



# OGD distance measurement sensor detects errors to improve product quality

Position sensors



[ifm.com/us](https://ifm.com/us)

# Precision sensor for error-proofing improves product quality

OGD Series Laser Sensors



*What if your optical sensor could see whether a small part was missing, upside down or misaligned before it moved to the next assembly step?*

ifm's innovative OGD Series photo-electric sensors are designed with a powerful laser source that can detect deviations in the position of tiny parts via distance measurement.

The sensor's Time of Flight measurement principle with PMD technology provides reliable sensing, background suppression, visible red light spot for setup and high excess gain.

Whether shiny, matte, dark or light objects, the OGD Series offers superior optical performance independent of target color, surface texture or reflectivity.

With precision sensing features, pmd technology, and a list price of \$265, the OGD Precision sensor is your assistant wherever improving product quality is needed.

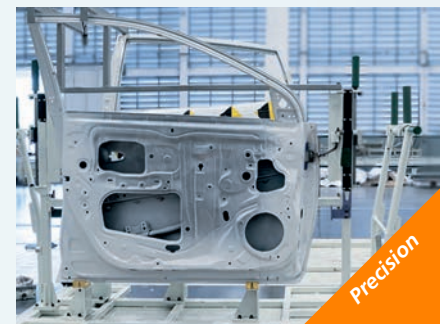


## **Reliable detection of tiny parts**

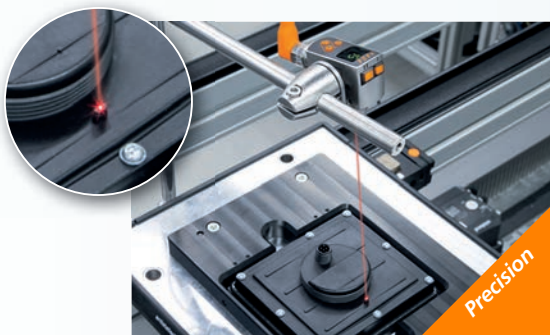
*The OGD Precision sensor is ideal for error-proofing. The 1 mm diameter laser light spot easily detects the slightest change in part orientation.*

*In this example, the sensor is able to detect whether the O-ring is correctly positioned on the workpiece via the set distance measurement.*

Precision



Precision



## **Accurate position monitoring**

*The OGD Precision sensor locates a miniature plastic lug to verify that it is correctly positioned on the carrier before the workpiece is transferred to the next assembly station.*

*If the workpiece is incorrectly positioned, the distance will be a few millimeters more. The sensor detects and signals this deviation.*

Precision



Precision



# OGD with simple setup applies Time of Flight measurement via PMD Technology

Two highly visible LEDs indicate switching status and power.

Compact profile fits limited mounting space. Robust stainless steel housing.

Two-color digital display shows the distance set (mm or inches are selectable).

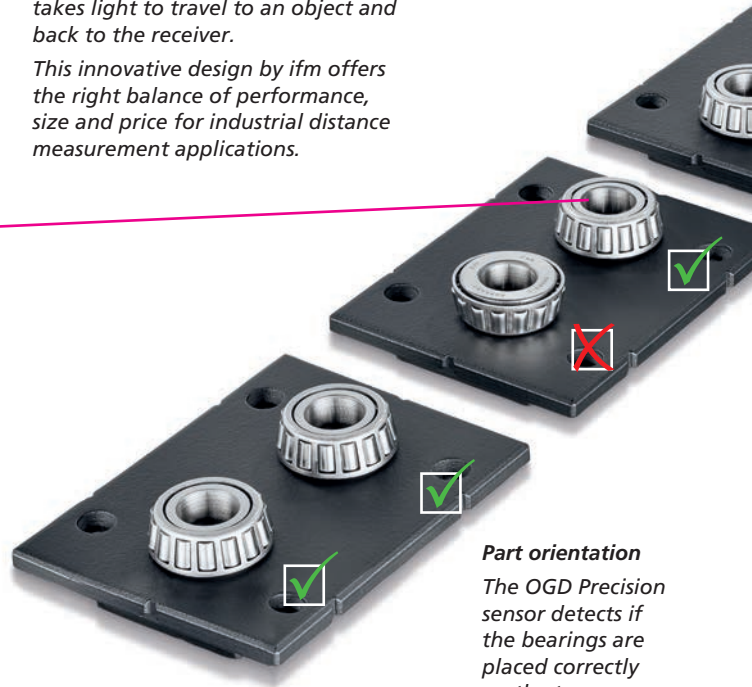
Use the display to set the distance: Simply measure the distance to the target and align the sensor using the visible red light spot. Use the arrows and enter button to set the distance. That's it!

Or, set the distance via IO-Link's Line Recorder Device, ifm's digital transmission interface.



PMD "time-of-flight" principle measures a distance based on the time it takes light to travel to an object and back to the receiver.

This innovative design by ifm offers the right balance of performance, size and price for industrial distance measurement applications.



**Part orientation**  
The OGD Precision sensor detects if the bearings are placed correctly on the trays.



Class 1 laser can be rotated in any position for application versatility.

## Improve product quality – reduce costs

The OGD Precision sensor verifies the presence of punch-outs in body-in-white, allowing for errors to be detected immediately – not after the next work step or, worse, after delivery to the customer.

OGD Precision is your assistant to in-line quality checks!

## Innovative PMD technology

The OGD high resolution background suppression laser sensors are ideal for precise sensing applications. The PMD sensor measures the distance to the target regardless of color and will not signal a false trigger from surrounding highly reflective surfaces such as oil or stainless steel.



Version	Measuring range [mm]	Background suppression [m]	Spot Ø at max. range [mm]	Part no.	List price
<b>PNP complementary · M12 connector</b>					
<b>OGD Precision</b>	25...300	...18	3*	<b>OGD592</b>	<b>\$265.00</b>

\*spot Ø focused (at 150 mm): 1 mm

## Accessories

Type	Description	Part No.	List Price
	Mounting set for clamp mounting, M10 thread, diecast zinc	<b>E20718</b>	<b>\$12.00</b>
	Mounting set for clamp mounting, M10 thread, stainless steel	<b>E20870</b>	<b>\$17.00</b>
	LineRecorder Device, software for parameter setting (requires E30390 cable)	<b>QA0011</b>	<b>\$110.00</b>
	USB IO-Link master cable for parameter setting	<b>E30390</b>	<b>\$367.00</b>
	Memory plug to store sensor's parameters for easy upload without a computer	<b>E30398</b>	<b>\$51.00</b>
	Straight cordset, M12 Micro DC (4-pin) 5 m, PUR	<b>EVC002</b>	<b>\$15.00</b>
	Right angle cordset, M12 Micro DC (4-pin) 5 m, PUR	<b>EVC005</b>	<b>\$15.00</b>





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**ifm people.** The ifm team of employees is committed to helping you succeed in your business. We directly service and work with over 22,000 customers in the US.

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