

## **New composite polymer sensor for vehicle weighing**

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### **Abstract**

The work presented in this paper describes a new concept of the sensor for weighing-in-motion of vehicles. This sensor has small dimensions and can be used for weighing the vehicles. The sensor has four strain gauges, two of them are external and two are embedded into polymer. It's well known that the influence of temperature can affect the measurement process and also can change the output signal of strain gauges. The hysteresis and linearity graphics of strain gauges are compared in order to establish which one has higher values. The measurements lead to interesting results which are presented in this paper.

*Keywords: sensors, weighing-in-motion of vehicles, weighing the vehicles, strain gauges*

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