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Mini Gas Flashlight Methane (CH₄) Detector L10M



Prep Before starting

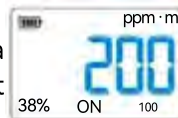
Open the product package, take out the telemeter, visually check the optical lens of the telemeter if there is dust and stains.

Check the power level

When the telemeter is off, click the key '●' and hear a short beep to display the current battery status  .

Power On

Press and hold the key '●' until you hear a short beep and the telemeter turns on. Wait until you hear a short beep again, the real-time concentration value will be displayed.



Charging

If the telemeter does not respond to keystrokes, use the original adapter to charge the telemeter. The charging port is located at the bottom of the telemeter, should open the rubber tap and insert the receptacle plug.

Turn on the indicating laser to begin detection

After the telemeter is turned on normally, double-click the key '●' You will hear two short beeps. This

indicate that the laser is turned on and the

'ON' icon will light up on the screen.



CAUTION

The telemeter will only sound an alarm if it detects methane gas when the indicating laser is turned on.

Align the detection target

Point the telemeter at the suspected leak area and the indicating blip will guide you to the target.

If methane (CH₄) molecules are present on the straight line (detection line) between the telemeter and the target. The telemeter will display its concentration on the screen, and

the concentration indicator bar will also show the change in concentration value in real

If the concentration above the limit it will alert with a beep sound and the red LED will light.



Select a suitable reflective surface

The telemeter emits invisible infrared laser light at the target and relies on detecting the intensity of the laser light reflected back from the target to measure whether there is methane in the path of the light.



The ability of the target to reflect the laser directly affects the distance and effect of the measurement. If the target is dark, tilted, porous or mirror surface, please adjust the angle and position, so that the target meets the requirements of bright, straight and flat, in order to achieve the best detection effect.

For example, black foam, slanted mirror is a poor reflection target, stone wall, right on the concrete plane is an excellent reflection target.

The number in the lower left corner of the screen indicates the current return light intensity, when the return light is not enough to meet the requirements, the telemeter displays '--'



What is ppm:m

A laser methane telemeter measures the amount of absorption of laser light by methane molecules on a straight line (laser detection line) between the telemeter and the target.

Because the gas leak is not evenly distributed in space and the distance between the instrument and the target is uncertain, ppm (concentration)xm (distance) is introduced to represent it.

The meaning of 100 PPM -m is that 100 PPM concentration of methane gas is evenly distributed over a distance of 1 meter.

If a gas mass of 20ppm over a distance of 5 meters, measured value is 100 PPM -m, this is equivalent to the gas mass being 'compressed' to 1 meter.



If a gas mass of 200ppm over a range of 0.5 m, measured value is 100 PPM, this is equivalent to the gas mass being 'extended' to 1 m.

