



## Gas/Chemical Sensor Chips

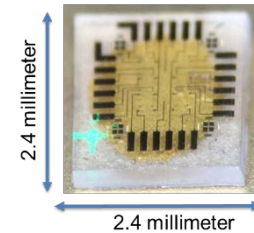
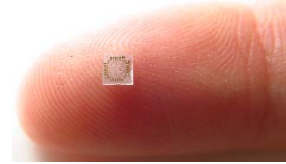
### Technology Description

N5 Sensors' chip-scale gas sensor technology represents the state-of-the-art in miniature gas sensing platform.

N5'S LOW-POWER GAS SENSOR CHIPS BRING NEW ENVIRONMENTAL DETECTION CAPABILITY TO WEARABLES AND MOBILE DEVICES.

Multiple robust micro-sensors on a single chip can detect different gases present in the air, with applications ranging from indoor air quality monitoring and personal exposure monitoring, to industrial safety. These sensors can be used in both indoor and outdoor environments in varying humidity and temperature conditions.

These sensor chips are made by standard semiconductor microfabrication processes, typically used for making integrated circuits. N5's sensors do not require heating like other MEMs based sensors, instead it uses low-power UV LEDs (off-chip) for detection of different gases with high selectivity and fast response and recovery.



### Typical Characteristics

Supply Voltage	DC 3.5 – 5 volts
Power Consumption	10 - 50 $\mu$ W
Typical Concentration Detection Range	1 ppm – 40% *
Operating Temperature Range	0 °C to 60 °C *
Operating Humidity Range	0 % to 90% *
Storage Temperature	-30 °C to 60 °C
Time for Stabilization	30 s after powered
Output Method	Change in Resistance

\* Range may vary depending on the analyte

### Detection Capability (Current and Future)

Hydrogen, Methane, Nitrogen Dioxide, Sulfur Dioxide, Hydrogen Sulphide, Carbon Monoxide, Carbon Dioxides, Volatile Organic Compounds

### Packaging

The sensor dies can be packaged in any standard SMD packages (QFP, CQFP, LGA, CSP, LCC, PLCC) and Through-Hole packages.

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