JOY-IT

SEN-MQ135
Analog sensor air quality, benzene, alcohol and smoke 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!

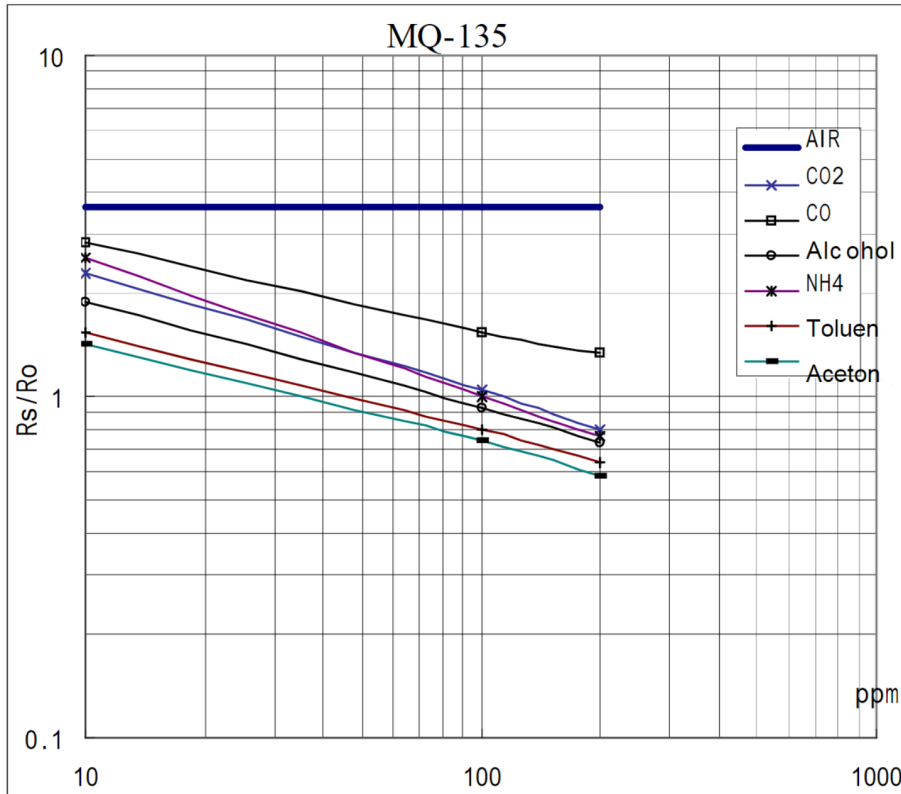| MAIN FEATURES	
Measurement range	10 - 1000 ppm
Measurable substances	Benzene, Ammonia, sulfide, smoke, Nitrogen oxides and other air pollution
Application areas	Detecting household gas leaks, industrial gas alarm, robotic, microcontroller projects
Compatible with	Raspberry Pi (with AD-converter), Arduino. etc.
Special features	High sensitivity, wide detection range
Dimensions	52 x 20 x 18 mm
Items delivered	SEN-MQ135

FURTHER SPECIFICATIONS	
Analog Output	values will be processed by microcontroller
Digital Output	thresholds can be set
Pins: VCC GND AOUT DOUT	Voltage supply 5 V Ground Analog output Digital output
Detection ranges: Ammonia (NH_3), Alcohol Benzene	10 - 300 ppm 10 - 1000 ppm
Heating voltage	5.0 V ± 0.2 V
Heating resistance	31 Ω ±3Ω (room temp.)
Heating power	≤ 900 mW
Sensitivity	Rs in air/Rs(100ppm NH_3) ≥5
Operation temperature	-10 - 45 °C

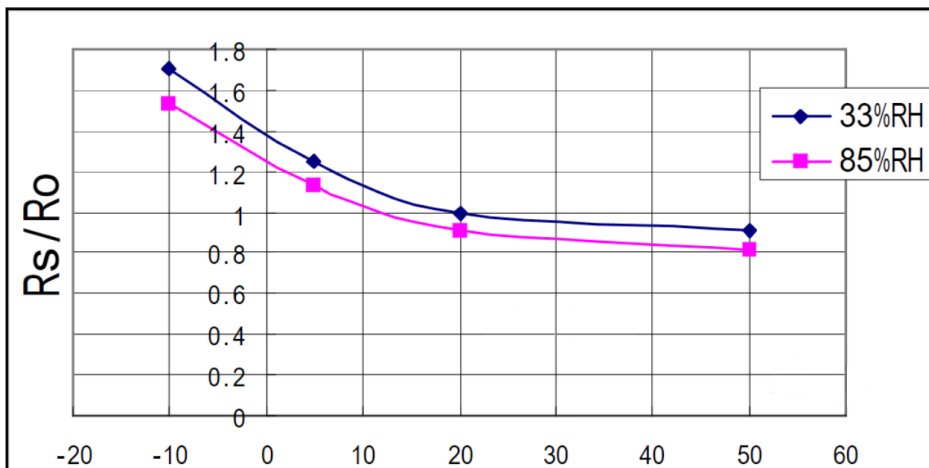| FURTHER DETAILS	
Article No.	SEN-MQ135
EAN:	4250236820002
Customs Tariff No.	90269000

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This shows the typical sensitivity characteristics of the MQ-135. Rs means resistance of the sensor in different gases, Ro means resistance of sensor in 1000ppm NH_3.

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)×RL

VC= Supply voltage; VRL= Analog pin voltage; RL= Load resistance (1,5k)