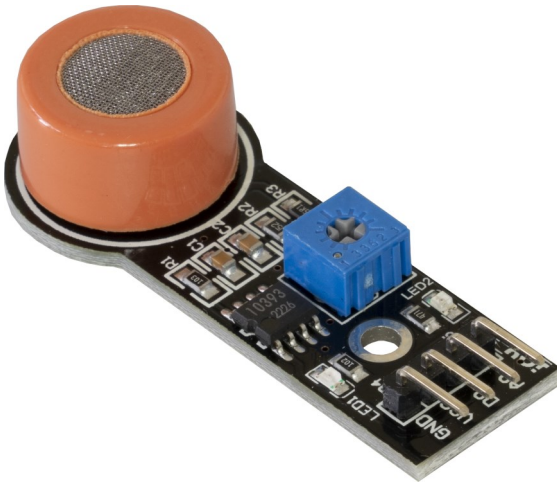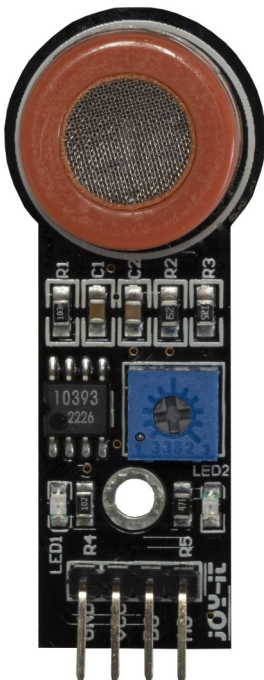# SEN-MQ3
Analog alcohol sensor on module

This analog gas sensor has a small heating part with an electronical chemical sensor. It is suitable for indoor usage. The sensor can output exact values only after warm-up phase.

Caution: sensor gets hot while usage!

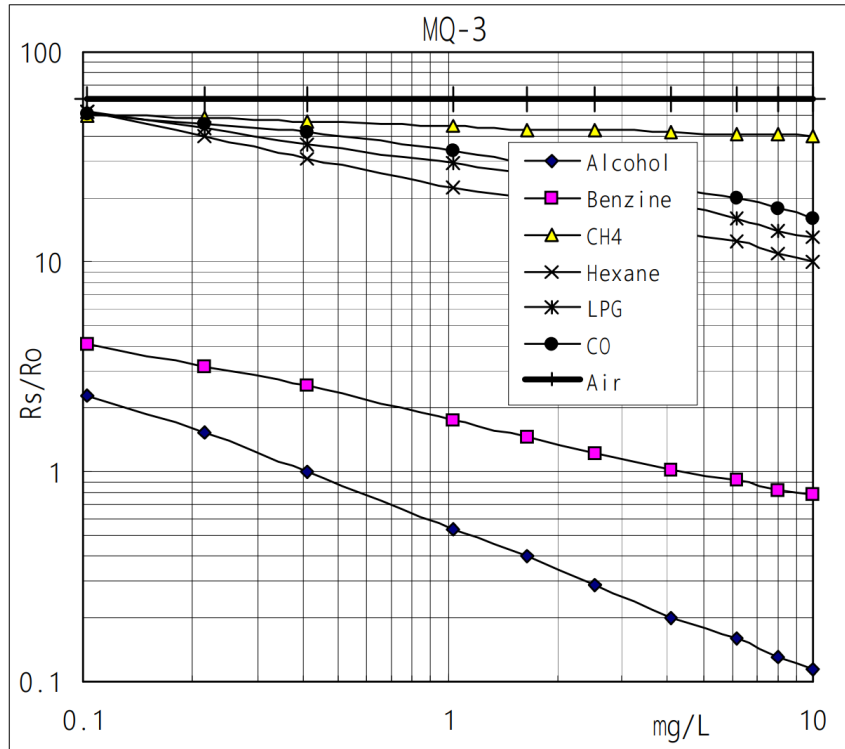| MAIN FEATURES	
Measurement range	100 - 1000 ppm
Measurable substances	Ethan, Alcohol over the concentration of hydrogen
Application areas	f.e. for breath alcohol tester, robotic, microcontroller projects
Compatible with	Raspberry Pi (with AD-converter), Arduino. etc
Special features	High sensitivity which can be adjusted by potentiometer, quick response time, low sensitivity to benzine
Dimensions	32 x 20 x 22 mm
Items delivered	SEN-MQ3

| FURTHER SPECIFICATIONS	
Analog Output	values will be processed by microcontroller
Digital Output	thresholds can be set
Pins: VCC	Voltage supply (5 V)
GND	Ground
AOUT	Analog output (0 V - 5 V)
DOUT	Digital output (0 V / 5 V)
Response time	< 1 s
Pick time after power-on	≤ 30 s
Heating current/ voltage	≤ 150 mA, 5 ±0,2/ 1,5 ±0,1 V
Heating energy power	750mW

FURTHER DETAILS	
Article No.	SEN-MQ3
EAN:	4250236819945
Customs Tariff No.	90269000

This shows the typical sensitivity characteristics of the MQ-3. Rs means resistance of the sensor in different gases, Ro means resistance of sensor in 1000ppm Alcohol.
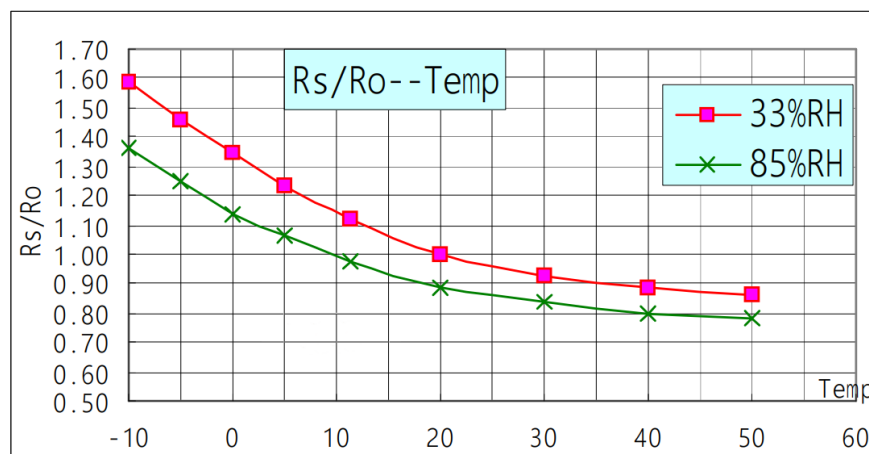
Correlation between sensor resistance(Rs) and ambient temperature and humidity

The resistance of the sensor can be calculated with the following formula:

$$Rs = (Vc/VRL - 1) \times RL$$

VC= Supply voltage; VRL= Analog pin voltage; RL= Load resistance (1k)