# indicator;

- The LED lighting red indicates the gas leaking and alarm;
- The LED lighting green indicates normal working;

Without the LED lighting indicates the detector has some trouble:

## Alarm Density and Restoration

When the gas density achieves or surpasses the limit, the detector will maintain alarm; When the gas density reduces and less than the limit, the detector automatic stopping alarm.

The alarm limit as following:

Natural gas: 0.1~1.0%

Liquefied petroleum gas: 0.1~0.5%

Artificial coal gas: 0.04~ 0.5% ) (CO≤

Artificial coal gas: 0.04~0.25% (Co≤20% Artificial coal gas: 0.025~ 0.15% ( CO≤ 30%)

# Sensitivity

· Adjust the sensitivity of iDo501CM and iDo501CMW through the sensitivity knob (Figure 1 and Figure 2). Gyrates anticlockwise reduces the sensitivity, gyrates clockwise increases the sensitivity.

#### Installation

- Choose the appropriate installation site;
- •Fix the bracket by screw;
- Opens the detector's front cover, and finish the connection (Figure 1 and Figure 2);
- •Inlays the detector to the bracket (Figure 4);

#### Maintenance

Suggest to clean the detector every three months. When cleaning, it must be power out and be careful to harm the mainboard of the detector.

How to Do When Alarm

#### iDo501CMW.

• The NO,NC jumpers on the iDo501CM are used for normal close setting and normal open setting. User can choose normal close output or normal open output for alarm or utility output.

# Matching for Wireless Product

- Power the detector through the power adapter (Figure 3);
- Set the wireless control panel or receiver at matching status;
- Press down the test button more than 3 seconds. The detector will send out a signal for matching:
- After finishing the matching, restores the control panel to working status;
- The detector report to the control panel every 6 hours.Otherwise the control will alarm detector trouble to the central monitor station.

#### LED Indicator

• Jumper S2 is used to close or open the LED

## When alarm:

- Shut down all of the to cut-off gas;
- Open all of the windows and doors to make the air flow rapidly:
- Extinguish all fire sources and anything can cause fire:
- •Do not turn on or off any electric appliance;
- Check the reason of gas leaking, and notice the relative departments and professional persons in

## ROISCOK WARRANTY

The warranty is promised by ROISCOK Electronics Ltd. and all its partners to all of the users whom ROISCOK products enthusiast.

All products, within 18 months from the date leaving our plant besides the artificial damage, we take charge of the after service or replacement new one freely. After the time limit, we take charge of lifelong paid service. Regardless of the middle process or/and sale link, all of ROISCOK product has the right to enjoy the after service announced here. Any business agent, the dealer • To install the detector according to the density:

Alarm volume: ≥70dB/m

Alarm restoration: ≤30s

Working voltage: DC12V

• Warm-up time: 2 minutes

Installation Position

petroleum gas and so on;

and so on.

•Dimensions: Φ140\*70 mm

Confirm the density of the gas:

100mA, warning < 100mA

• Operating current: 25mA (12V) static state

• Quiescent current: <10uA (wireless product)

The gas which is heavier than the air: liquefied

The gas which is lighter than the air: Natural gas,

carbon monoxide, artificial coal gas, methane

• Wireless frequency: 433MHz/868MHz

Alarm time: ≤10s

When the gas is heavier than the air: the installation position should be lower and at the place above the ground 0.3-1.0 meter, and within 1.5 meters to the gas resource;

when the gas is lighter than the air: the installation position should be higher and at the place below the ceiling 0.3-1.0 meter, and within 1.5 meters to the gas source.

## Connection

- The inappropriate connection will possibly cause the detector not work well. The connection of iDo501CM as shown in Figure 2:
- -12VDC+: power input (red cable and black

Alarm: alarm output, NC (yellow cable and white

UO: utility output

• Only need connect power input for

or installer has no right to refuse to provide the after service.

For quickly service, we hope the user to fill in "Return Products List" in detail together with the units. The goods may return directly to our company, agent, the dealer or installer. When necessary, the users are welcome send "User Complaint Letter" to us.

The Warranty go into effect from the date of July

ROISCOK Electronics Ltd. is responsible to explain.

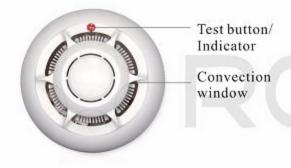


Fig3. Indicator LED and Test button

Provides the double model type output

Alarm output: NC or NO

• Provides the UO output for electromagnetic valve, the ventilating fan and so on

LED instructs the working status, alarm status

Sensitivity adjustable

and trouble

• Electrode protection

### Technical Data

- · Alarm gas: Artificial coal gas, natural gas, liquefied petroleum gas
- Working conditions: 20°C ~+60°C
- Relative humidity: ≤90%RH
- Consumed power: ≥50W
- Stability: The long lasting work warning density error is not bigger than ±5%LEL
- Duplication: The redundant test warning density error is not bigger than  $\pm 5\%$ LEL

The iDo501CM and iDo501CMW are designed conforming to the standard of GJ3057-1996, EN50194-1:2009, EPA3050B:1996, EN1122B:2001, EPA3052:1996, EPA3060A:1996, EPA7196A:1992, EPA3540C:1996, EPA8270D:2007. Adopt the optoelectronic technology + micro processing technology. When the environment gas density surpasses the limit, the detector will alarm immediately, including the LED blinking, starts the buzzer, and report to the receiver or/ and control panel by wired or wireless, etc. The wired product has many kinds of options: The single channel output (NO, NC) and two channel output (No, NC). Without special statement, we supply single channel output products (NO, NC). iDo501CM is wired gas detector

iDo501CMW is wireless gas detector. 433MHz/868MHz

# Main Feature

- Can detect coal gas, the natural gas, liquefied petroleum gas;
- With high sensitivity and fast restoration.

# hole for installation hole for cables hole for fixing hole for fixing

iDo501CM/iDo501CMW

Wired/ Wireless Gas Detector

Fig4. Detector bracket

**ROISCOK** ROISCOK ELECTRONICS LTD. www.roiscok.com

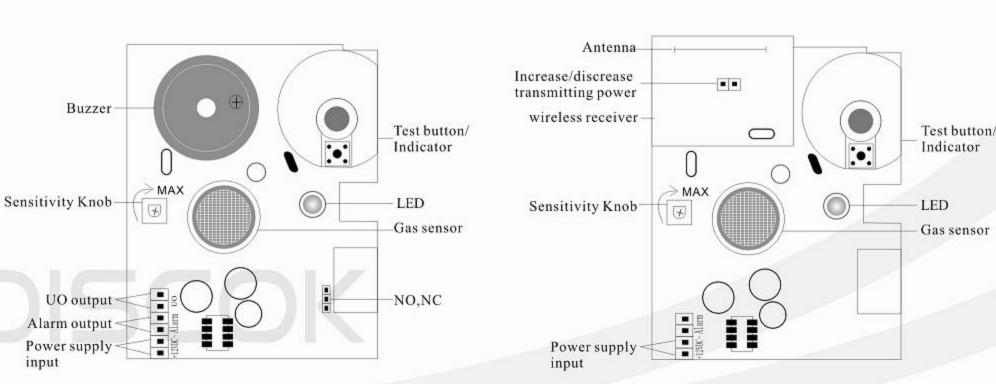


Fig1.iDo503CM Main board

Fig2. IDo503CMW Main board