

# Long-Term Stable Multi-Pixel Gas Sensor

**Experts in Environmental Sensing** 

### SGP – Metal-Oxide Gas Sensor for Indoor Air Quality Applications

- Outstanding long-term stability
- Indoor air quality signals based on Sensirion's multi-pixel technology
  - Total VOC output
  - H<sub>2</sub>-based CO<sub>2</sub> equivalent output
- Very small DFN package and I<sup>2</sup>C interface



## **Multi-Pixel Gas Sensor SGP**



#### **TECHNOLOGY AND APPLICATIONS**

- Metal-oxide gas sensor for indoor air quality applications
- Based on Sensirion's multi-pixel platform and CMOSens® Technology
- Ideally suited for air purifiers, air conditioners, smart home and internet-of-things devices as well as mobile applications

#### LONG-TERM STABILITY AND RELIABILITY

- Outstanding resistance against siloxanes
- Fully qualified according to JEDEC standards
- Every sensor is fully tested during production

#### **EASY INTEGRATION**

- Two air quality signals based on multi-pixel technology
  - Total VOC output
  - H<sub>2</sub>-based CO<sub>2</sub> equivalent output
- Very small 6-pin DFN package (2.45 x 2.45 x 0.9 mm³) with I<sup>2</sup>C interface
- Fully factory calibrated

#### LONG-TERM STABILITY OF METAL-OXIDE GAS SENSORS

Traditional metal-oxide gas sensors suffer from poor long-term stability caused through irreversible contamination by Siloxanes.

#### Siloxanes are ubiquitous

- Indoor environments
- «Most abundant VOC emitted by humans»
- Consumer products

#### Siloxanes destroy metal-oxide sensors

- Significant loss of VOC sensitivity
- Strong increase of response time

Sensirion's proprietary metal-oxide technology and multi-pixel platform provide the SGP with an unmatched robustness against siloxanes resulting in unique long-term stability and accuracy.



Simulated operation time in an indoor environment based on accelerated lifetime measurements

