

OGD Cube photoelectric distance sensors with time of flight technology



ifm.com/gb/ogdcube

OGD Long Range: designed for long ranges OGD Precision: adjustable to the nearest millimetre



PMDLine:

Small compact design with standard M18 thread and time of flight technology.

To the nearest millimetre:

Visualisation and setting of the distance value via IO-Link and 2-colour display on the unit.

Easy handling:

Easy setting with 3 buttons or IO-Link.

Reliable detection:

Sensors with laser protection class 1, perfectly suited for all industries.

OGD Long Range:

Excellent range of 1.5 m – independent of the colour.

OGD Precision:

For precise distance measurement to within a millimetre.



Tried-and-tested PMD technology

The PMD sensors measure the distance irrespective of the surface colour. Even ambient light sources as well as reflective, oily surfaces or very dark objects are no problem. One typical application area for the OGD Long Range is conveying, e.g. parcel detection.



Version	Measuring range [mm]	Background suppression [m]	Spot Ø at max. range [mm]	Unit of measurement	Order no.
PNP complementary · M12 connector					
OGD Long Range	251,500	20	5	mm, inches (selectable)	OGD580
OGD Precision	25300	18	3*	mm, inches (selectable)	OGD592

^{*}spot Ø focussed (at 150 mm): 1 mm





PMD distance measurement

The OGD type sensors use the innovative on-chip time-of-flight measurement system with PMD (photonic mixer device) technology.

These class 1 laser sensors perform more reliably than conventional red light sensors even in very demanding circumstances e.g. in detecting shiny metallic surfaces.

The excellent reflection resistance and background suppression, together with a high excess gain, enable reliable operation.

The switch point is easily set to the nearest millimetre via the three operating buttons or alternatively via IO-Link, which also allows read-out of the current distance value.

OGD Long Range

The Long Range version is distinguished by a range of up to 1.5 m, independent of the colour.

Typical applications are found in the automotive industry, conveying and materials handling.

OGD Precision

This OGD version is perfectly suited for verifying the presence of parts, by means of the distance information, or their correct installation, e.g. if an O-ring has or has not been mounted. Its extremely small light spot even allows for detection of tiny parts. The PMD technology of the OGD is vastly superior to conventional diffuse reflection laser sensors.

Position detection

For example, the sensor is able to detect if the rolling element bearings are placed correctly on the trays.















Increase quality - reduce costs

In the context of in-line quality checks, the OGD Precision is, for example, able to verify the presence of punch-outs in body-in-white, allowing for errors to be detected immediately and not only after the next work step or, worse, after delivery to the customer.

Reliable detection of tiny parts

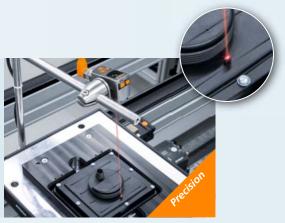
As the light spot has a diameter of around 1 mm, the OGD Precision is ideal for errorproofing applications.

The sensor is, for example, able to detect if the O-ring is correctly positioned on the workpiece.

Position monitoring

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

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





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