

## Effect of Temperature on Sensing Behavior in Oscillating Measurements for Doped Tin Oxide Gas Sensor

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The gas sensing behavior in oscillating and static measurements was analyzed. The temperature curves of static and oscillating measurements were compared. Temperature curves under different duty ratios, applied voltages and heating shape were studied. Experimental data showed that the most essential parameter was temperature, because any change in heating voltage and duty ratio resulted in a change in the surface temperature of the sensor element. Further necessary conditions for oscillating measurements are also discussed.

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