

Laser distance sensor

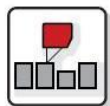
OPTImessMC



- Minimum size and weight
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor OPTIMESS MC 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 MC 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.



Distance measurement, position control



Steel industry, industrial automation

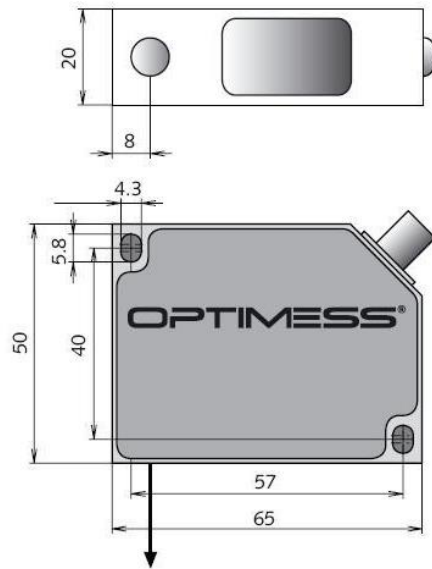


Thickness measurement



Car industry





Typ	OMS 4108	OMS 4120	OMS 4125	OMS 4140
Measuring range [mm] [3]	80	200	250	400
Stand off [mm] [3]	70	150	225	300
Resolution [mm] [1]	0.03	0.06	0.08	0.1
Spot size (SO) [mm]	0.3	0.6	1.0	1.3
Linearity	$\leq \pm 0.3\%$ FSO			
Reproducibility	$\leq \pm 0.1\%$ FSO.			
Bandwidth [2]	1 kHz max.			
Filter [2]	Digital averaging			
Measuring rate [2]	2 kHz			
Light source	Laser diode			
Spot diameter [2]	0.05 - 5mm			
Wave length [2]	660 nm			
Laser safety class [2]	2 / 3R			
Photo detector	CMOS linear image sensor			
Supply voltage	10 - 30V / 100mA			
Output [2]	0 - 5V			
Operating temperature	-20°C up to 60°C – no condensation			
Dimensions	65 x 50 x 20mm			
Weight	approx. 95g			
Protection class	IP 65			

[1] Standard settings with filter
200Hz

[2] Factory-set depending on the
application

[3] Other types upon request

