

Qoltec[®]



USER MANUAL

SMART GAS DETECTOR (LPG)

52652

Introduction

Thank you for choosing the Qoltec Smart LPG Gas 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 the manual.

About the product

The sensor is suitable for installation in residential homes. It can continuously monitor the concentration of LPG in rooms. When the concentration reaches the alarm threshold, the device will emit an audible and visual signal, allowing for rapid action to prevent fire, explosion or poisoning. The device is built using a high-performance microcontroller (MCU), advanced electronic components and modern technology. The hardware and software solutions employed enable simultaneous monitoring of the sensor's status and detection of gas concentration, ensuring high safety and reliability.

Sensor design

Figure 1 in the appendix to the manual

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

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 to the manual

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. Install the detector by hanging it on the mounting plate.

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

Note:

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

AVOID Installation:

- Near ventilation inlets/outlets, extractor fans, doors or windows with strong air flow,
- Places with high humidity or exposed to water droplets,
- Directly above sources of heat or steam,
- Above gas appliances,
- Places prone to dirt,
- Areas obstructed 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 power supply. The green power LED will start flashing and the device will enter a warm-up mode, which lasts 3 minutes. During this time, the sensor does not detect gas. Once the warm-up is

complete, the detector will switch to normal operating mode and the green LED will remain lit.

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 (including mobile phones) and move to a well-ventilated area.
2. The alarm will switch off automatically when the gas concentration falls below the alarm level. 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 four times, 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 3 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</i>	-	-

	<i>flashes</i>		
<i>Normal mode</i>	<i>Green LED is lit continuously</i>	-	-
<i>Self-test mode</i>	<i>The following 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>Yellow LED remains lit</i>	-	<i>3 beeps every 10 seconds (continuous cycle)</i>
<i>Alarm mode</i>	<i>Red LED flashing continuously</i>	-	<i>4 beeps every 2 seconds (continuous cycle)</i>
<i>Operating time</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	Propane (LPG)
Sampling method	Free diffusion
Sensor type	Semiconductor
Sensor lifetime	5 years
Alarm mode	Sound + light
Alarm volume	≥85dB (1 metre in front)
Alarm level:	10% LEL ± 3% LEL
Installation	Wall-mounted
Storage temperature	-20°C to 55°C
Operating environment	Temp.: -10 °C ~ 40 °C Relative humidity: <95% (non-condensing) Ambient pressure: 86 kPa ~ 106 kPa

Dimensions	112 mm × 86 mm × 33.5 mm
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Troubleshooting

Fault	Possible cause	Solution
The green power LED is not lit	The power cable is not connected properly	Check and reconnect the power cable
	Faulty power LED or circuit failure	Contact your distributor or the manufacturer for repairs
No audible or visual alarm during the self-test	Circuit failure	Contact your distributor or the manufacturer for repair
No response to detected gas	The detector is warming up	Wait until the warm-up is complete
	System failure	Contact your distributor or manufacturer for repairs
	Prolonged power failure	Switch on the power and wait 4 hours
	Gas concentration has not reached the alarm level	Wait until the gas concentration reaches the alarm threshold
Continuous alarm after start-up and after a period of 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 a fault that you cannot rectify 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 false alarms;
2. Do not use gases of unknown concentration to test the detector. Gases of very high concentration may damage the sensor, shorten its service life and be harmful to health;
3. Contact your distributor or 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 of 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 48 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, reinstall the detector on the mounting plate and check that it is working;
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 the distributor or manufacturer to arrange for repairs or to purchase a new unit.

Disposal

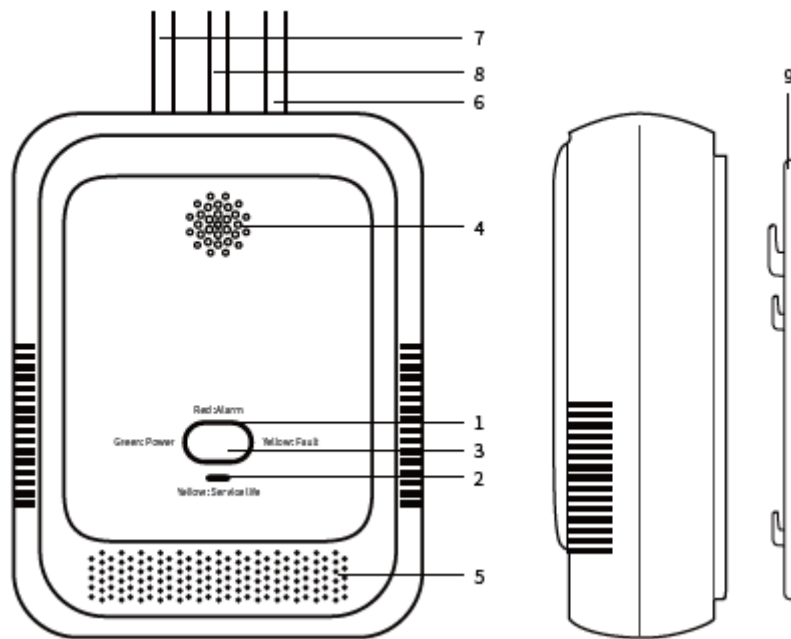
Dispose of in accordance with local regulations regarding electronic waste. Do not throw into fire or incinerate.

Warranty

The product is covered by a 24-month manufacturer's warranty from the date of purchase. In the event of any issues, please contact customer service.

Attachment 1

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