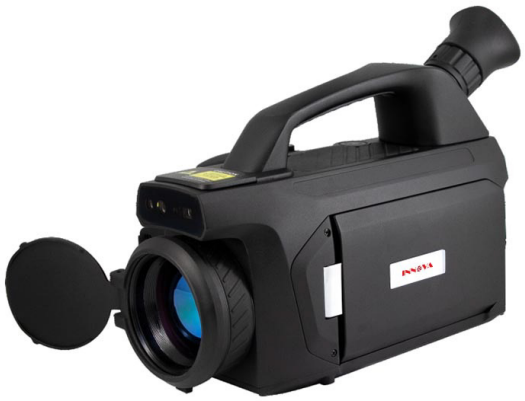
Portable VOC gas leak detection infrared thermal imager

IVOC-infrared 200 is a non-contact VOCs gas leak detection instrument, which can quickly scan VOCs leaks in pipelines and equipment sealing points, observe VOCs gas leaks in real time and intuitively by means of thermal and video images, and measure temperature accurately at the same time. Realizing vOCs leakage detection at the sealing point of VOCs pipeline and equipment.



Feature

- Refrigeration type high sensitivity detector, sensitivity ≤10mk
- VOCs gas detection sensitivity ≤0.4g/hr (CH4)
- High sensitivity mode to detect small gas leaks
- Can VOCs gas imaging leak detection, but also infrared temperature measurement built-in laser indication and ranging.
- Small size, weight <2.5kg
- Android intelligent touch screen operation
- Explosion-proof mark :Ex ic nC op is lIC T6 Gc
- Remote control of the instrument via APP

Specification

Model		IVOC-infrared 200
Application field		Natural gas, chemical, petrochemical, environmental law enforcement
Primary detection gas		VOCs gas
Detector performance	Type	Refrigerated high sensitivity detector
	Pixel	320x256
	Pixel spacing	30 microns
	Wavelength range	3.1 ~ 3.5 um
	Thermal sensitivity	10mK
	Gas sensitivity	≤0.4g/hr (CH4)
Lens	Field of view Angle/focal length	14°×11.2°/39 mm
	Minimum imaging distance	0.5 m
	Spatial resolution	0.77 mrad
	Focusing	Manual/electric/automatic
	Optional lens	24°x19.2°/23mm (optional)
Imaging performance	Liquid crystal display screen	High definition 5.0", 1280x720, rotary touch screen
	Built-in visible light camera	13 million pixels
	Frame frequency	50Hz
	Magnification	1~10x electronic zoom
	Eyepiece	1920 * 1080
	Color palette	12 options (including iron red, Rainbow, Black and white hot, etc.)
	Brightness/contrast	Automatic/manual
	Tripod interface	1/4 "_20
Power supply system	Battery type	Lithium battery, rechargeable
	Working hours	4h(room temperature >
	External power supply	DC:12V
	Charging type	Smart charger or DC12V 3A power adapter charging
	Power saving mode	Yes
Environmental parameter	Operating temperature	-20℃~+50℃
	Storage temperature	-30℃~+60℃
	Humidness	≤95%(non-condensing)
	Electromagnetic compatibility	EN61000-6-4&EN61000-6-2, FCC47CFR Part15 classA, EN61000-4-8, L5
	Vibration	2G(IEC60068-2-6)
	Strike	25G(IEC60068-2-29)
	Explosion-proof mark	Ex ic nc op is llCT6Gc
Physical characteristics	Dimension	240mm(L)X160mm(W)x156mm(H)
	weight	<2.5kg(including standard lens and battery)
Detectable gas		Methane, ethane, butane, propane, octane, pentane, heptane, hexane, ethylene, propylene, benzene, ~ toluene, ethylbenzene, xylene, ethanol, methanol, isoprene, MEK, MIBK, 1-pentene
Disposition	Standard configuration	Infrared camera,2 rechargeable lithium batteries, battery charger, adapter, SD card, SD card reader, U disk, warranty card, Certificate, headset, carrying case, video cable, manual

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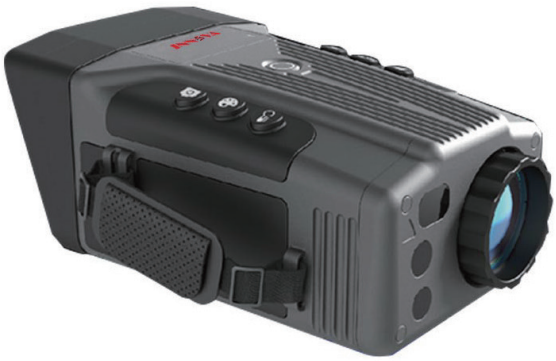
IVOC-infrared 100 is used for detecting VOCs gas leakage. It adopts a highly sensitive cooling infrared detector to realize multi-sensor fusion and is suitable for petrochemical industry and environmental protection industry.



Feature

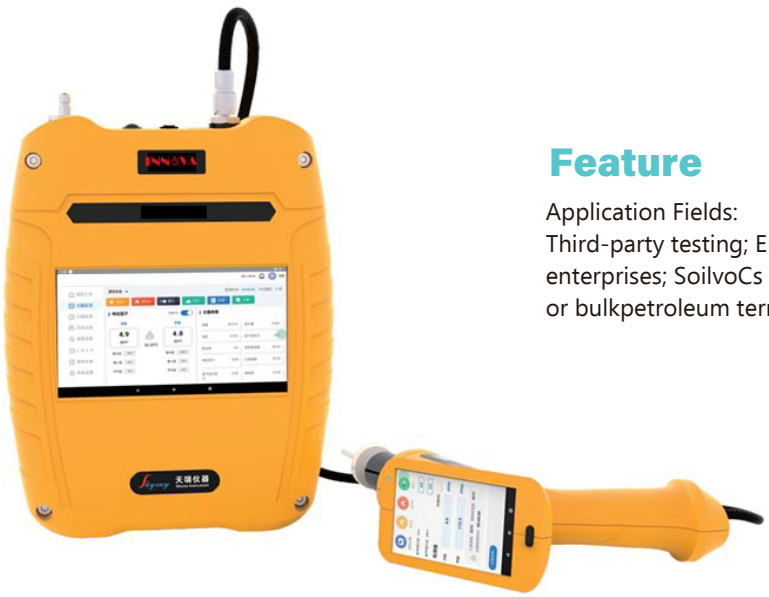
- The ability to quickly scan storage tanks, transportation pipelines, etc. for leaks while maintaining a safe distance effectively reduces revenue loss due to breakdowns and repairs. The fire gas infrared leak detector can quickly detect the leak accident and alarm before the explosion threshold of the gas is reached.
- Refrigerated detector: resolution is 320*256, NETD<10mK
- Images and videos are stored directly on the SD card
- Equipped with 8 megapixel visible light camera, portable touch screen operation, wearing gloves can also work
- Explosion-proof grade: Ex ic nc IICT4 Gc, protection grade IP54
- Small size, weight only 2.7kg(including battery).

Specification

Detector	Detector type	T2SL
	Wave length	3.1 ~ 3.5 um
	Resolution	320 * 256
	Pixel spacing	30um
	Thermal sensitivity	≤10mK
	Frame frequency	60Hz
Measurement analysis	Measuring range	
	Measurement accuracy	±1℃ or ±1%
	Analysis rule	Point, line, region analysis 5(extensible)
	Temperature measurement model	Maximum/minimum auxiliary catch. Average basic measurement. Equal irrigation analysis. Temperature difference measurement. Temperature alarm (sound, color)
	Temperature correction	Emissivity, background temperature, atmospheric transmittance correction
Power supply system	Battery type	Lithium battery
	Endurance time	≥3 hours
	Charging type	Charger/local charging
	Geographical position	GPS+ Beidou
	Electric quantity detection	Real-time display of battery power/low power alarm
External interface	Power/data interface	USB3.0 TYPE-C composite interface
	Video output	Micro-HDMI
	WIFI	Standard: 802.11b /g
Environmental parameter	Operating temperature	- 20 ℃ to 50 ℃
	Class of protection	IP54
	Working humidity	95%RH
	Explosion-proof certification	Ex ic nC CT4 Gc
Infrared lens	Field of view Angle/minimum focal length	15.7 ° x 12.6 ° / 1.5 m
	Focusing mode	Manual operation
	Spatial resolution	0.43 mrad
Visible light	Resolution	8 megapixels, CMOS
	Focusing mode	Fixed focusing
	Flash lamp	Support
Graphic display	Liquid crystal display screen	5" shadow color digital LCD screen (available in daylight),1280×720 resolution
	Image adjustment	Automatic/manual
	Image scaling	support
	Color palette	Black heat, white heat, rainbow, iron red and other 15 kinds of false colors available
	Image mode	Infrared, visible light, picture in picture. Gas model
Graphics storage	Image browsing	Contracted graph
	Storage medium	High speed TF card
	Image format	JPEG contains temperature measurement data
	Sound annotation	Supports 60S with photo saving
	Text annotation	Support
Video	Real-time video recording (including audio)	Infrared, visible light, picture in picture, gas mode recording in real time
	Radiation data (infrared raw data)	Support
Physical characteristics	Weight	2.7 kg or less
	Dimension	176.3 mm * 272 mm * 119 mm
	Tripod mounting port	UNC 1/4"-20

Portable VOC detector

IVOC-5000 adopts hydrogen flame ionization detector (FID) and photoionization detector (PID) double detector, which can not only play the advantages of FID detector's response to almost all VOC gases and good linear range, but also play the advantages of PID detector's fast response speed and low detection limit.Used in petrochemical, chemical, pharmaceutical, resin, fertilizer and other industries, LDAR (leak detection and repair) detection, soil VOCs detection, factory workshop environment vOCs detection unorganized on-site emergency detection



Feature

Application Fields:
Third-party testing; Environmental law enforcement;voc testing of chemical enterprises; SoilvoCs detection;Oil gas recovery inspection at gas stations or bulkpetroleum terminals; vocs source investigation.

Specification

FID detector	
Range range	0-50,000 ppm
Accuracy	±5% or 3ppm of the reading, whichever is larger
Detection limit	0.5 parts per million
Response time	T90 in 3.5 seconds
Return-to-zero time	Return to 10% of baseline in 4 seconds
Hydrogen cylinder	Capacity 100ml, maximum working pressure 20MPa
Hydrogen service time	Full gas use for more than 12 hours
Battery operating time	10h
Igniter	Double igniter
Parameter display	Flame temperature, electricity, pump power, hydrogen pressure
PID detector	
Range	0-4000ppm
Detection limit	0.1 parts per million
T90 Response time	<3s
Detection accuracy	Plus or minus 5%
Other	
Main engine weight	3.6 kg
Explosion-proof mark	Ex d ic mb llCT4 Gc
Main engine size	27.3×20.5×6.8 (cm) Length * width * height

Portable total hydrocarbon, methane and non-methane total meter

IVOCS 800P is a portable volatile organic compounds analysis instrument based on GC-FID technology, which mainly analyzes total menstrual (THC), methane (CH4), non-methane total (NMHC), benzene series (BTEX), VOCs factors, etc. Can be widely used in pollution sources, environmental air VOCs analysis and comparison detection, emergency detection, survey, environmental law enforcement and so on.

Feature

- Professional and general, VOCS-800P meets the technical requirements of laboratory non-methane equipment, and can be extended to detect benzene series and other VOCs characteristic factors.
- Modular design and integration concept, the host, battery, air source can be integrated and disassembled, convenient for users to choose a suitable integration solution according to the test scenario, so that your travel is more reasonable.
- Truly portable, the weight of the host is <9kg, and the power component and cylinder component can be split to make it more convenient to carry.
- Full thermal sampling, analysis flow path design, the whole system has no cold point, to ensure the analysis results of different types of VOC samples accurate and reliable. The pipeline is fully inert and silanized to ensure that the sample has no residue and no adsorption to improve the detection limit of the system method.
- Sampling gun design, sampling gun equipped with removable flange, easy to fix the sampling rod, free the hands of the operator.
- Valve sampling system, the use of electronically controlled rotating plane 10-way valve, high reliability, long life, save air source, to avoid the impact of the pressure fluctuation of the cutting valve on the baseline when the gas is driven, and reduce gas consumption; Effectively prevent diaphragm valve air leakage, dead volume, small passage and other problems.
- FID detector design, wide linear range, high sensitivity, flame state with double detection function.
- Man-machine interface, using color touch screen, can control the instrument and display the test results.
- Data lock, built-in GPS module, so that the monitoring data and pollution point combination, so that the data lock the pollution source.
- Report output, can be connected to the field pocket printer to print test results, can also output professional test reports.
- APP remote operation to realize online equipment installation and one-click startup of the portable analyzer platform in the cabin, reduce the sampling time deviation between the online instrument and the portable device during comparison, ensure the uniformity of sampling and ensure the accuracy of comparison results.
- Working time, continuous working time of the instrument >8 hours (power supply: continuous working time >10 hours; Air source: ontinuous working time >8 hours). · High-strength packing box design, equipped with rollers, tie rods, lifting rings, etc., to make quipment handling and platform lifting more convenient and safer.
- Power supply safety, the separation design of battery and host makes battery charging, storage and transportation safer.
- Safe gas source, hydrogen using solid hydrogen storage technology, high volume hydrogen storage density, high purity, low pressure inflation, low pressure output, no explosion risk; High pressure cylinders are used for air and nitrogen, with a maximum pressure of 30MPa.

Specification

Detection principle	GC-FID
Detection object	THC, CH4, NMHC, BTEX, VOCs factors
Detection range	0~ 20 mg/m3 (ambient air); 0~200 mg/m3 (pollution source); It can be configured according to user requirements
Concentration unit	mg/ m3.ppm can be converted to each other
Detection limit	≤0.07mg/m3 (ambient air); ≤0.8mg/m3 (Pollution source)
Analysis time	≤1min (NMHC),≤5min (NMHC+BTEX)
Qualitative repeatability	0.5% or less
Quantitative repeatability	1% or less
Linear error	≤±2%F.S.
Indication error	≤±2%F.S.
Standard recovery	Between 80% and 120%
Zero drift	≤±3%F.S./24h
Range drift	≤±3%F.S./24h
System response time	≤30s(NMHC)
Exportation	USB
Environmental condition	Operating temperature: - 10-45 ℃, 90% RH (no condensation) store temperature: - 20-60 ℃, 90% RH (no condensation)
Air source	Carrier gas (nitrogen or zero level air), gas (hydrogen), auxiliary gas (zero level air)
Power source	DC24v portable DC power supply or adapter AC220V
Volume	Length * Width * height 400mm*250mm*282mm
Weight	About 9kg