

Laser distance sensor

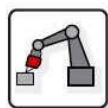
OPTImess MR CCD



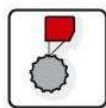
- Large measuring ranges
- High measuring rate
- High accuracy
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor OPTIMESS MR 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.

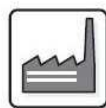
The OPTIMESS MR CCD works according to the triangulation principle. The laser spot projected by a laser diode via an optical system is represented at an angle on a CCD line by a receiving optical system. The processor integrated in the sensor processes the optical distance information and outputs them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



Robotics



Profile measurement



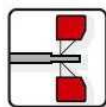
Steel industry, industrial automation



Railroad systems



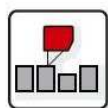
Dynamic contour measurement



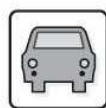
Thickness measurement



Rubber and tire industry

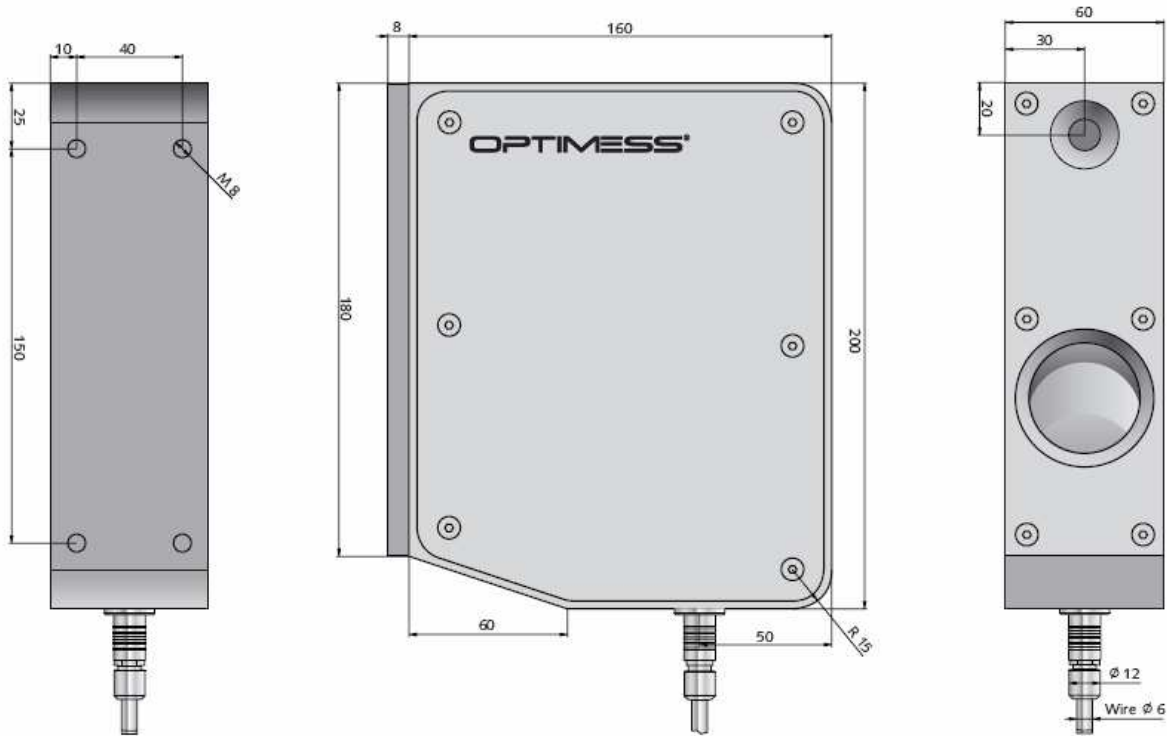


Distance measurement, position control



Car industry





Type	OMS 7505	OMS 7510	OMS 7520	OMS 7540	OMS 7560	OMS 7580
Measuring range [mm] [3]	50	100	200	400	600	800
Stand off [mm] [3]	200	300	400	800	1000	1200
Resolution [mm] [1]	0,010	0,025	0,050	0,100	0,150	0,200
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 / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus					
Operating temperature	-20°C up to 50°C – no condensation					
Dimensions	200 x 160 x 60mm					
Weight	ca. 2700g					
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

