

Laser distance sensor

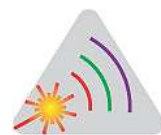
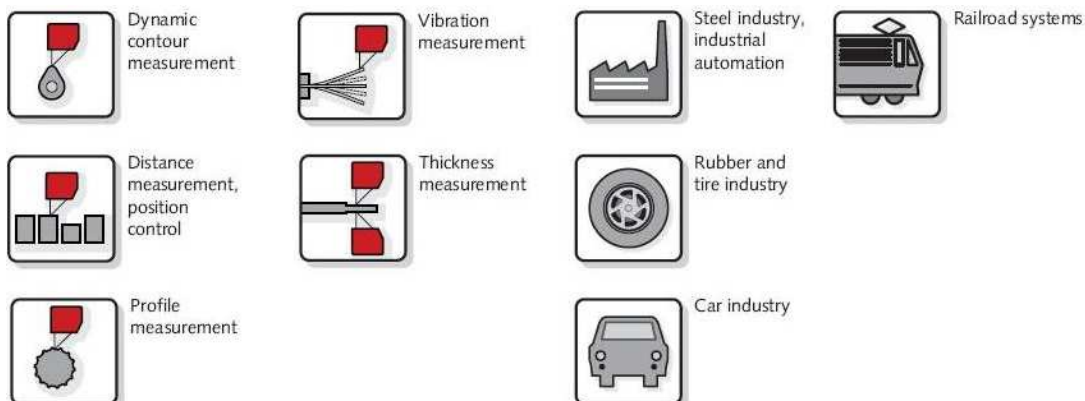
OPTImessS3 CCD

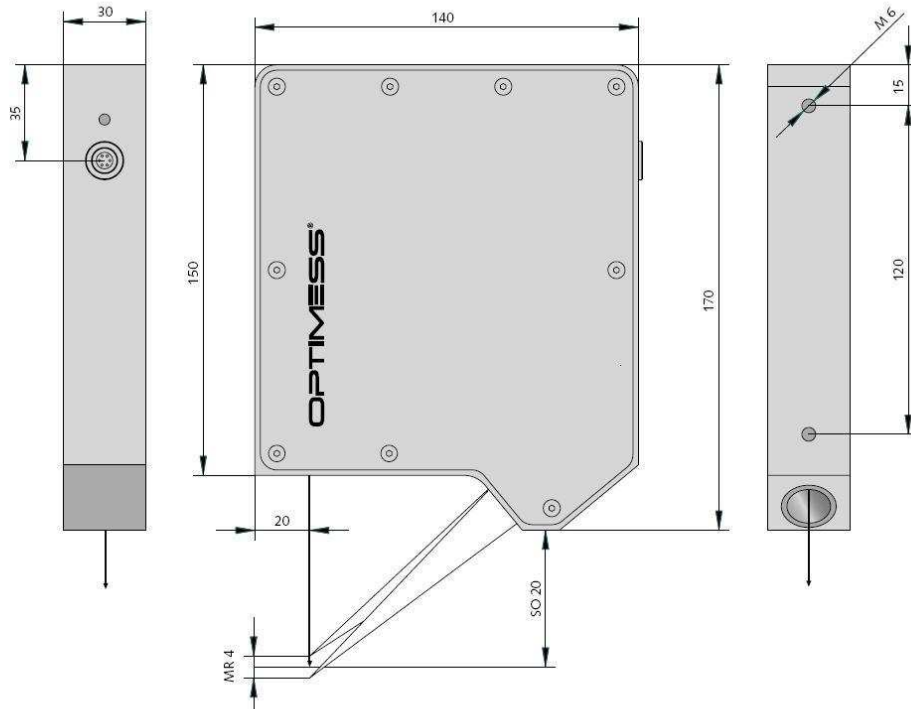


- High measuring rate
- Meets the highest requirements
- Digital processing of measured values
- Analog output or CAN bus

The optoelectronic sensor OPTIMESS S3 CCD is a device for no-contact distance measurement. This sensor distinguishes itself by a great independence of the measurement accuracy on different material surfaces and from the ambient light.

The OPTIMESS S3 CCD works according to the triangulation principle. The laser spot projected by a laser diode via an optical system is represented at an angle on a CCD line by a receiving optical system. The processor integrated in the sensor processes the optical distance information and outputs them as an analog value or via the CAN bus.





Type	OMS 5804	OMS 5808	OMS 5812	OMS 5820	OMS 5840	OMS 5880
Measuring range [mm] [3]	4	8	12	20	40	80
Stand off [mm] [3]	20	20	50	50	100	150
Resolution [mm] [1]	0,001	0,002	0,003	0,005	0,010	0,020
Linearity	≤ ± 0.04% of range					
Reproducibility	≤ ± 0.02% of range					
Bandwidth [2]	20 kHz max.					
Filter [2]	Digital averaging					
Measuring rate [2]	20 kHz max.					
Light source	Laser diode					
Spot diameter [2]	0.01 – 0.5mm					
Wave length [2]	660 - 780nm					
Laser safety class [2]	2 / 3R / 3B					
Photo detector	CMOS linear image sensor					
Supply voltage	± 15V / 120mA, ± 5% or 12 - 30V / 120mA [4]					
Output [2]	± 5V / ± 10V / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus					
Operating temperature	-20°C up to 50°C – no condensation					
Dimensions	140 x 170 x 30mm					
Weight	ca. 920g					
Protection class	IP 54 / IP 65					

[1] Standard settings with filter 200Hz

[3] Other types upon request

[2] Factory-set depending on the application

[4] only unipolar output and CAN Bus

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