

UL 60730-2-101 Sensor Evaluation

Outlines of Investigation (OOI) Introduction

Why do sensors need to be certified?

Sensors are applied to many different products and systems to detect and measure vital parameters to help end product safety control and increase their performance. Sensor manufacturers are required to certify sensors without a specific system control function, because customers often do not know what type of product or system the sensor will be used with.

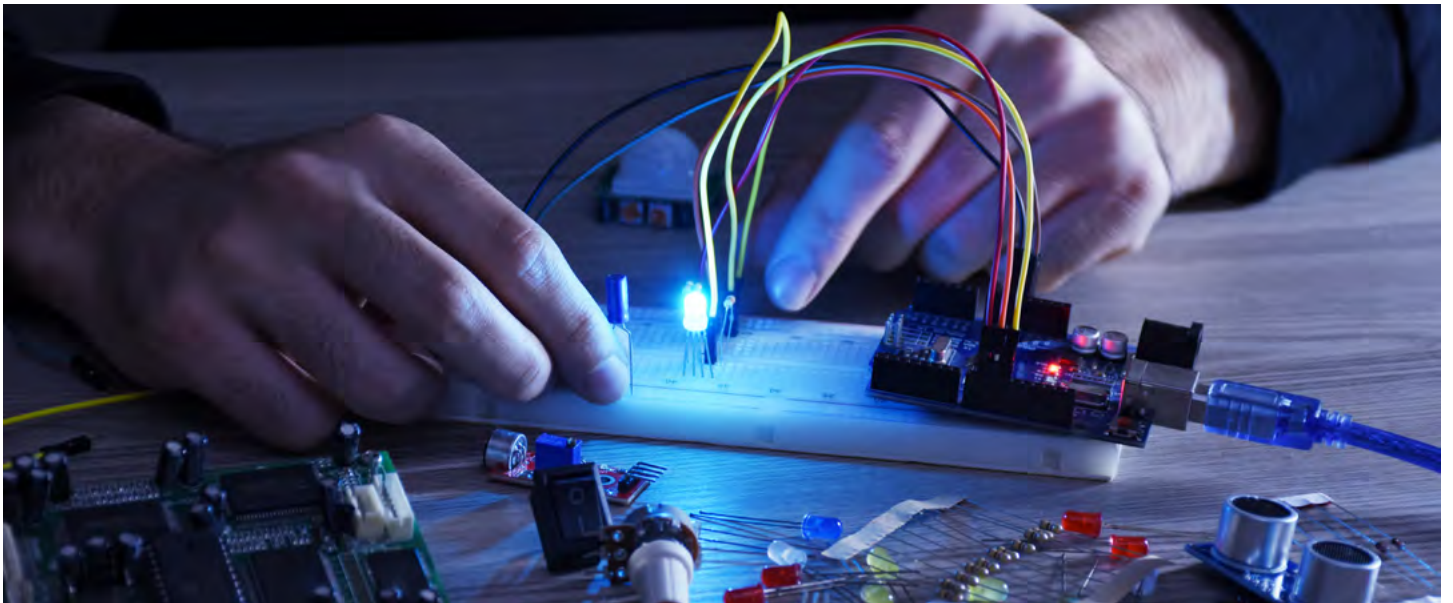
Currently, a sensor-specific safety standard does not exist, to support requests and to reduce the need for sensor redundancy, to comply with the deterministic approach to functional safety, UL 60730-2-101, Outline of Investigation for Automatic Electrical Controls - Part 2-101: Particular Requirements for Electrical Sensors and Sensing Elements, is an interim solution to facilitate sensor certification.

Your customers may ask:

- What evidence do you have that your sensors won't lose a degree or two over time?
- How can you assure us that each of your manufacturing locations delivers sensors of equal grade?
- Do you conduct any independent auditing of your manufacturing process besides ISO 9000/9001?
- How can we trust the performance of your innovative sensor?

As an independent third party and a leader in certifying sensor, electronic and control systems, UL can support you with the following services:

- Sensor certification to help differentiate you from the competition.
- Manufacturing process inspection/auditing.
- Performance evaluation and marketing claim verification.



How does UL Solutions use an Outline of Investigation to evaluate the performance of a sensor?

UL 60730-2-101 is used to evaluate a sensor's essential parameters, including deviation, drift, endurance, resistance to heat and fire, electromagnetic compatibility (EMC) and tracing resistance to corrosion and other similar specifications. These parameters are critical for sensors applied to a product or system.

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