OPTIMESS®
The non-contact measurement system

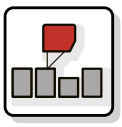
Laser distance sensor

OPTIMESS MC

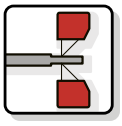
- Minimum size and weight
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor OPTIMESS MC is a device for non-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 linescan image sensor 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.

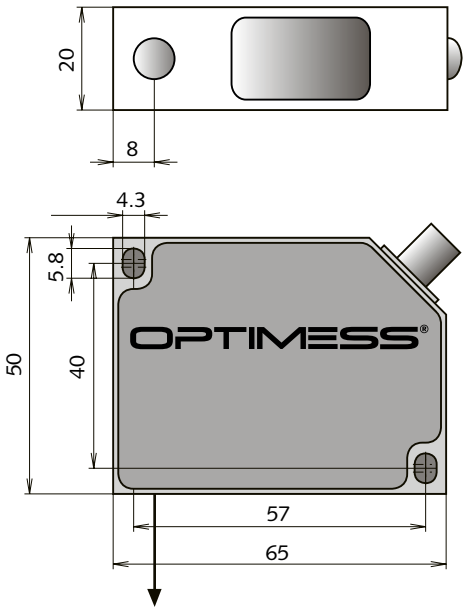

Distance measurement, position control


Steel industry, industrial automation


Thickness measurement


Car industry

ELAG Elektronik AG | Stegackerstrasse 14 | CH-8409 Winterthur
Tel +41 52 235 15 50 | Fax +41 52 235 15 59 | info@elag.com



Technical data

	OMS 4108	OMS 4120	OMS 4122	OMS 4140
Measuring range [mm] [3]	80	200	200	400
Stand off [mm] [3]	70	150	300	300
Resolution [mm] [1]	0.040	0.100	0.100	0.200
Linearity	≤ ± 0.3% FSO			
Reproductibility	≤ ± 0.1% FSO			
Bandwidth [2]	1 kHz max.			
Filter [2]	Digital averaging			
Measuring rate	1 kHz			
Light source	Laser diode			
Spot diameter [2]	0.05–5 mm			
Wave-length [2]	660–780 nm			
Laser safety class [2]	2 / 3R / 3B			
Photo detector	CMOS Linear image sensor			
Supply voltage	10–30 V / 100 mA			
Output [2]	0–5 V / 0–20 mA / 4–20 mA / CAN - Bus			
Operating temperature	-20°C bis 50°C (no condensation)			
Dimensions	65 x 50 x 20 mm			
Weight	approx. 95 g			
Protection class	IP 65			

[1] Standard settings with filter 200Hz [2] Factory-set depending on the application [3] Other types upon request