

Qoltec®



USER MANUAL

Smart Certified Natural Gas (Methane, CH₄) Detector

Model: 52650

Introduction

Thank you for choosing the Qoltec Smart Natural Gas (Methane, CH₄) Detector. To ensure your personal and system safety and to achieve the best performance from the device, please read this manual carefully and thoroughly before installing, using or repairing this device. Please pay particular attention to the warnings and notes contained in this manual.

About the product

The detector is suitable for installation in residential properties. It can continuously monitor the concentration of natural gas indoors. When the concentration reaches the alarm threshold, the device will emit an audible and visual alarm, allowing you to take swift action to prevent fire, explosion or poisoning.

Figure 1 in the appendix

- 1 Status indicator
- 2 Service life indicator
- 3 Button
- 4 Audible alarm vents
- 5 Gas detection ports
- 6 Power cable
- 7 Solenoid valve cable
- 8 Relay cable
- 9 Mounting plate

Safety information

WARNING: This device is designed to detect methane (CH₄). It must not be used to detect other gases, smoke or fire unless the manufacturer has specifically provided for such a function.

Note: The device should be installed by a competent person, in accordance with the user manual and the requirements regarding the location and method of installation.

- 1 Please read the user manual before installation and before using the device.

- 2 The device must only be installed in the location and in the manner specified by the manufacturer.
- 3 Methane is a gas lighter than air and accumulates in the upper parts of rooms. The detector must be fitted in a suitable part of the room in accordance with the requirements specified in the product manual.
- 4 Do not install the device in locations exposed to direct contact with water vapour, grease, dust, strong draughts, chemicals or temperatures outside the device's operating range.
- 5 Do not block the ventilation openings or the sensor. Do not paint or cover the device with stickers.
- 6 Do not dismantle, modify or attempt to repair the device yourself.
- 7 Do not test the sensor using a lighter, torch, open flame or an uncontrolled gas source.
- 8 Regularly check that the device is working correctly using the TEST function, if the model is equipped with one.
- 9 For battery-powered devices, replace the batteries in accordance with the instructions and do not ignore low-battery warnings.
- 10 Once the sensor has reached the service life specified by the manufacturer, the device must be replaced.

Safety warning:

A gas detector is an additional safety measure and does not replace the correct installation, inspection and maintenance of the gas system.

Installation method

Note: The sensor is intended for indoor use only. Install it in areas where there is a risk of gas leakage or accumulation. The device should be mounted horizontally at a distance of 1–4 m from the gas appliance and vertically 0.3–1 m from the ceiling. Users may select the installation location in accordance with the diagram below, adapting it to the actual conditions.

Figure 2 in the appendix

1. Select a suitable location on the wall for mounting the detector;
2. Secure the mounting plate using wall plugs;
3. Switch on the detector and check that it is working correctly;
4. Fit the detector by hanging it on the mounting plate.

Note: If the room is to be painted or refurbished, do not install the detector until the work has been completed.

Note: The power cable is fitted with a plug; please connect it directly to a suitable socket.

Avoid installation:

- Near ventilation inlets/outlets, extractor fans, or doors or windows with strong draughts,
- In areas with high humidity or exposed to water droplets,
- Directly above sources of heat or steam,
- Above gas appliances,
- Places prone to dirt accumulation,
- Areas obscured by obstacles.

Note: If the room is to be painted or refurbished, please do not install the detector until the renovation or painting work has been completed.

Description of how the device works

1. Connect the detector to the mains. The green power LED will start to flash, and the device will enter a warm-up mode, which lasts 3 minutes. During this time, the sensor does not detect gas.
2. When the gas concentration reaches the alarm threshold, the device switches to alarm mode — the red LED flashes and the detector emits 4 audible beeps in a repeating cycle until the alarm ends.

What to do in the event of an alarm

1. In the event of an alarm, immediately shut off the gas supply, open the windows, do not use any electrical appliances, and move to a well-ventilated area. From a safe location, contact the relevant emergency services. Do not return to the room until the source of the hazard has been removed.
2. The alarm will switch off automatically when the gas concentration falls below the alarm threshold. An audible and visual signal indicates that the concentration has exceeded the limit.
3. If the yellow LED is lit continuously and the device emits 3 beeps every 10 seconds, this indicates a fault. The detector is not working properly — please contact the service department.

Self-test

1. To perform a self-test, press the button once. The siren will sound 4 beeps, and the yellow, red, yellow and green LEDs will flash in sequence (1 cycle).
2. If the yellow LED is flashing and the siren emits 3 beeps every 10 seconds, briefly press the button to perform a self-test. The device will then return to normal operating mode.
3. If the yellow LED continues to flash and the siren emits three beeps every 10 seconds, this indicates that the sensor has reached the end of its service life
4. Contact the service department or the manufacturer for repair or replacement.

Indicator light statuses

<i>Mode</i>	<i>LED</i>	<i>Lifespan indicator</i>	<i>Audible signal</i>
<i>Heating mode</i>	<i>Green LED flashes</i>	-	-
<i>Normal mode</i>	<i>Green LED is lit continuously</i>	-	-
<i>Self-test mode</i>	<i>The LEDs flash in sequence: yellow, red, yellow and green (1 cycle)</i>	<i>The yellow LED flashes 4 times (1 cycle)</i>	<i>4 beeps (1 cycle)</i>
<i>Fault mode</i>	<i>The yellow LED remains lit</i>	-	<i>3 beeps every 10 seconds (continuous cycle)</i>
<i>Alarm mode</i>	<i>Red LED flashes continuously</i>	-	<i>4 beeps every 2 seconds (continuous cycle)</i>
<i>Operating period</i>		<i>Yellow LED flashes continuously</i>	<i>3 flashes every 10 seconds (continuous cycle)</i>

Technical specifications

Standard	EN 50194-1:2023
Power supply / Operating voltage	AC 100V–240V / 50Hz–60Hz
Application	Natural gas (methane, CH ₄)
Sampling method	Free diffusion
Sensor type	Semiconductor
Sensor service life	5 years
Alarm mode	Sound + light
Alarm volume	≥85dB (1 metre in front)
Alarm level:	7% LEL ± 3% LEL
Installation	Wall-mounted
Battery	None
Storage temperature	-25°C to 55°C
Operating environment	Temperature: -10 °C to 40 °C Relative humidity: <95% (non-condensing) Ambient pressure: 86 kPa to 106 kPa
Dimensions	112 mm × 86 mm × 33.5 mm

Troubleshooting

Fault	Possible cause	Solution
The green power LED is not lit	The power cable is not connected correctly	Check and reconnect the power cable correctly
	Faulty power LED or circuit failure	Contact your distributor or the manufacturer for repairs
No audible or visual alarm during the self-test	System fault	Contact your distributor or the manufacturer for repairs
No response to detected gas	The detector is warming up	Wait until the warm-up is complete
	System failure	Contact your distributor or the manufacturer for repairs
	Prolonged power cut	Switch on the power and wait 4 hours
	The gas concentration has not reached the	Wait until the gas concentration reaches

	alarm level	the alarm threshold
Continuous alarm after start-up and during operation	There is a large amount of cigarette smoke, alcohol or volatile organic compounds (e.g. petrol, perfumes, varnishes) in the room	Move to a clean, well-ventilated area and try again
	System failure	Contact your distributor or the manufacturer for repairs

Note: In the event of faults that cannot be rectified by yourself, do not dismantle the detector. Contact your distributor or the manufacturer for assistance.

Notes and warnings

1. High levels of cigarette smoke, alcohol or volatile organic compounds such as petrol, perfume, banana oil or paint in the room may cause the detector to give false alarms;
2. Do not use gases of unknown concentration to test the detector. Gases with very high concentrations may damage the sensor, shorten its service life and be harmful to health;
3. Contact your distributor or the manufacturer for assistance and use suitable gases at the correct concentration for the annual testing of the detector;
4. The product must not be used or stored in an environment containing corrosive gases (e.g. chlorine);
5. Regularly clean the surface of the detector to remove dust and oily dirt using a brush or a dry, soft cloth;
6. After prolonged storage or transport, switch on the detector and leave it for at least 24 hours to achieve optimum performance;
7. Under normal operating conditions, the semiconductor sensor has a service life of up to 5 years.

Product maintenance

1. Clean the detector at least once a year, ensuring that the gas inlet is free from dust and oil;

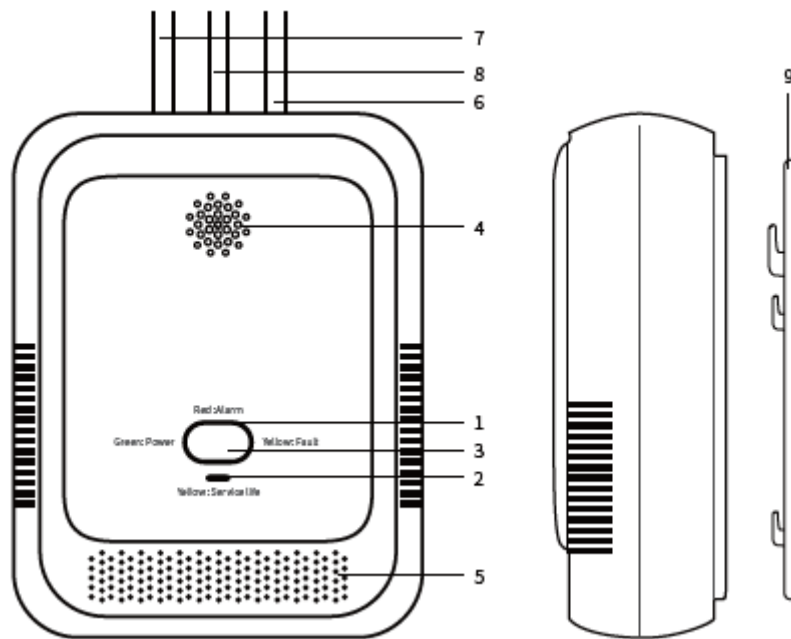
2. After cleaning, refit the detector onto the mounting plate and check that it is working properly;
3. Carry out an analogue alarm test every six months to ensure correct operation;
4. Do not expose the detector to prolonged or frequent exposure to high concentrations of gas, as this may reduce the sensor's sensitivity, shorten its service life or damage it;
5. The detector should be connected to a stable power supply;
6. In the event of a fault, contact your distributor or the manufacturer to arrange for repairs or to purchase a new unit.
7. Dispose of in accordance with local regulations on electronic waste. Do not throw into a fire or burn.

Warranty

The product is covered by a 24-month manufacturer's warranty from the date of purchase. If you experience any problems, please contact customer services.

Attachment 1

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