

Sensors are used in the electronic market everyday such as touch-sensitive elevator buttons and lamps which dim or brighten by touching the base. There are so many applications for sensors of which most people are never aware. Applications include cars, machines, aerospace, medicine, manufacturing and robotics.

A sensor is a device which convert to electrical signal from a stimulus. Here, the term "stimulus" means a property or a quantity that needs to be converted into electrical form. Hence, sensor can be defined as a device which receives a signal and converts it into electrical form which can be further used for electronic devices. A sensor differs from a transducer in the way that a transducer converts one form of energy into other form whereas a sensor converts the received signal into electrical form only.

### Features

- Suited for cost optimized sensors: gain and offset correction by programmable coefficients.
- External or internal temperature sensor for compensation of temperature errors.
- Over-voltage protection.
- Fault detection and clamping levels.
- Ratio-metric output: 0 to 5V.
- Single Pin Digital Programming.
- Fully analog signal path.

### Applications Examples

- Pressure transducers, strain gauges, Accelerometers, position sensors, etc.
- Steering systems (e.g. torque sensors)
- Safety restraints systems (e.g. seat occupant detection)
- Braking systems (e.g. ABS, force)
- Comfort systems (e.g. air conditioning)
- Engine management (e.g. injection)



### Technical Tentative

- Compensated sensors
- Design according to customer's specification
- Wide range of temperature
- Easy mounting
- High linearity
- Microprocessor Based analog/digital
- Small package
- Target: 0,1% f.s.
- Vcc: 3.3V to 5V
- I<sub>abs</sub>: < 20mA
- I<sub>out</sub> : < 10mA