

New Product Launch | GF320 Methane Gas Leakage Detection Thermal Imaging Instrument

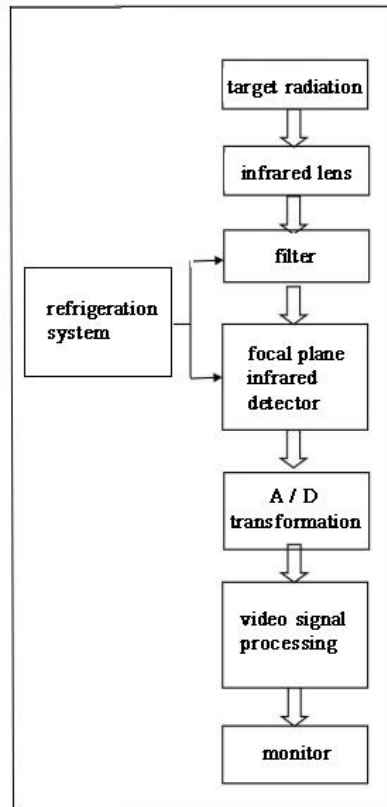
Methane is commonly found in the extraction and chemical production of petroleum, coal, and natural gas resources. It is an important fuel and chemical raw material, and also a major component of natural gas. Due to the inability to effectively monitor and alarm gas leaks, it is prone to leakage and explosion hazards during gas extraction, LNG transportation, and storage. Therefore, several accidents have occurred in recent years, resulting in casualties and property losses. In the fields of petroleum, coal mining, chemical production, and biogas application, safety accidents caused by gas leaks often occur, seriously threatening the safety of personnel and property. In order to minimize and avoid losses caused by gas leakage to the greatest extent possible, the development of real-time detection and leak monitor technology for methane gas has become increasingly important.



The GF320 gas leakage detection thermal imager is a non-contact portable gas leakage detection equipment carefully developed by Optosky using infrared radiation imaging technology. It can accurately locate dozens of VOCS (volatile organic gases) gas leakage points such as methane through imaging, and locate gas leakage points in real-time and intuitively through imaging, and accurately measure temperature, achieving rapid detection of equipment, facilities, and environmental safety.

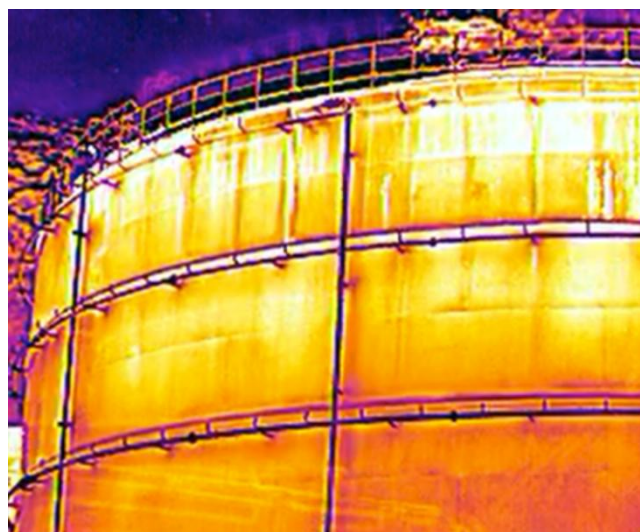


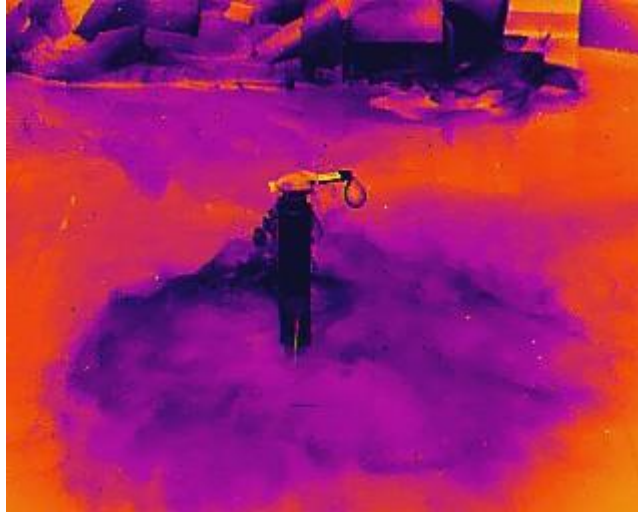
The Optosky GF320 gas detection dedicated infrared thermal imager utilizes infrared radiation imaging technology. The working principle is shown in the figure. The focal plane infrared detector of the gas detection dedicated infrared thermal imager is equipped with a special filter and cooler in front of the infrared detector. Select filters and cooling temperatures in different wavelength bands based on the absorption band of the target gas. The system receives infrared radiation emitted by objects through lenses and filters, and the detector converts it into electrical signals. Real time display of the location and diffusion direction of equipment leakage on the display through signal processing



Therefore, GF320 can detect gas leaks beyond a safe distance, greatly ensuring the safety of operators. In addition, the device can also track some harmful gases to the environment, which has safety and environmental benefits. Its main usage scenarios include offshore platforms, refineries, liquefied natural gas LN transportation terminals, compressor stations, biogas power plants, natural gas wellheads, and natural gas processing plants.

GF320 detection effect:





GF320 product highlights:

- Specially designed for safety applications in the petrochemical and natural gas industries, fully considering the actual needs of customers;
- Using refrigeration type detectors to accurately detect leaks of methane and VOCS gases;
- High sensitivity, able to detect smaller leakage points;
- Supports multiple image modes of infrared and visible light, and supports gas enhanced display;
- Temperature measurement and laser ranging, supporting GPS to obtain real-time geographic information;
- Equipped with a large-sized touch screen display, easy to operate, and better human-computer interaction experience;
- Built in audio and video storage device, supporting mobile phone/computer access;
- Good portability, replaceable battery, and extended operation time;
- Durable, highly reliable, with a protection level of IP65, suitable for harsh weather and environmental use;

GF320 main parameters table		
1	detector type	cooled infrared detector
2	resolution	320*256
3	corresponding band	3.2±0.1um~3.5±0.1um
4	gas detection sensitivity	0.001ml/s
5	temperature sensor	0°C~500°C
6	detectable gases	methane, ethane, propane, butane, hexane, heptane, octane and other VOCS gases
7	image mode	infrared, visible light, enhanced infrared
8	image control	partial zoom, freeze, screenshot
9	display	6-inch color touch LCD screen,1080×1920 pixels
10	storage capacity	64GB
11	explosion-proof level	not less than Ex IC IIC T4 Gc
12	protection level	IP65
13	lens	23.6°*19°@23mm lens
14	laser ranging	150m
15	power supply	10000m removable lithium-ion rechargeable battery (single battery life is not less than 3 hours)
16	visible light camera	enter visible light mode
17	button	power, ranging, photo, video and other buttons are convenient for user operation.