

## MQ-9 Carbon Monoxide and combustible gas sensor



The Symbol : **LANKON-076**

Price NET : **2,87 €**

Price Gross : **3,53 €**

The sensor detects the concentration of CO (carbon monoxide) and flammable gases, the result can be obtained from measuring the voltage at the analog output. The system is powered by 5 V. Current consumption is about 150 mA. It has a digital and analog output, which makes it compatible with most start-up modules, including Raspberry Pi and Arduino.

Shipping within **24 hours from the moment of positive payment authorization**

### Additional information

Availability **Few**

### Description

The MQ-9 sensor measures the concentration of carbon monoxide (CO) and other dangerous flammable gases in the air. The sensor board has a factory-soldered 4-pin goldpin connector with a pin pitch of 2.54 mm. The sensor requires a 5 V power supply to function. Among the pins, the sensor is also equipped with a digital output and an analog output, making it very universal and compatible with various prototype boards, including Arduino and Raspberry Pi.

## Carbon monoxide sensor MQ-9 - a quick warning against a silent killer

Unlike natural gas and liquefied petroleum gas (propane-butane), which is used to light gas furnaces, carbon monoxide is a gas heavier than air and has no smell or taste. For this reason, it is difficult to detect - people may only experience symptoms of drowsiness, headache and nausea. In addition, carbon monoxide impedes the exchange of oxygen in living organisms, consequently leading to death by suffocation. The MQ-9 sensor module provides protection against the tragic effects of the potential leakage of this dangerous gas. In addition to the possibility of connecting acoustic and optical signaling, we can also connect the control of the solenoid valve in the furnace to this sensor so that in the event of detecting the presence of carbon monoxide in the air, it will automatically cut off the furnace from the gas pipeline.

## Sensor specifications:

<b>Power supply</b>	5 V
<b>Current consumption</b>	150 mA
<b>Type</b>	semiconductor
<b>Outputs</b>	analog and digital
<b>Measuring range</b>	from 0 to 10,000 ppm
<b>Operating temperature</b>	from -10 °C to +50 °C
<b>Leads</b>	goldpin connectors raster 2.54 mm
<b>Dimensions</b>	35 x 22 mm (has mounting holes with a diameter of: 3.2 mm)

## Digital output D0

Using the potentiometer located on the back of the board, the threshold is set, after which the D0 output changes from high to low state. The D0 lead can be connected directly to a microcontroller or a development kit, including Arduino, or e.g. to a buzzer module, which will signal too low or too high level of unwanted gases in the air.

## Analog Output A0

The sensor also has an analog output A0, which should be connected to the A/D converter lead (analog input in Arduino). This will allow you to measure a proportional voltage signal and determine the concentration more accurately.