



# Nitrogen Dioxide Sensor with Implemented Digital Temperature Sensor and EEPROM

## 1. FEATURES

- Sensitive detection of nitrogen dioxide levels in the sub-ppm in air
- Semiconducting tungsten oxide layer
- Good response and recovery times
- Applicable in relative humidity (rh) between 0 % to 100 %
- On-chip temperature Pt1000 element
- On-chip platinum heater
- Industrial temperature range from -40 °C to +85 °C
- On-board digital temperature sensor and EEPROM with I2C® bus connectivity

## 2. APPLICATION

- Environmental control

## 3. DESCRIPTION

NO2-SW I2C is a semiconducting nitrogen dioxide sensor with a tungsten oxide based sensor element and is based on a conductometric operation principle. It contains a digital temperature sensor and an EEPROM for an advanced control of sensor characteristics in a wide temperature range of -40 to +85°C.

## 4. SIMPLIFIED SCHEMATIC

