Sensors   **Switches**   **Controls**
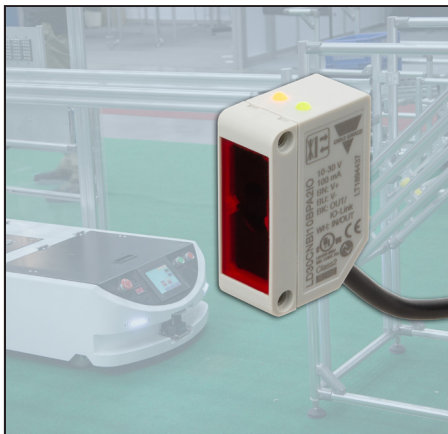
Application notes

| **Application Note :** January 2020 |
| **Market involved :** Industrial automation |
| **Product :** LD30CNBI10...IO ... ToF |
| **Customer :** - |
| **Subject :** Obstacle detection for automated guided vehicles (AGV) |

CUSTOMER ISSUE :

It is necessary to detect the presence or the absence of an obstacle at a distance of 800 to 1000 mm from the AGV side.

A standard diffuse photoelectric sensor detects objects of various colours at different distances and the ultrasonic sensors are too expensive for this application.

OUR SOLUTION :

The LD30CNBI10...IO or the LD30ETBI10...IO sensors can detect objects at a distance of up to 1000 mm, independently of the colour, structure or shape.
Moreover, the compact size makes them the perfect solution into the AGV application.

BENEFITS :

The LD30 sensor has two sensors in one, i.e. separate sensing distances can be set for output 1 and 2.

This allows the AGV to have two functions:
• the long distance detection to slow down the speed
• the short distance for full stop

These sensors are also equipped with IO-Link connection for easy customization of distances, timers, logic functions as well as different output configurations.