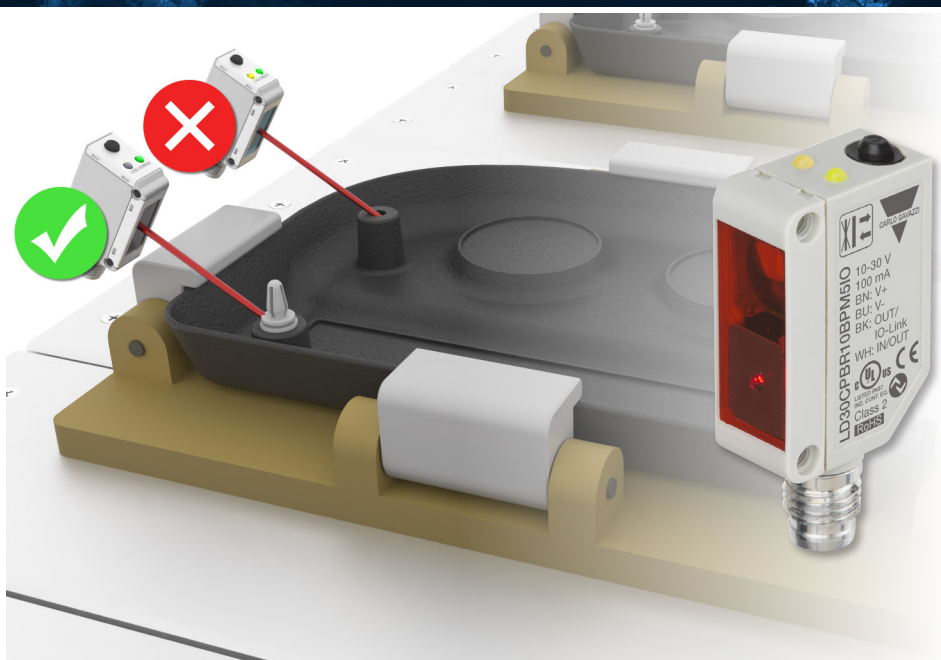


# Application note



Subject:  
**Quality Inspection - missing part**

Industry:  
**Conveyors in materials handling**  
 Product:  
**LD30xPBR..IO**

Customer:  
**OEMs, System integrators**

## CUSTOMER ISSUE

In inspection control stations, placed along assembly lines of different industries, it is a requirement to verify that all mounting clips are present before moving to the final section of the assembly line.

The clips or parts can vary in size, colour and shape.

## OUR SOLUTION

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

The small 1 mm visible round red laser spot is aligned to the background surface with the clips missing and taught in dual detection mode to recognize the background. If the clips have been correctly mounted, they will block the sensor from seeing the background and the clips 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 background. Only a small part of the clips needs to block the view if of the background to detect the clips
- 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