

# The twin-sensor solution TPS 100 / 200 / 210

The TPS (triangulation proximity switch) product family is a range of very precise, active infrared proximity sensors with background suppression. Due to their very high sensitivity, they are able to monitor distances of up to two meters with non-cooperative targets. The sensor contains two fully independent sensor beams within the same housing. This unique concept enables applications such as reliable object detection, people counting, direction recognition of moving objects, height recognition, etc.; applications that would not be easily possible with two

### **Application areas:**

- Door opening in public buildings
- Door opening for interior sliding doors in trains
- Door opening for elevators
- Object detection at gates and sluices
- Direction recognition of moving objects
- People counting and many more

separate sensors. The sensing range can be manually adjusted between 0.3 m and 2 m. The detection principle is based on precise triangulation technology.

This technology is ideal for excellent background suppression and low distance variation between black and white objects. Therefore, the sensor is insensitive to variable ambient light conditions.

#### **TPS - Copes with all lighting conditions!**





#### At a glance

- Infrared sensor based on triangulation proximity technology
- Built-in signal processing
- Insensitive to variable light conditions
- Plug-and-play system
- Easy to install
- Integrated status LEDs
- Eye-safe
- TPS 100 for presence detection
- TPS 200 for level detection
- TPS 210 for direction recognition

The TPS sensor can be used in a wide range of applications. Whether to simply detect an object or people at a certain spot, distinguish between children and adults at an entrance or even to count people moving in or out of a building or public transportation - the TPS 100 / 200 / 210 can do it all. A reliable detection sensor has to work in all ambient light conditions. Normal infrared sensors reach their limits detecting gray objects against a dark background. The new TPS family is unaffected by light conditions as it is based on triangulation proximity technology; i.e. it measures the angle of the reflected light. This results in precise and reliable detection.



PRELIMINARY

Housing of TPS 100 / 200 / 210

## **Application examples**



Object detection with the TPS 100



Level detection with the TPS 200



People counting with a TPS 210 in a building



People counting with a TPS 210 in a public transportation application