VOC Sensor

Description:
The sensors respond to changes in the composition of the ambient atmosphere.
The sensors detect a wide range of gases, including CO, NO2, NH3, CH4 as well as toxic and explosive gases in very low concentrations. Further a wide variety of volatile organic compounds (VOCs) can be measured.
These maintenance-free sensors show high sensitivity, good stability, long lifetime, and short response/ recovery times. They can be operated in a wide ambient temperature range (-40°C to +70°C) and a humidity range of 5 to 100% RH without condensation.

Chip size:	2 x 2 x 0.8 mm
Package:	CSP or QFN
Supply voltage	1,8 V up to 16.5 V (different products)
Ambient temperature range	-40° to 85°C
Ambient humidity	5 to 100% RH, non-condensing
Power consumption	20 mW (continuous measurement mode)
Typical acquisition time	1 Second
Cross sensitivity	humidity and hydrogen (compensation with integrated humidity sensor possible)
Detectable gases	VOC's: Alcohols, aldehydes, ketones, organic acids, amines, aliphatic and aromatic hydrocarbons CO2, CO, NO2, NH3, CH4 and more

Examples for achievable accuracies:

CO	05 – 500 ppm, 2 ppm detection limit
NO2	0.1 – 2 ppm, 100 ppb detection limit
CH4	0.01% - 4%, 0.01% detection limit
VOC	400-2000 ppm, 10 ppm detection limit