



Detect gas and maintain safety

Overview

Sonel KSF-360 uses quantum well infrared detector, which can accurately find NH₃/SF₆ leakage point through thermal imaging. This portable thermal camera can detect leaks from a safe distance, therefore it can greatly ensure the safety of operators. In addition, it can also track some harmful gases to make contributions to environment.

Features

- QWIP, sensitivity 15 mK
- SF₆/NH₃ gas detection sensitivity ≤0.001 ml/s
- Passive thermal imaging, specific background & auxiliary light source is not required
- SF₆/NH₃ gas imaging leak detection and thermal temp measurement
- Pictures and videos are stored in SD card directly
- 5 megapixel visible light
- Small size, weighs only 2.8 kg
- Durable, intelligent operation

Applications

- Electric industry
- Chemical industry
- Environmental protection agency
- Institute

Specifications

Detector data

Type	Quantum well infrared detector (QWIP)
IR resolution	640 x 512
Pixel pitch	15 µm
Spectral range	10.3...10.7 µm
NETD/Sensitivity	15 mK
Gas sensitivity	≤0.001 ml/s

Lens data

FOV / Focal Length	14°x11.2° / 39 mm
Minimum imaging distance	0.5 m
Focus	Manual/Motor/Auto
Lens(optional)	24°x19.2° / 23 mm (Optional)

Image performance

LCD	HD 5.0", 1280x720, rotatable touch screen
Visual camera	5 megapixel CMOS, autofocus, 1 LED fill light
Amplification	1...10x continuous digital zoom
Palette	12 palettes (including iron red, rainbow, black hot and white hot, etc.)
Brightness	Manual

Measure

Temperature range	-40°C...+50°C +0°C...250°C +200°C...500°C
Measurement accuracy	±1°C for temp range of 0...100°C ±2% of temperature range readings for temp range of >100°C
Measurement correction	Auto/Manual
Emissivity correction	Adjustable from 0.1 to 1.0 or selected from list of materials
Background temperature correction	Auto (according to the input background temp)
Atmospheric transmissivity correction	Auto (according to the input distance, relative humidity, ambient temp)

Image storage

Memory card	128G
Storage method	Auto/manual single frame image or dynamic recording
Single frame infrared image format	JPEG, with 14-Bit measured data image
Video storage method	HD videos are stored in the memory card in MPEG4/H.264, each segment can be up to 1 h
Voice annotation	40 s voice record, stored with image
Timed storage	Every 10 s...24 h

Laser Indicator

Laser classification	Class 2
Laser wavelength	635 nm red

Interface

Power interface	✓
SD card slot	✓
Video output	HDMI
Communication Interface	Wi-Fi, Bluetooth, USB
Audio output	✓
Tripod	1/4" _20

Specifications

Power system

Battery type	Lithium battery, rechargeable
Operating time	3 h continuous (room temperature)
External power	14 V DC
Power saving	✓

Environment parameters

Operating temperature range	-20°C...+40°C
Storage temperature range	-30°C...+60°C
Humidity	≤90% (non-condensing)
Vibration	2g meets the requirements of Q/GDW11304.1-2015 5.5.3
Shock	25g meets the requirements of Q/GDW11304.1-2015 5.5.4
Protection level acc. to IEC 60529	IP54

Physical data

Size	240 x 172 x 155 mm
Weight	≤2.8 kg (with standard lens& battery)

Gas detection

Gas detection	Sulfur hexafluoride, ammonia, acetic acid, hydrazine, acetyl chloride, methylsilane, allyl bromide, butanone, propenyl chloride, butenone, fluorinated allyl acrolein, anhydrous ammonia, propene, methyl bromide
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Standard accessories

2x lithium battery

Battery charger

Adapter

SD card

SD card reader

USB flash drive

Carrying case

HDMI cable