It adopts interchangeable smart sensor modules, easy to replace the sensors and maintenance. It can combine various gases: O2, toxic gases, combustible gases., convenient for the workers to monitor the gas environment in working site. Send alarms when exceeding gas concentration is detected, protesting the workers from danger caused by O2 deficiency, toxicity and explosion.

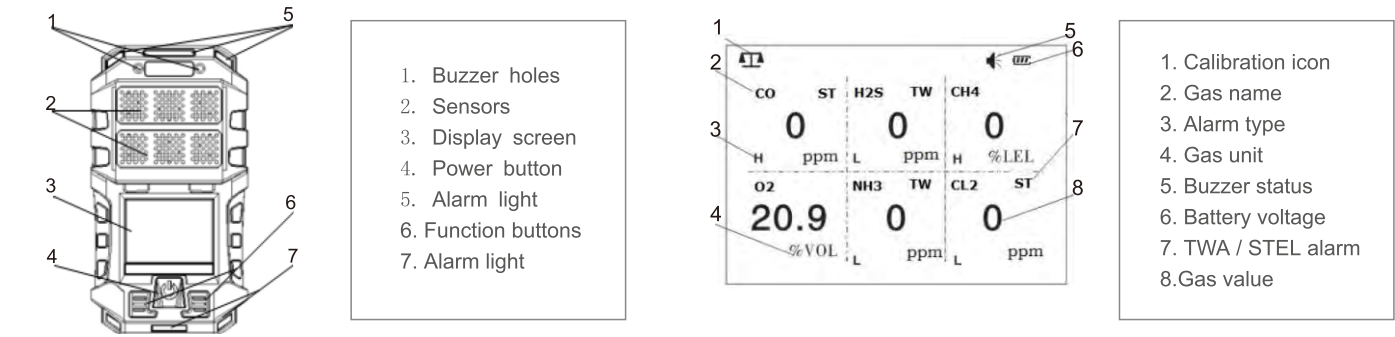
FEATURES

- Interchangeable smart sensor module
- Intrinsically safe
- Built-in sampling pump (optional)
- Visual, audible and vibration alarm
- Adjustable alarm levels and span calibration values
- Password management
- Self-test after power on
- Self-diagnostic and self-correction function
- Real-time clock

APPLICATION

Oil and gas industries, Power plants, Petrochemical plant, Steelworks, Marine, Sewage treatment plant, Confined spaces, Labs etc.

APPEARANCE



SPECIFICATIONS

Measuring gas	Flammable gas, toxic gas, O2	Alarm method	Visual, audible and vibration signals
Measuring range	Please refer to our gas list	Audible	≥80dB @ 1m
Sensor type	Catalytic sensor, electrochemical sensor, NDIR sensor, PID sensor	Response type	DC3.6V 6600mAh Lithium-ion battery
		Event log	100,000 events
Sensor life	Catalytic sensor: 3 years	Working temperature	Toxic gases, O2: -20℃~50℃
	Electrochemical: 2 years (1 year for O2 sensor)		Combustible gases:-40℃~70℃
	NDIR sensor: 5 years	Humidity	<95%R.H.(no condensation)
Measuring type	Diffusion naturally or pump sampling	Standard accessories	Operation manual, calibration cap, charger, USB cable, software, suitcase
Response type	Catalytic sensor: T90≤30s	Housing	Rubber enclosure
	Electrochemical: T90≤60s	Dimension & Weight	168mm*91mm*45mm About 500g
	NDIR sensor: T90≤10s	Ingress protection	IP67
	PID sensor: T90≤10s	Ex grade	Ex ia IIC T4 Gb

Accessories

PP01 Sampling Pump

This pump is used to collect gas from the confined space onto the gas detector for analyzing.

FEATURES

- Good shock resistance
- Beautiful appearance, ergonomic design
- Easy to replace the filter device after failure
- Convenient installation and good sealing
- Indication of blocking, device status and under-pressure
- Intrinsically safe instrument

APPLICATION

To be used together with our gas detectors as an accessory.

SPECIFICATIONS

Working voltage	DC3V±30% (two AA 1.5V alkaline batteries)	Housing material	ABS
Working current	<500mA	Dimensions	42mm×27mm×160mm
Sampling flow rate	≥320ml/min	Weight	About 140g (including battery, device only)
Working temperature	-10℃~60℃	Ex grade	EX ia II B T4 Ga
Humidity	≤95%RH	Ingress protection	IP54



Sampling Probe & Tube

The sampling probe and tube are used together with the pumped gas detector to collect gas from the confined space onto the gas detector for analyzing.

FEATURES

- Flexible and extendable
- Multiple filtering against water and dust
- Comfortable handle

APPLICATION

An accessory for Hanwei E4000 / E6000 multi-gas detector with built-in pump

SPECIFICATIONS

Probe length	Maximum 1 meter
Probe material	Stainless steel
Tube length	1.7 meter
Tube material	PVC
Tube size	innerφ2.5, outer φ4



Fixed gas detectors - 24 hour monitoring

TC100N Fixed Gas Detector

TC100N is a fixed gas detector installed in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas. With ATEX approval, It is suitable for explosive environment use. It communicates with the control panel through 4-20mA analog output or RS485 digital signal.

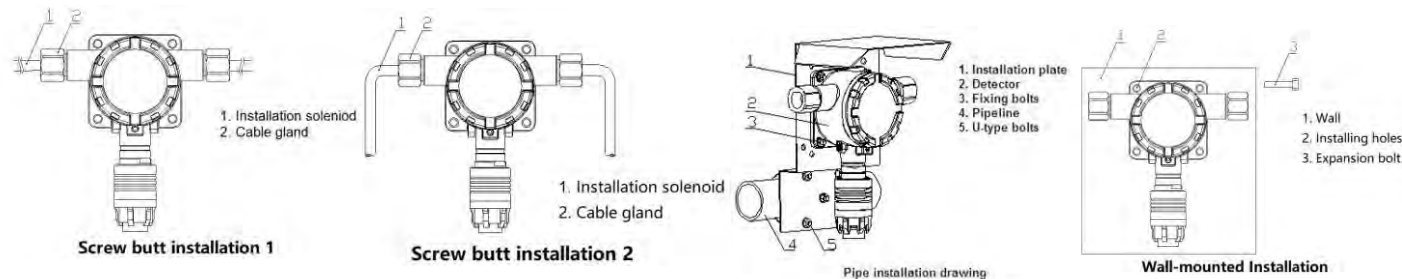
FEATURES

- ATEX approved
- 4-20mA analog or RS485 digital output
- 2 relay output for 4-20mA type
- Sensor module design, easy for replacement

APPLICATION

Steelworks, Petrochemical plants, Shipyards, Water treatment plants, Mines, Power plants, Food industry etc.

APPEARANCE



SPECIFICATIONS

Measuring gas	O2	CO	H2S	Combustible
Measuring range	0-25%VOL	0-500ppm	0-100ppm	0-100%LEL
Resolution	0.1%VOL	1ppm	1ppm	1%LEL
Sensor type	Electrochemical			Catalytic
Sensor lifespan	1 year	2 years	2 years	2 years
Measuring type	Diffuse naturally		Working temperature	Toxic gas: -20℃ ~ +50℃
Response time	Toxic gas and O2: T90≤60s			Combustible: -40℃ ~ +70℃
	Combustible: T90≤30s		Rated voltage	DC24V±25%
Signal output	4-20mA / RS485		Consumption	<2W
Relay output	2 programmable relays for 4~20mA type		Ingress protection	IP65
Cable / distance	4-20mA type: 1.5 MM2, 3 wire, shielded,1000m (maximum) RS485 type: 1.5 MM2, 4 wire, shielded, 1000m (maximum)		Housing material	Chamber: Aluminum alloy Sensor cover: Stainless steel
Cable entry	G1/2"		Dimension	196×186×68.5mm
Mounting type	Wall mounted		Weight	about 1.2kg
Humidity	≤95%RH (no condensation)		Approval	 II 2G Ex db IIC T6 Gb

Fixed gas detectors - 24 hour monitoring

CXE Fixed Gas Detector

CXE combustible gas detector is mainly used in small restaurants, shopping malls, underground integrated pipe corridors and other environments where gas may leak. When the gas concentration in the environment exceeds the preset alarming value, the indicator will give an alarm. At the same time, it can output signals and drive valves and other equipment to protect the user's personal and property safety.

FEATURES

- Compact design
- Stable transmission
- Low power consumption
- Cost-effective.

APPLICATION

Applicable to 9 small places such as industrial and commercial small restaurants, snack bars, barber shops, bathrooms, small hospitals, shopping malls etc.

SPECIFICATIONS

Sensor type	Catalytic sensor	Ingress protection	IP66
Power	DC24V±6V	Cable entry	NPT1/2
Electrical output	RS485 Power BUS	Dimensions	95mm x 106mm x 76.5mm
Operating temperature	-40~70℃	Ex grade	Ex d IIC T6 Gb / Ex tD A21 IP66 T80℃
Closure material	Aluminum alloy	State indication	Yellow-Fault, Red-Alarm, Green-Power
Relay capacity	3A@DC30V or 3A@AC250V	Extendable functions	Wireless: GPRS / NB-IoT Temperature and humidity collection function

CXF Standalone Flammable Gas Detector

CXF is a fixed flammable gas detector for industrial and commercial purposes, which is a stand-alone detector. The detector is mainly used in small restaurants, shopping malls, underground integrated pipe corridors and other environments where gas may leak. When the gas concentration in the environment exceeds the set concentration, it will alarm through the indicator light and buzzer, and drive the solenoid valve at the same time, fans and other equipment to protect the personal and property safety of users.

FEATURES

- Compact structure, easy to install
- Low cost
- Explosive proof
- Convenient operation and maintenance
- Flexible wiring
- Stable and reliable

APPLICATION

Mainly used in small restaurants, shopping malls, underground integrated pipe corridors and other environments where flammable gas may leak.

SPECIFICATIONS

Sensor type	Catalytic sensor	Working temp.	-10-55℃	Working method	Continuous monitoring
Sampling method	Diffuse naturally	Humidity	≤95%RH	Operation	By IR remote controller
Application area	Indoor environment	Ambient pressure	88KPa to 106KPa	Ex grade	Ex d IIC T6 Gb
Power supply	AC220V±44V	Cable entry	NPT3/4	IP class	IP66
Consumption	≤3W	Output	2 dry relays (3A@DC30V)	Housing material	Aluminium alloy
Alarm error	±3%LEL	Detection range	0-100%LEL	Dimension	168.4×193.4×82.1mm
Response time	T90≤20s (CH4)	Preset low alarm	20%LEL	Weight	About 1.2kg
Indication	LED indicators	Preset high alarm	50%LEL	Sensor lifespan	3 years
Display	LCD screen	Resolution	1%LEL		



Fixed gas detectors - 24 hour monitoring

GTQ-BS01 & GTQ-BS02 fixed gas detector is designed for industrial and commercial use. By adopting high-performance gas sensor and MCU technology, combined with sophisticated SMT manufacturing process, this detector has good repeatability, high accuracy and long lifespan.

ADVANTAGES



IP67



Free



Anti-reverse



Fast response



Color backlight



Low consumption



High accuracy



Strong scalability

GTQ-BS01 Fixed Gas Detector

FEATURES

- High measurement accuracy, stable performance and long service life
- 4-20mA analog output or PBUS digital output
- Non-contact operation by infrared remote control
- Smart sensor module, free of calibration, easy to maintain

APPLICATION

This detector is widely used in petroleum, petrochemical, chemical production plant areas, petroleum and natural gas gathering and transportation, refueling/gas stations, municipal administration, metallurgy, electric power and other places where flammable gas exists.

SPECIFICATIONS

Measuring gas	Combustible gas	Operating temperature	-40~70℃
Sample method	Diffuse naturally	Humidity	≤95%RH (no condensation)
Power	DC24V±6V, ≤2.5W	Ambient pressure	86KPa~106KPa
Response time	T90≤20s	Ex grade	Ex d IIC T6 Gb / Ex tD A21 IP67 T80℃
Electrical output	4-20mA or PBUS	Ingress protection	IP67
Relays	1 relay (free contact)	Enclosure material	Aluminium alloy
Operation by	IR remote control	Cable entry	NPT3/4
State indication	Yellow--Fault, Red--Alarm, Green--Power	Dimensions & Weight	130mm x 154mm x 83mm about 1.2kg



GTQ-BS02 Fixed Gas Detector

FEATURES

- High measurement accuracy, stable performance and long service life
 - 2 relay outputs
 - High-performance LED screen display
- 4-20mA analog output or FBUS digital output
 - Non-contact operation by infrared remote control
 - Smart sensor module, free of calibration, easy to maintain

APPLICATION

This detector is widely used in gas detection in petroleum and petrochemical industries, refineries, chemical plants, metallurgical industries, power industries, and other places that may produce harmful gases to the human body.

SPECIFICATIONS

Measuring gas	Combustible gas, toxic gas	Operating temperature	LEL: -40~70℃ Toxic: -20~50℃
Sample method	Diffuse naturally	Humidity	≤95%RH (no condensation)
Power	DC24V±6V, ≤2.5W	Ambient pressure	86KPa~106KPa
Response time	LEL: T90≤15s Toxic gas: T90≤30s	Ex grade	II 2G Ex db IIC T6/T5 Gb II 2D Ex tb IIIC T80℃/T95℃ Db
Electrical output	4-20mA or PBUS	Ingress protection	IP66/67
Relays	2 relay (free contact)	Enclosure material	Aluminium alloy
Operation by	IR remote control	Cable entry	NPT3/4
State indication	Yellow--Fault, Red--Alarm, Green--Power	Dimensions & Weight	130mm x 154mm x 83mm about 1.2kg



Fixed gas detectors - 24 hour monitoring

BS03 Fixed Gas Detector

BS03 is a fixed gas detector installed in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas. It shows not only the concentration of gas but also diagnostic result of the unit itself through the LED screen and LED lights and can be connected to the control panel with a standard 4-20mA analog output.

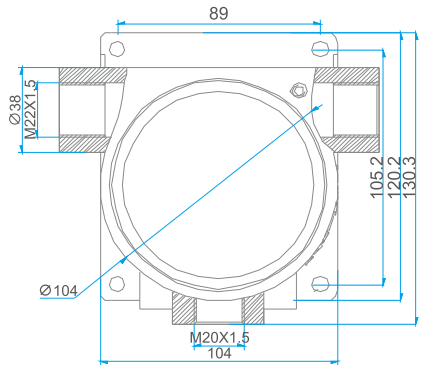
FEATURES

- BS03 measures the concentration of the flammable gas, toxic gas, oxygen and VOCs
- Explosion proof structure.
- Water and dust proof design
- Segment display to indicate readings in 4 digits.
- 3 LED lights to indicate Fault, Low alarm and High alarm
- IR remote control for setting and calibration.

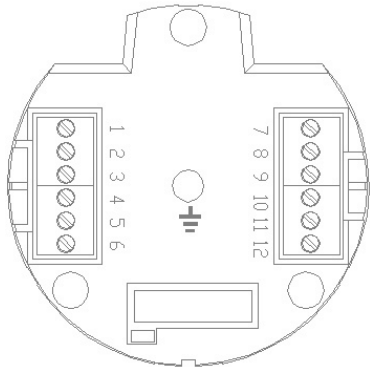
APPLICATION

Steelworks, Petrochemical plants, Shipyards, Water treatment plants, Mines, Power plants, Food industry etc.

DIMENSION DRAWING



WIRING TERMINAL DIAGRAM



NO.	Mark	Function	Spec
1	L-Alarm	Low alarm output	Switching value
2	L-Alarm	Low alarm output	
3	24V	Power input	DC24V±25%
4	GND	Power input	
5	Iout	Current ouput	4 ~ 20mA
6	NC	—	—
7	H-Alarm	High alarm output	Switching value
8	H-Alarm	High alarm output	
9	24V	Power input	DC24V±25%
10	GND	Power input	
11	Iout	Current output	4 ~ 20mA
12	NC	—	—

SPECIFICATIONS

Measuring gas	Combustible	Catalytic sensor / NDIR sensor		
	Toxic gas & O2	Electrochemical sensor		
	CO2 gas	NDIR sensor		
	VOCs	PID sensor		
Measuring range	Refer to our gas list		Cable / distance	1.5 MM2, 3 wire, shielded,1000m (maximum)
Measuring accuracy	±5%F.S.		Conduit connection	G3/4"
Sensor life	Catalytic sensor: 3 years		Mounting type	Wall mounted
	Electrochemical: 2 years (1 year for O2 sensor)		Working temperature	Toxic gas: -20°C~-+50°C
	NDIR sensor: 5 years			Combustible: -40°C~-+70°C
	PID sensor: 0.6 to 1 year		Working humidity	≤95%RH (no condensation)
Measuring type	Diffuse naturally		Operation voltage	DC24V±25%
Response time	Catalytic sensor: T90≤30s		Consumption	<2W
	Electrochemical: T90≤60s		Ingress Protection	IP65
	NDIR sensor: T90≤10s		Housing material	Chamber: Aluminum alloy
	PID sensor: T90≤10s			Sensor cover: Stainless steel
Signal output	4-20mA		Dimension and weight	162 x 208 x 103.5mm, about 2.1kg
Alarm output signal	2 programmable relays		Approval	 II 2G Ex db IIC T6 Gb

Fixed gas detectors - 24 hour monitoring

GTQ-BS03 Fixed Gas Detector

GTQ-BS03 fixed gas detector is designed for industrial and commercial use. By adopting high-performance gas sensor and MCU technology, combined with sophisticated SMT manufacturing process, this detector has good repeatability, high accuracy and long lifespan.

FEATURES

- 4-20mA analog output or RS485 Power BUS digital output
- 3 relay outputs (2 free contact, 1 active relay)
- High measurement accuracy, stable performance and long service life
- High-performance LCD screen display
- Non-contact operation by infrared remote control
- Smart sensor module, free of calibration, easy to maintain

APPLICATION

This detector is widely used in gas detection in petroleum and petrochemical industries, refineries, chemical plants, metallurgical industries, power industries, and other places that may produce harmful gases to the human body.

ADVANTAGES



IP67



Free



Anti-reverse



Fast response



Color backlight



Low consumption

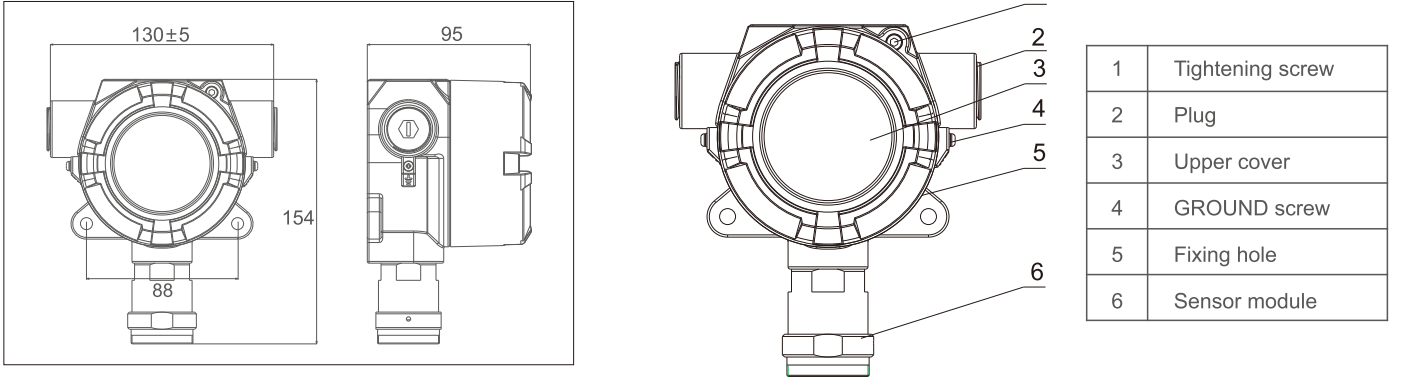


High accuracy



Strong scalability

DIMENSION DRAWING



SPECIFICATIONS

Measuring gas	Combustible gas, toxic gas	Operating temperature	LEL: -40~70℃ Toxic: -20~50℃
Sample method	Diffuse naturally	Humidity	≤95%RH (no condensation)
Power	DC24V±6V, ≤2.5W	Ambient pressure	86KPa~106KPa
Response time	LEL: T90≤15s Toxic gas: T90≤30s	Ex grade	II 2G Ex db IIC T6/T5 Gb II 2D Ex tb IIIC T80℃/T95℃ Db
Electrical output	4-20mA or RS485 Power BUS	Ingress protection	IP66/67
Relays	2 free contact, 1 active relay	Enclosure material	Aluminum alloy / stainless steel
Operation by	IR remote control	Cable entry	NPT3/4 (adapter for other size)
State indication	Yellow--Fault, Red--Alarm, Green--Power	Dimensions & weight	130*154*95mm, about 1.2kg/4.5kg

Fixed gas detectors - 24 hour monitoring

GTQ-WD2200 Fixed Gas Detector

GTQ-WD2200 fixed gas detector is designed for industrial use. By adopting high-performance gas sensor and MCU technology, combined with sophisticated SMT manufacturing process, this detector has good repeatability, high accuracy and long lifespan.

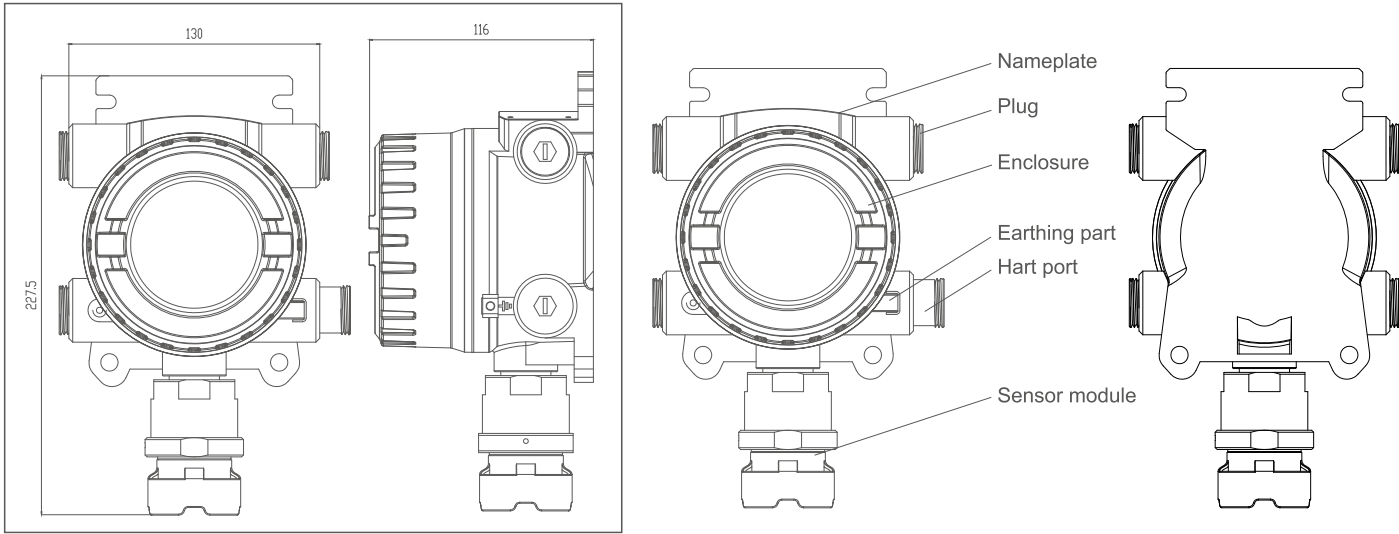
FEATURES

- High measurement accuracy, stable performance and long service life
- 4-20mA analog signal output, RS485-RTU digital upload
- HART output, support Hart handheld communicator for settings
- 3 relay outputs for 1st alarm, 2nd alarm and fault
- High-performance LCD screen display
- Non-contact operation by magnetic bar / infrared remote control
- Smart sensor module, free of calibration, easy to maintain
- Bluetooth communication
- Remote upgrade function (optional)

APPLICATION

The detector is widely used in oil refineries and chemical plants in the petroleum and petrochemical industries, as well as industries where flammable gases may cause explosions such as metallurgy, electric power, gas, catering, and aquaculture.

DIMENSION DRAWING



SPECIFICATIONS

Measuring gas	Combustible gas, toxic gas	Display error rate	±5%F.S.
Sample method	Diffuse naturally	Operating temperature	LEL: -40 ~ 70℃ Toxic: -20 ~ 50℃
Power	DC24V±6V, ≤3.6W	Humidity	≤95%RH (no condensation)
Response time	LEL: T90≤15s Toxic gas: T90≤30s	Ambient pressure	86KPa~106KPa
Electrical output	4-20mA, Hart, RS485-RTU	Ex grade	II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T80℃ Db
Relays	For 1 st alarm, 2 nd alarm, Fault SPST contacts rated 3A 30Vdc or 3A 250Vac	Ingress protection	IP66/67
Operation by	Magnetic bar or IR remote control	Enclosure material	Aluminum alloy
State indication	Yellow--Fault, Red--Alarm, Green--Power	Cable entry	NPT3/4 (adapter for other size)
		Dimensions & weight	130mm x 209mm x 116mm about 2.0kg

Fixed gas detectors - 24 hour monitoring

GTQ-WD6200 Fixed Gas Detector

GTQ-WD6200 fixed gas detector is designed for industrial use. By adopting high-performance gas sensor and MCU technology, combined with sophisticated SMT manufacturing process, this detector has good repeatability, high accuracy and long lifespan.

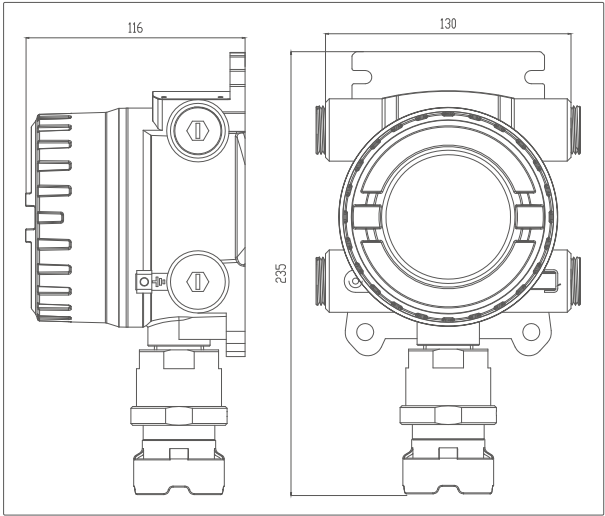
FEATURES

- High measurement accuracy, stable performance and long service life
- 4-20mA analog signal output, RS485-RTU digital upload
- HART output, support Hart handheld communicator for settings
- 3 relay outputs for 1st alarm, 2nd alarm and fault
- High-performance LCD screen display
- Non-contact operation by magnetic bar / infrared remote control
- Smart sensor module, free of calibration, easy to maintain
- Bluetooth communication
- Remote upgrade function (optional)

APPLICATION

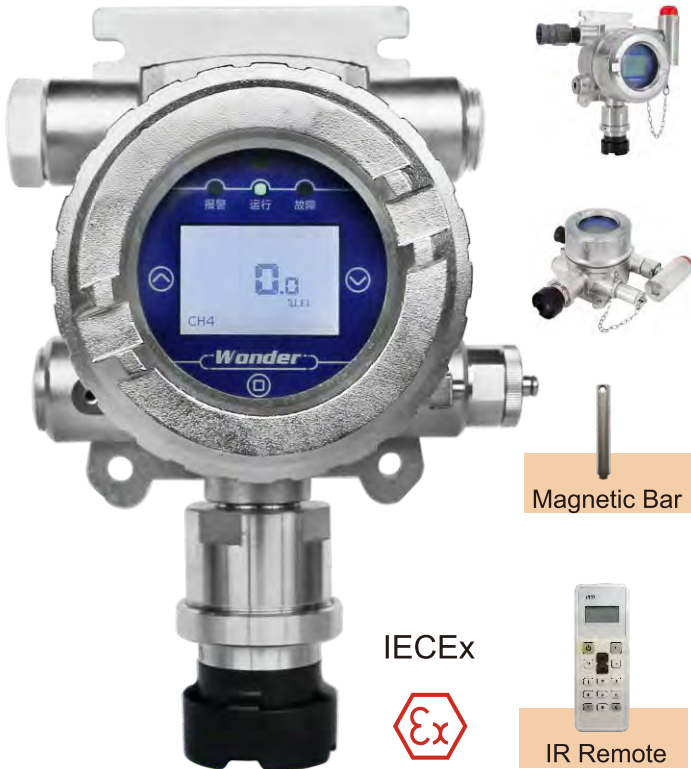
The detector is widely used in oil refineries and chemical plants in the petroleum and petrochemical industries, as well as industries where flammable gases may cause explosions such as metallurgy, electric power, gas, catering, and aquaculture.

DIMENSION DRAWING



SPECIFICATIONS

Measuring gas	Combustible gas, toxic gas	Display error rate	±5%F.S.
Sample method	Diffuse naturally	Operating temperature	LEL: -40 ~ 70°C Toxic: -20 ~ 50°C
Power	DC24V±6V, ≤3.6W	Humidity	≤95%RH (no condensation)
Response time	LEL: T90≤15s Toxic gas: T90≤30s	Ambient pressure	86KPa~106KPa
Electrical output	4-20mA, Hart, RS485-RTU	Ex grade	II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T80°C Db
Relays	For 1 st alarm, 2 nd alarm, Fault SPST contacts rated 3A 30Vdc or 3A 250Vac	Ingress protection	IP66/67
		Enclosure material	Stainless steel
Operation by	Magnetic bar or IR remote control	Cable entry	NPT3/4 (adapter for other size)
State indication	Yellow--Fault, Red--Alarm, Green--Power	Dimensions & weight	130mm x 209mm x 116mm about 5.5kg



Fixed gas detectors - 24 hour monitoring

GTYQ-WD6200IR II Fixed Gas Detector

GTYQ-WD6200IRII Fixed Gas Detector is designed for detecting flammable gas. It features a double beam IR sensor that effectively reduce the zero drift to the minimum, and extends the maintenance intervals. The detector enjoys better gas selectivity, stability, longer life span, and wider application over detector with regular IR sensor. It shows not only the concentration of gas but also diagnostic result of the unit itself through the LCD screen and can be connected to the control panel with a standard 4-20mA analog communication.

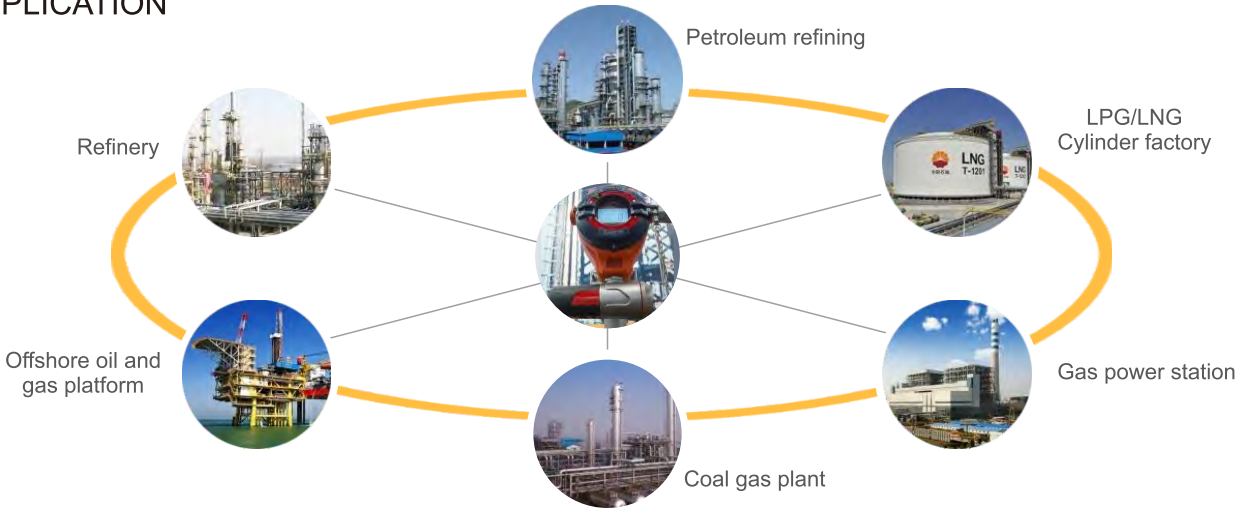
FEATURES

- Double beam infrared technology, good stability
- High accuracy, longer lifespan
- 4-20mA / Hart signal output
- 2 relay output for gas leak alarm and fault alert
- LCD display, easy to read
- Calibration indication and overdue indication
- Magnetic bar and IR remote for setting, easy operation
- Special installation accessories, easy installation
- Smart sensor module design, easy maintenance
- Sensor with heating function, excellent moisture and heat resistance
- Optional Bluetooth communications function
- Support remote upgrade

APPLICATION

Petroleum and petrochemical industry refineries, LPG/LNG tanking plants, gas energy industry, gas plants, offshore oil/gas platforms, etc.

MAIN APPLICATION



SPECIFICATIONS

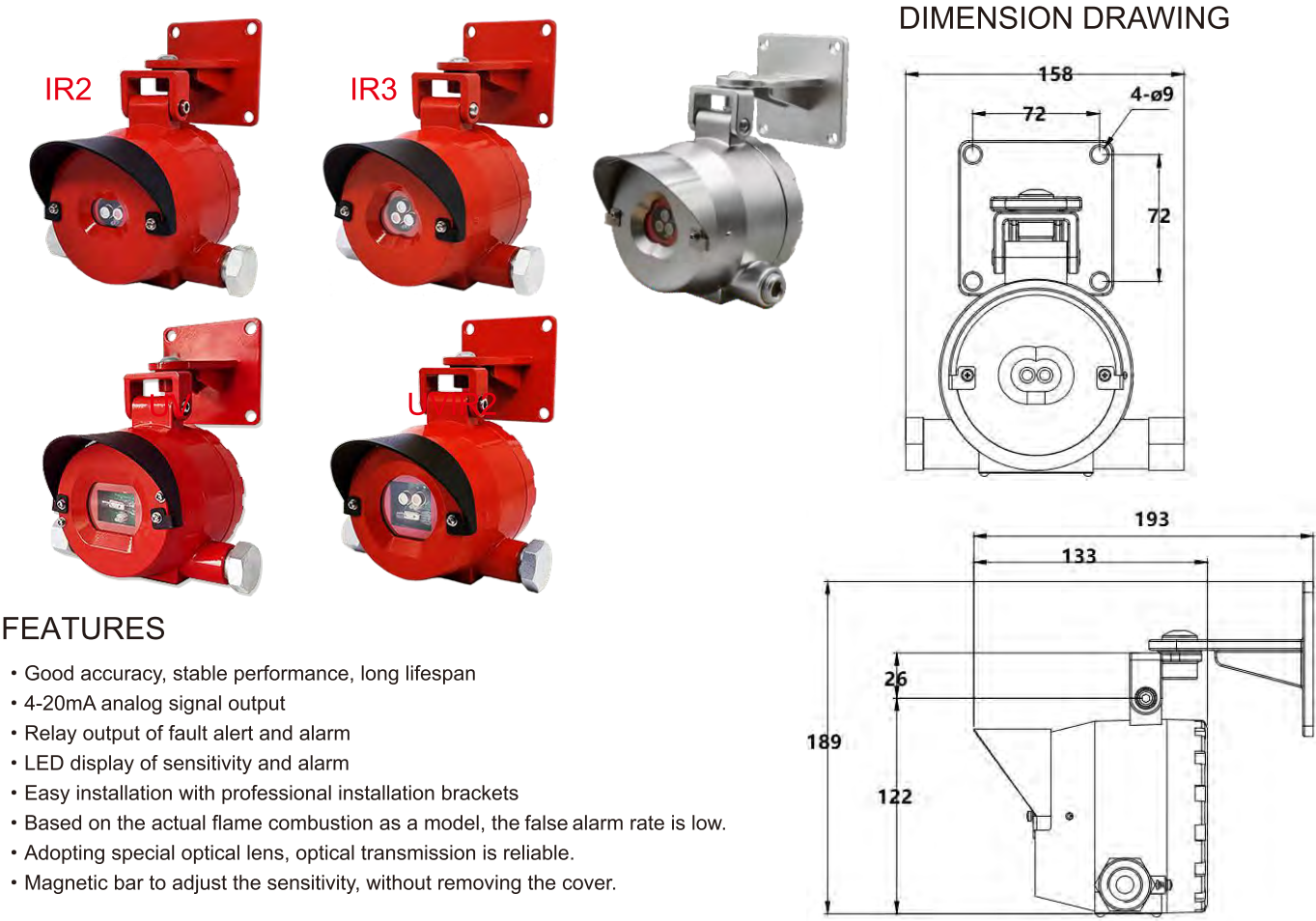
Measuring gas	CH ₄ , C ₃ H ₈ , C ₄ H ₁₀	Working humidity	≤95%RH (no condensation)	Consumption	≤6.5W
Measuring range	0-100%LEL	Alarm output signal	2 programmable relays	Ingress protection	IP66 / IP67
Measuring accuracy	±3%LEL	Cable / distance	1.5 MM2, 3 wire, shielded, 1000m (maximum)	Explosive proof	Ex d IIC T6 Gb
Sensor life	≥5 years			Housing material	316L
Measuring type	Diffuse naturally	Conduit connection	NPT 3/4	Dimension	243*158*127mm
Response time	≤30s	Working temperature	-40°C ~ +70°C	Weight	about 5.2KG
Signal output	4-20mA (Hart)	Operation voltage	DC24V±25%		



Flame detectors

FD10 Series of Flame Detector

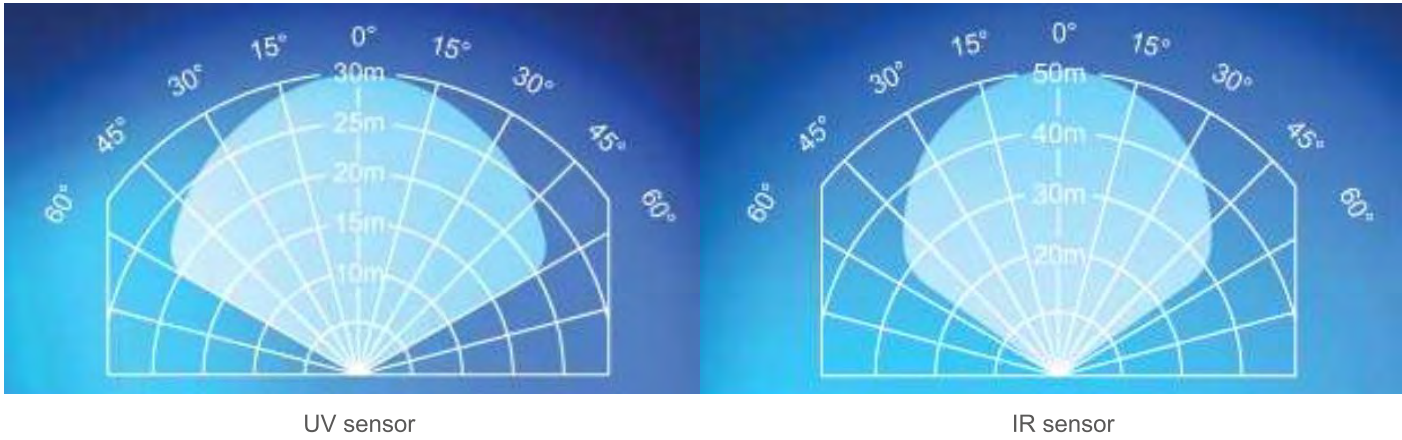
FD10 series of flame detectors are newly developed products for fire and gas detection systems by our company. By adopting high-performance sensors and MCU technology, combining with sophisticated SMT process, the detectors are with advantages of good repeatability, anti-interference, long lifespan and easy operation. With 4-20mA analog signal output and 2 passive relay output, they are convenient for customers to dock with multiple manufacturers' control panels.



FEATURES

- Good accuracy, stable performance, long lifespan
- 4-20mA analog signal output
- Relay output of fault alert and alarm
- LED display of sensitivity and alarm
- Easy installation with professional installation brackets
- Based on the actual flame combustion as a model, the false alarm rate is low.
- Adopting special optical lens, optical transmission is reliable.
- Magnetic bar to adjust the sensitivity, without removing the cover.

Drawing illustration: Field of view



APPLICATION

Aerospace industry, hangars, aircraft repair shops, chemical industry, highway tunnels, ammunition and explosives warehouses, paint factories, petrochemical enterprises, pharmaceutical enterprises, power stations, printing enterprises, flammable materials and other carbonaceous materials Other occasions.

Flame detectors

SPECIFICATIONS

Model	FD10-UV	FD10-IR2	FD10-IR3	FD10-UVIR2
Principle	UV sensor	Double IR sensor	Triple IR sensor	UV+double IR sensor
Spectral response	185~260nm	4.3μm, 5.0μm	3.8μm, 4.3μm, 5.0μm	185~260nm, 4.3μm, 5.0μm
Display method	LED indicators	LED indicators	LED indicators	LED indicators
Ingress protection	IP66	IP66	IP66	IP66
Rated voltage	DC24V±6V	DC24V±6V	DC24V±6V	DC24V±6V
Input power	≤30mA (DC24V)	≤30mA (DC24V)	≤30mA (DC24V)	≤30mA (DC24V)
Response time	≤10s	≤20s	≤10s	≤5s
Detection distance	30m	50m	50m	50m
Field of view	120°	100°	100°	100°(IR) / 120° (UV)
Working temp.	-20~60℃	-25~70℃	-25~70℃	-20~60℃
Working humidity	≤95%RH (no condensation)			
Status indication	Green LED --- normal operation, Red LED--- indicate an alarm			
Signal output	4-20mA analog output; Dry relays for fault and alarm(optional Hart for FD10-IR3)			
Operation	Magnetic bar, adjust sensitivity (4 levels)			
Explosive proof	CNEx, Ex d IIC T6 Gb / Ex tD A21			
Installation method	Wall mounted or lifting or holding-pipe with mounting kit			
Housing material	Aluminum alloy or stainless steel			
Dimension & weight	1.5kg (aluminum alloy) / 4.5kg (stainless steel)			
Cable entry	NPT1/2			

• **Note:** Detection distance is based on 0.3m×0.3m N-heptane fire

INFD-01 Test Lamp

INFD-01 test lamp is designed for flame detector testing. It is convenient for flame detector testing in areas where open flame is not available. As different infrared flame detector manufacturer has different detection frequency, so this device is suitable for testing 0-10Hz infrared flame detectors.

FEATURES

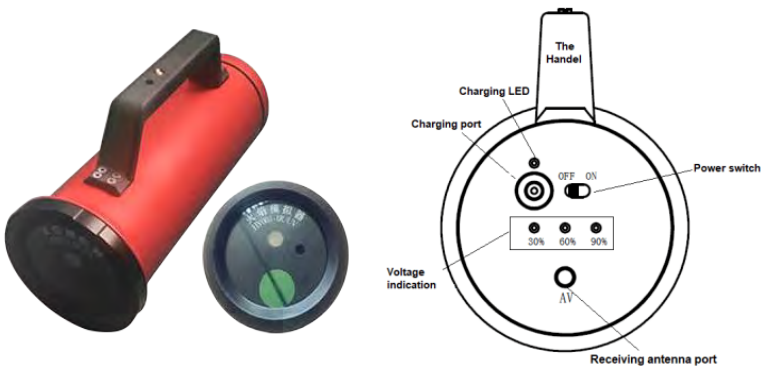
- Simple operation
- Suitable both UV and IR type of flame detectors

APPLICATION

Provide a simulated fire source similar to the flame signal, which can replace the open flame to test the function and performance of various flame detectors in the fire field test.

SPECIFICATIONS

Emission spectrum	IR: 2.7-11um		UV: 180-300nm
Use distance	IR: ≤ 50CM		UV: ≤ 300CM
Emission angle	≤30°	Working humidity	0~95%RH (no condensation)
Charging voltage	DC24V	Ingress protection	IP65
Consumption	<30W	Housing material	Cast aluminium
Working time	≤3h (continuous emission)	Dimension	190mm*70mm*105mm
Working temperature	-10℃~+55℃	Weight	About 1.2KG



Gas alarm control panels

KB2160 Gas Alarm Control Panel

KB2160 gas alarm control panel is designed for industrial use with 4~20mA communication signal to integrate all the gas detectors in different sites, to monitor the gas concentration continuously and conveniently.

FEATURES

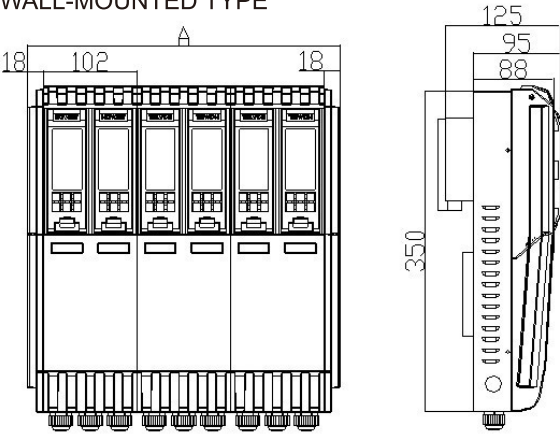
- 4-20mA signal connection
- Audible and visual alarm
- LCD display
- 3 passive relay output for each channel
- Audible and visual alarm

APPLICATION

Hospital, School, Parking lot, Hotel kitchen etc. commercial places, LNG/LPG cylinder factory, Gas station, Cooling plant, Water treatment, Refinery, Metallurgy, Chemical plant, Brewery, Pharmacy, etc. Industries.

DIMENSION & INSTALLATION (mm)

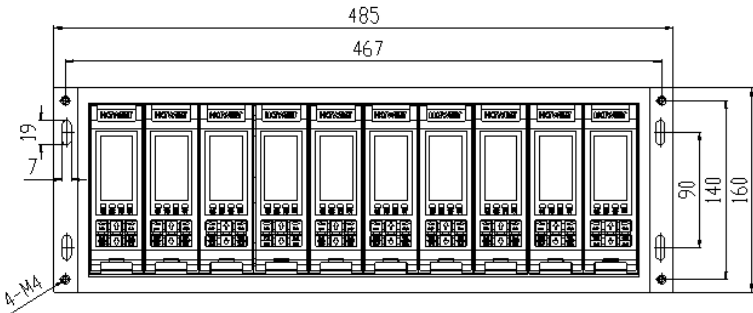
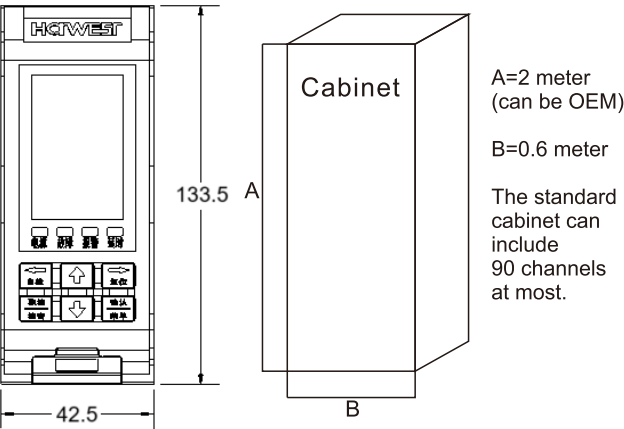
WALL-MOUNTED TYPE



Channel quantity	1-2	3-4	5-6	7-8
Size of "A"	138mm	240mm	342mm	444mm



CABINET TYPE



SPECIFICATIONS

Power	AC220V±15%, 50Hz±1%	Relay	3 passive replay output for each channel
Consumption	≤10W	Relay capacitance	2A/AC220V
Voltage output	DC24V±25%	Cable required	RVVP3×1.5mm2, RVVP4×1.5mm ²
Working temperature	-10℃~+50℃	Transmission distance	≤1000m
Working humidity	≤95%RH (no condensation)	Installation type	Wall mounted, Cabinet type
Alarm method	Visual and audible	Detector quantity	Wall mounted type: 10 channels maximum
Audible alarm	65dB~115dB @1m		Cabinet type: 80 channels maximum
Ingress protection	IP54	Approval	CE

Gas alarm control panels

KB180 Gas Alarm Control Panel

KB180 gas alarm control panel is used to monitor the fixed gas detectors (4-20mA type) and can give audible & visual alarming signals to inform the end user of the on-site hazards. At most, it can connect 8pcs of 4-20mA gas detectors. When the measured gas concentration reaches or exceeds the set value, the panel will send out sound and light alarm signals, output relevant control signals, and start the corresponding control devices, thereby avoiding the occurrence of major accidents.



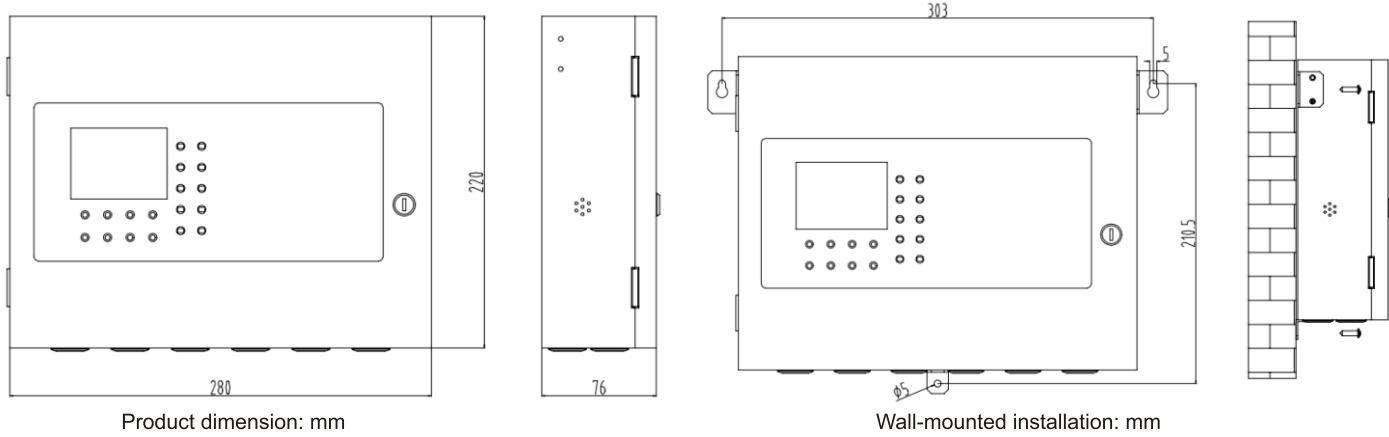
FEATURES

- Compact and light weight design
- LCD man-machine interface, status indication is clearly visible
- Audible and visual alarm signals
- Programmable channel design for different gas
- Backup battery included to ensure continuous working
- Suitable for safe area use

APPLICATION

For industrial and commercial gas monitoring

DIMENSION DRAWING



SPECIFICATIONS

Power supply	Main: AC187V~AC253V, 50Hz±5Hz Backup: DC20V~DC27V	Pulse valve output	DC24V solenoid valve (DN50 or smaller)
Consumption	≤10W (gas detectors excluded)	Working temp.	0℃~40℃
Output voltage	DC20V~DC28V	Relative humidity	≤95%RH
Detector quantity	8pcs of 4-20mA detectors	Display & indication	LCD screen and indicators
Data upload	RS485 (supports Modbus)	Alarm method	Audible (65dB to 100dB @1m), visual
Relay output	2 dry relays (Max voltage is AC220V)	Dimension	280mm×220mm×76mm
Relay capacity	≤3A	Weight	About 4.5kg

Gas alarm control panels

KB100 Control Panel

KB100 is our new generation of small-point gas alarm control panel. It can connect up to 4 digital gas detectors. The man-machine interface adopts LCD and keyboard interactive operation, which makes the display clear and operation simple.

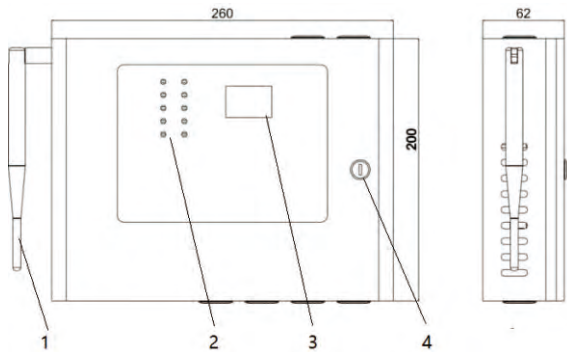
FEATURES

- Compact and economical control panel
- LCD man-machine interface, status indication is clearly visible
- New generation RS485 Bus signal communications
- Data upload function

APPLICATION

For industrial gas monitoring use with RS485 Power Bus.

STRUCTURE AND DIMENSIONS

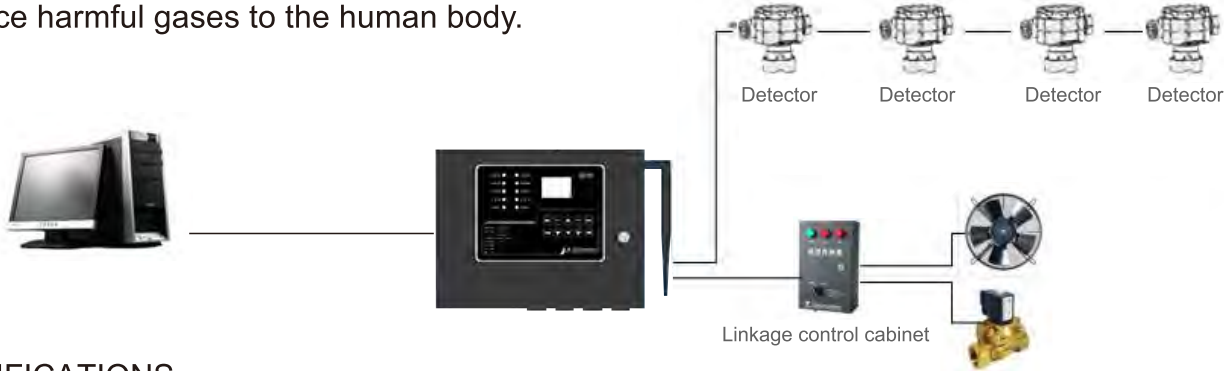


1.	Antenna (optional)	3.	LCD display
2.	Indicator	4.	Chassis lock



SYSTEM MAKEUP DRAWING

This detector is widely used in gas detection in petroleum and petrochemical industries, refineries, chemical plants, metallurgical industries, power industries, and other places that may produce harmful gases to the human body.



SPECIFICATIONS

Power supply	Main: AC 220V±33V, 50Hz±5Hz Battery backup: DC 24V±3V	Ingress protection	IP54
Consumption	≤20W	Ambient temperature	0°C- 40°C
Communications signal	RS485 Power BUS	Humidity	≤95%RH
Loop capacity	4pcs of gas detectors	Indication method	LCD screen and LED indicators
Voltage output to detector	DC 24V±6V	Alarming method	Audible: 65-100dB @ 1m Visual: LED indicators
Data upload	RS485 (support MODBUS protocol)	Dimension	260mm × 200mm × 62mm
Relay output	2 relays (free contact, capacity ≤5A)	Weight	≤5kg
Ex grade	Not explosive proof		

Gas alarm control panels

KB500 Gas Alarm Control Panel

KB500 gas alarm control panel can be combined with Hanwei's GTQ-BS series of gas detectors to form an industrial gas intelligent control system for monitoring and alarming gas concentration at industrial sites.

FEATURES

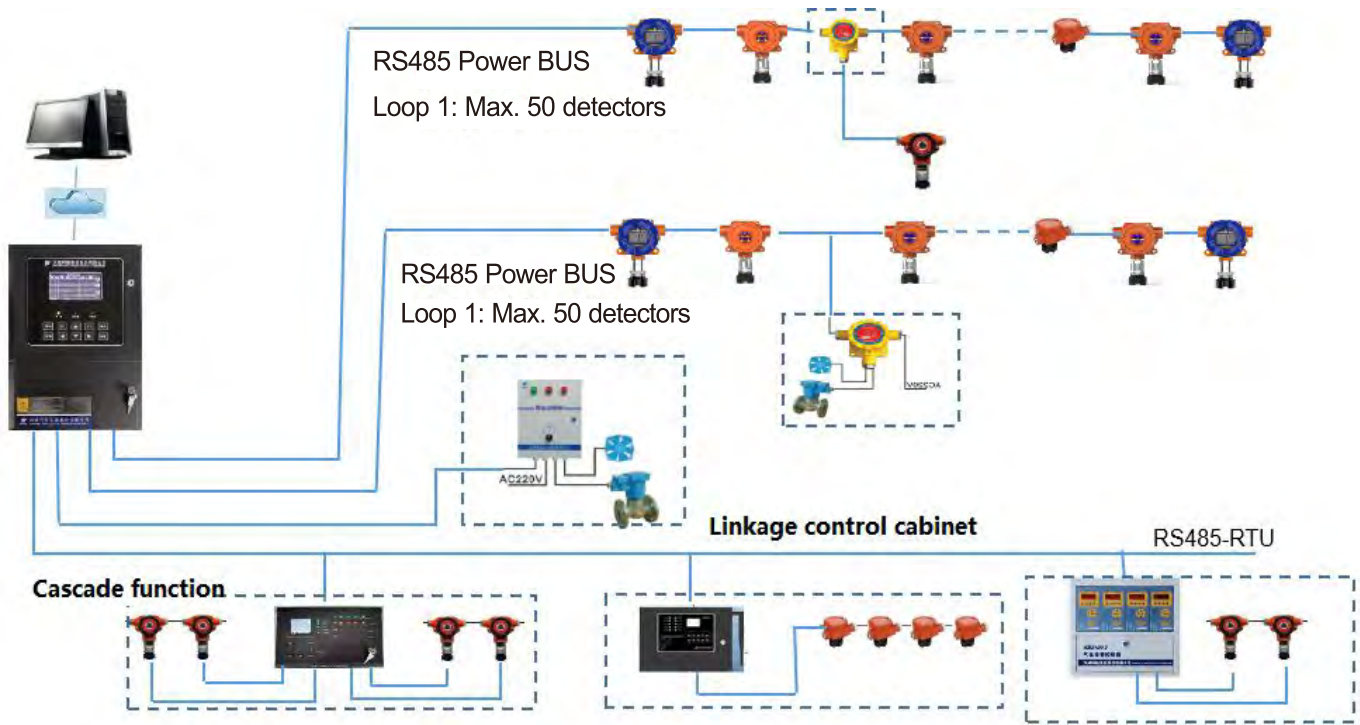
- Automatic search at boot
- External devices can be started via the panel
- Power management function
- English menu, easy to operate
- Convenient for online zero calibration and relay setting

APPLICATION

It forms a combustible gas alarm control system with an alarm, which is suitable for 9 small places such as industrial and commercial small restaurants, snack bars, barber shops, bathrooms, small hospitals, and shopping malls, underground integrated pipe corridors and other environments where gas may leak.



SYSTEM CONNECTION DRAWING



SPECIFICATIONS

Power supply	Main power: AC 220V±33V, 50Hz±5Hz Backup battery: DC 24V±3V Rechargeable lead-acid battery	Ingress protection	IP54
Consumption	≤20W	Working temperature	0°C~40°C
Power to detector	DC24V±6V	Humidity	≤95%RH
Detection connection	2×PBUS loops, protection current: ≤2.5A	Display and indication	4.3" color LCD screen and status LED indicators
Digital upload	2×RS485 output, support MODBUS	Alarm indication	Audible (65dB-100dB@1m), visual
Relay output	3 active relays, 3 free contact, relay capacity ≤4A	Dimension	370mm×246mm×90mm (without mounting bracket)
		Weight	≤15kg

Gas alarm control panels

KB9000 Gas Alarm Control Panel

KB9000 gas alarm control panel is suitable for continuously monitoring gas concentration of combustible gas, O2, toxic gas, VOCs and CO2 etc by connecting with fixed gas detectors.

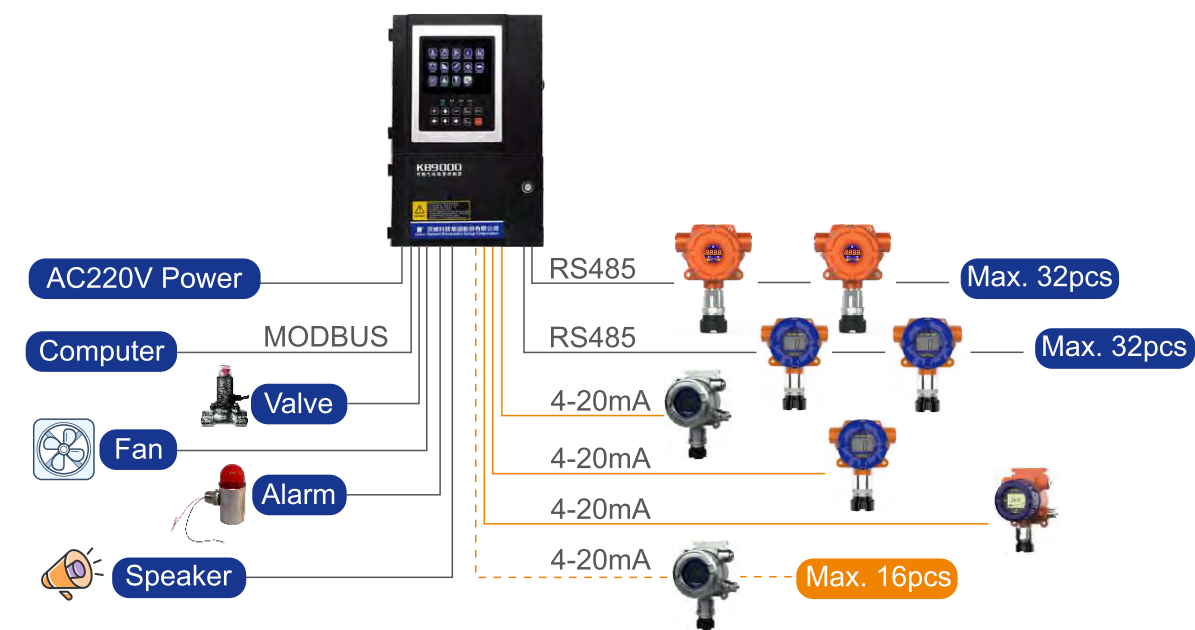
FEATURES

- Large LCD screen display, clear display
- Standard 3-wire or 2-wire 4-20mA detector input
- 6 programmable relay outputs, suitable for various linkage equipment
- Two RS485 detector input
- One RS485 Bus data upload
- Intelligent system, online zero point calibration, detector calibration
- Large-capacity data storage function

APPLICATION

This product can monitor various gases such as combustible gas, toxic gas, oxygen, etc. by cooperating with an appropriate detector.

SYSTEM ARCHITECTURE DIAGRAM



SPECIFICATIONS

Consumption	≤20W	Environment temperature	-10℃~50℃
Signal input with gas detectors	4-20mA: 16 channels RS485: 2 loops, max. 64 channels in total	Environment humidity	≤95%RH (no condensation)
Signal output for data upload	RS485: support MODBUS, Hanwei's TC200 protocol	Indication methods	8" color LCD screen LED indication lights
Voltage output to detectors	4-20mA: DC27V±3V, channel protection current ≤0.5A RS485: DC27V±3V, channel protection current ≤2.5A	Alarming method	Audible:100dB@1m Visual: LED lights
Total output protection current	≤5A	Dimensions	510mm×330mm×115mm (without installation plate) 510mm×330mm×259mm (with installation plate)
Relay output	6 relays: free contact, capacity ≤5A	Weight	about 15kg
Ingress protection	IP54		

Accessories

Annunciator

Explosion-proof annunciator is specially designed for gas detectors and other equipment which require function of audible and visual alarm. It adopts professional integrated circuit as its inner chips, functioning stable and also durable. At the top of the annunciator, there is ultra bright LED light-emitting diode with large angle, which is 360 degree clearly visible so that warning could be more effective and then workers can take action immediately in case of any serious accidents. The outer case is explosion-proof, firmly and durable, and also water-proof, quake-proof, and corrosion resistant.

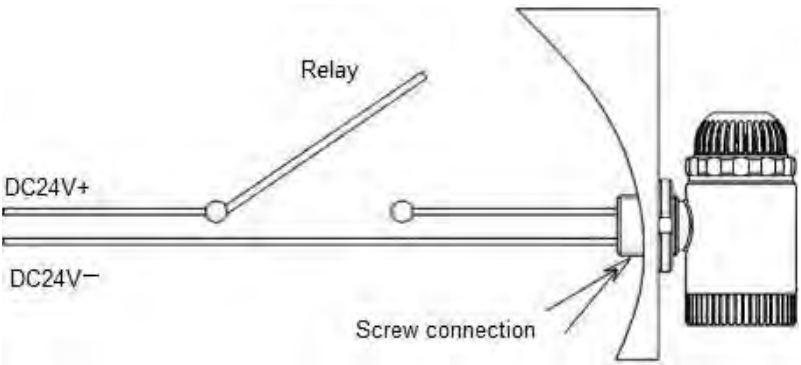
FEATURES

- Stable working
- High-brightness LED light, clearly visible in various environments
- Small size, light weight, easy installation
- Waterproof, shockproof and corrosion resistant
- Anti-collision and anti-drop design

APPLICATION

Used with fixed gas detector for on-site alarming.

SYSTEM ARCHITECTURE DIAGRAM



SPECIFICATIONS

Rated voltage	DC24V±6V	Lifespan	3 years
Working current	≤60mA	Working temp.	-40℃~+70℃
Light intensity	≥2400mcd	Humidity	≤95%RH
Sound intensity	≥85dB	Enclosure material	S304 stainless steel
Ex grade	Ex d mb IIC T6 Gb		
Model	RS166		
Ingress protection	IP66		
Dimension	61×35×81mm		
Weight	450g		

IR Remote

IR remote controller is specially designed for setting and calibrating our gas fixed gas detectors.

FEATURES

- Optional mode of IR03 and IR07
- Remotely setting, no touching the detector
- Keyboard and LCD screen, easy for operation
- Low voltage alert function

APPLICATION

For setting and calibration use of Hanwei fixed gas detectors.

SPECIFICATIONS

Power supply	2pcs AAA alkaline batteries
Working time	More than 30 hours
IR03 mode	For Hanwei old detector BS03, WD2200, WD6200
IR07 mode	For Hanwei new detectors GTQ-BS and GTQ-WD series



VG60 Wireless Gas Detection System

By integrating video monitoring, multi-gas detection, voice intercom and on-site alarm together, VG60 is an explosive-proof and multi-function equipment. With excellent dust-proof ability, flexible installation methods (like hoisting installation, bracket installation and others), equipped with powerful information processing platform, this system can be used in places with limited space, such as explosion-proof sites, toxic gas leakage rescue, underground pipeline maintenance, and production and storage tank security inspections and repairs. It can effectively ensure that the life safety of staff is not infringed and production equipment is not lost.



APPLICATION

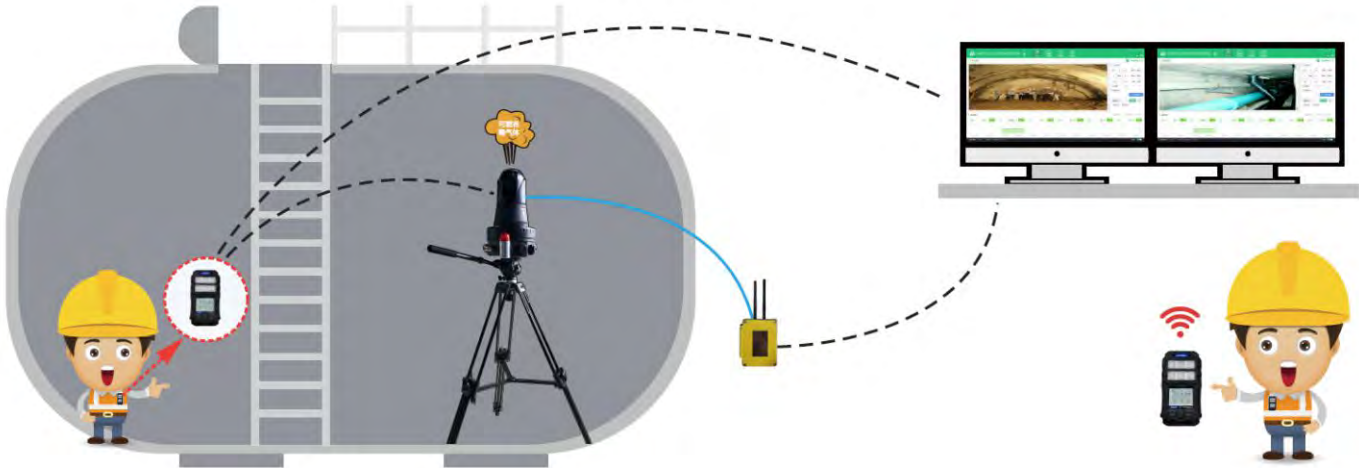
Closed or partially closed space with narrow and limited import and export, with poor natural ventilation, which is likely to cause the accumulation of toxic and harmful, flammable and explosive substances or insufficient oxygen content. It includes underground area, on the ground area and confined equipment.



SYSTEM BENEFITS

- Real-time monitoring of the gas environment in the confined space;
- Working process of the operator can be seen in real time;
- Wearing portable gas detectors can be monitored in real time;
- The standard operation actions of the operators can be seen in real time;
- Guardians and operators can communicate in real time.

SYSTEM MAKEUP



TECHNICAL FEATURES

- Multi-gas detection: 6 gases can be detected at the same time
- High-definition video: support 2 channels of video input
- On-site monitoring: Through the wireless network, all data information is displayed and saved on the handheld terminal.
- Data storage: Video data and gas concentration are stored on the SD memory card inside the device and stored cyclically.
- Power supply: External power supply and battery, battery working time is about 13 hours

SPECIFICATIONS

Detection method	Natural diffusion	Humidity	<95%RH (no condensation)
Power supply	AC200V or internal battery (not less than 13 hours)	Explosion-proof mark	Ex d IIC T6 Gb / Ex tD A21 IP66 T80°C
Response time	T90<30s	Ingress protection	IP66
Alarm method	Audible and visual signals	Dimensions & Weight	240mm×240mm×370mm about 9.7kg
Working temperature	-20°C~50°C	Measuring gases	See attached table

GAS LIST TABLE

Gas	Detection Range	Low alarm	High alarm	TWA	STEL
CH4	0-100%LEL	20%LEL	50%LEL	—	—
C3H8	0-100%LEL	20%LEL	50%LEL	—	—
H2	0-100%LEL	20%LEL	50%LEL	—	—
H2	0-1000ppm	35ppm	250 ppm	—	—
H2S	0-100ppm	10ppm	15ppm	10ppm	15ppm
CO	0-1000ppm	35ppm	200ppm	35ppm	200ppm
CO	0-2000ppm	35ppm	200ppm	35ppm	200ppm
O2	0-30%VOL	19.5%VOL	23.5%VOL	—	—
C2H5OH	0-100%LEL	20%LEL	50%LEL	—	—
NH3	0-100ppm	25ppm	50ppm	25ppm	35ppm
CL2	0-20ppm	5ppm	10ppm	0.5ppm	1.0ppm
SO2	0-100ppm	2ppm	5ppm	2ppm	5ppm

Let our flag fly along the yellow river
and all over the world!

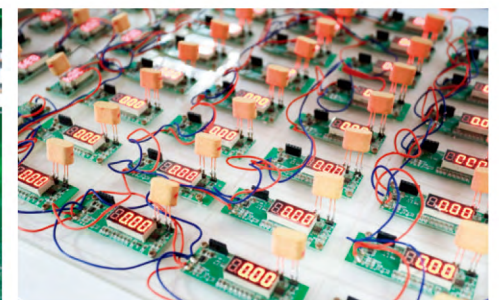
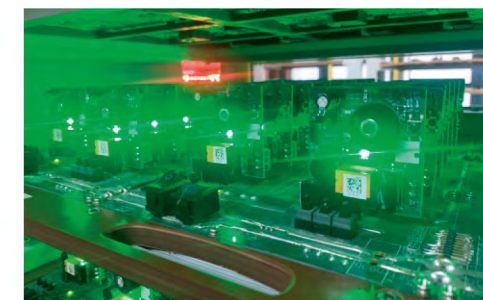
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