

GC-106 THERMAL CORE GAS LEAK DETECTION



The GC-106 core is specially designed to quickly, accurately, and safely detect and locate gas leaks - without system downtime. Temperature measurement up to 120°C (248°F) meets the requirements of industrial settings and is ideal for petroleum, chemical, natural gas, and electric power applications. Monitoring for gas leaks assists in daily equipment maintenance, accident prevention, and environmental protection. The GC-106 can be integrated into fixed mounted and handheld devices.

Features

- Temperature measuring up to 120°C (248°F)
- Customized point/line/area temperature analysis
- Analog and digital video options
- Built-in power protections
- Small size
- Light weight

Gases Detected

- | | |
|--|---|
| <ul style="list-style-type: none"> • Sulfur Hexafluoride • Ammonia • Ethylene • Crotonaldehyde • Vinyl Chloride • Trichloroethylene • Propene | <ul style="list-style-type: none"> • Cyclopropanone • Acrylonitrile • Ethyl Cyanoacrylate • 2-Chloropropylene • Allyl bromide • 2-Butynal • C₃H₅FC |
|--|---|

Accessories

- Call for lens options

Specifications

- **Pixel Resolution:** 640 x 512
- **Accuracy:** ± 3°C (± 5.4°F) or ± 3%
- **Temperature Range:** -20°C to 120°C (-4°F to 248°F)
- **Operation Range:** -20°C to 50°C (-4°F to 122°F)
- **Storage Range:** -45°C to 85°C (49°F to 185°F)
- **Detector Array:** UFPA (VOx)
- **Pixel Pitch:** 12 µm
- **Spectral Band:** ~10.6 µm
- **Frame Rate:** 25 Hz
- **Humidity:** 5% to 95%, non-condensing
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 80 G/6.06 G
- **Dimensions (without lens):** ¹
26 mm x 26 mm x 22m (L x W x D ± 0.5 mm)
(1.02" x 1.02" (L x W x H ± 0.02"))
- **Weight (without lens):** 21 g (0.74 oz)
- **Power:** 4V~ 6V DC, 1.3W ²
- **Power Protection:** over-voltage; under-voltage; reverse polarity
- **Interface:** RS-232; UART (3.3 V)
- **Expansion Board:** call for options
- **Video Format:**
 - Analog: 1 channel PAL or NTSC ³
 - Digital: BT.656; 8-bit or 14-bit LVCMOS; LVDS ⁴
- **Video Mirror:** horizontal; vertical; diagonal ⁵
- **Image Polarity:** white hot or black hot
- **Image Processing:** digital enhancement; imaging denoising
- **Reticle:** reveal; hidden; shift ⁵
- **Brightness:** adjustable
- **Zoom:** 1x ~ 8x continuous ⁵
- **Palette support** ⁵
- **Internal non-uniformity correction (NUC)**



1. Dimensions without expansion board.
2. Wattage is based on tests without extension boards. Typical working voltage is 4V DC. Expansion boards support 3.5V ~ 18V DC.
3. The analog video output format is PAL-D.
4. 8-Bit or 14-Bit LVCMOS digital video is supported only on the 70 pin connector module.
5. Digital video does not have the zoom and video mirror except for BT.656.