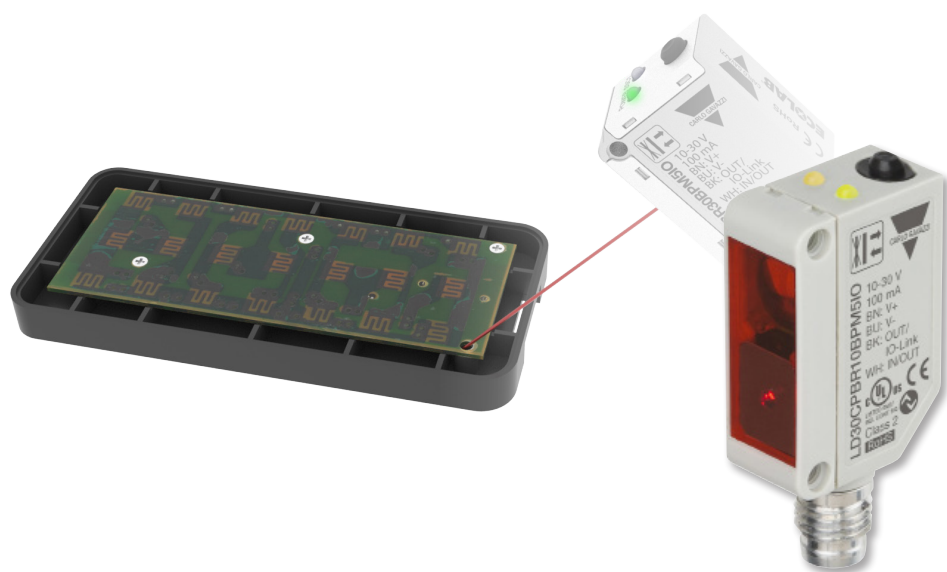


Application note



Subject:
Quality inspection - Missing part

Industry:
Semiconductor assembly lines

Product:
LD30xPBR..IO

Customer:
OEMs, System integrators

CUSTOMER ISSUE

In inspection control stations, placed along the assembly lines of various industries, it is strongly required to verify that all the mounting screws are present, before moving on to the final assembly line.

OUR SOLUTION

The LD30CPBR...IO or the LD30EPBR...IO can be set to background suppression or, in this case, to dual detection mode via an IO-Link master or our SCTL55 Smart Configurator.

The visible, round, 1 mm red laser spot is aligned to the far surface of the mounting hole with the small screw missing and is taught to recognize it as background in Dual Detection mode.

If the screw has been fitted correctly, the sensor will block the background and the small screw will be detected.

By means of IO-Link the sensor can be configured to a variety of functions.

BENEFITS

- The dual detection mode, with the small visible red laser spot, allows reliable detection of the missing part. Only a small part of the screw will block the view of the background to be detected
- In IO-Link mode, valuable downtime can be avoided thanks to the predictive maintenance functions such as Quality of Run, Quality of Teach, Temperature and dust alarms, Excess Gain, and Auto Adjustment
- In addition, the IO-Link allows easy customization of distances, timers, logic functions as well as different output configurations