

Laser distance sensor

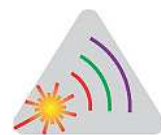
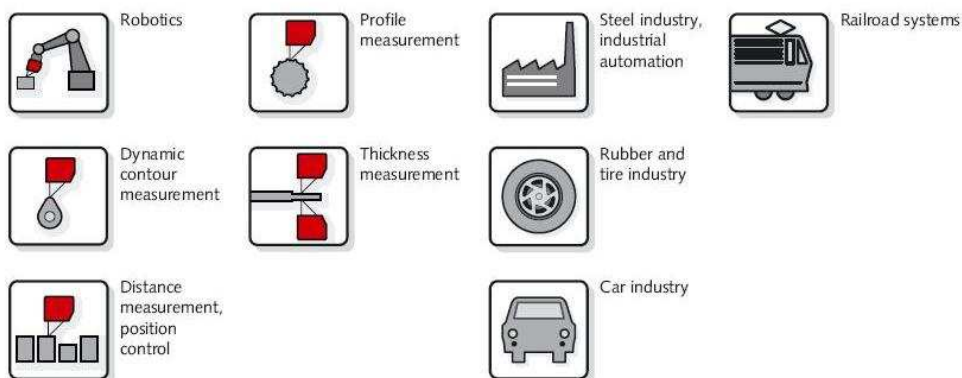
OPTImessM CCD

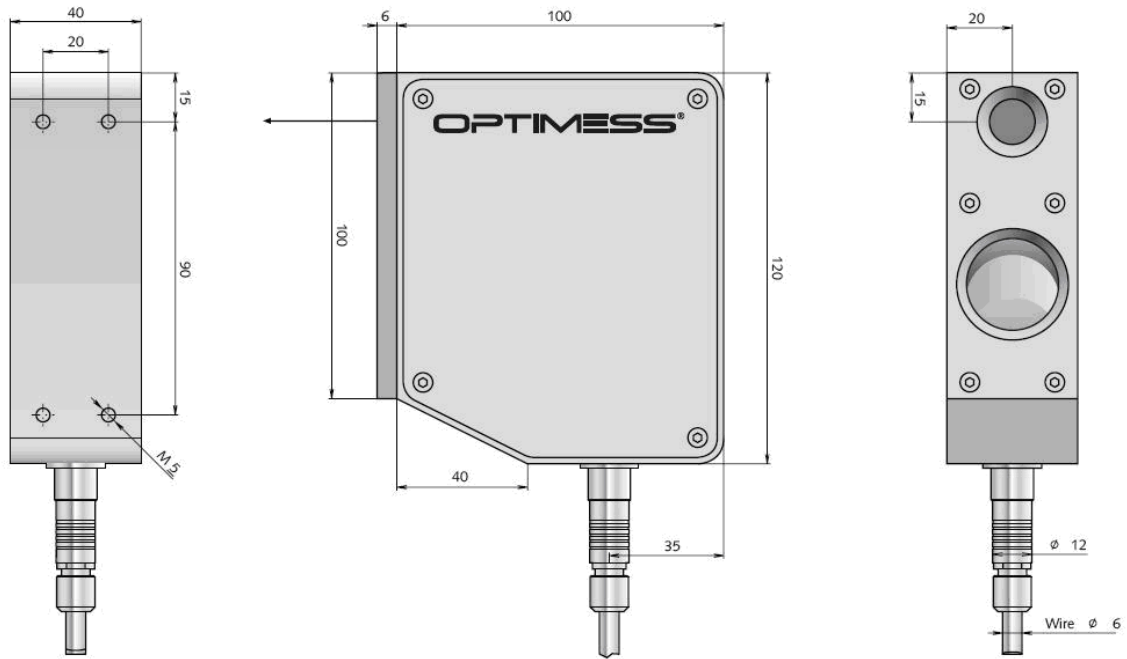


- High measuring rate
- High accuracy
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor OPTIMESS M 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 M 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 8008	OMS 8020	OMS 8040	OMS 8080	OMS 8120	OMS 8200
Measuring range [mm] [3]	8	20	40	80	120	200
Stand off [mm] [3]	50	100	150	200	300	400
Resolution [mm] [1]	0,002	0,005	0,010	0,020	0,030	0,050
Linearity	≤ ± 0.06% of range					
Reproducibility	≤ ± 0.03% of range					
Bandwidth [2]	20 kHz max.					
Filter [2]	Digital averaging					
Measuring rate [2]	20 kHz max.					
Light source	Laser diode					
Spot diameter [2]	0.05 - 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, optional: 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus					
Operating temperature	-20°C up to 50°C – no condensation					
Dimensions	120 x 100 x 40mm					
Weight	ca. 820g					
Protection class	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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