

# Laser distance sensor

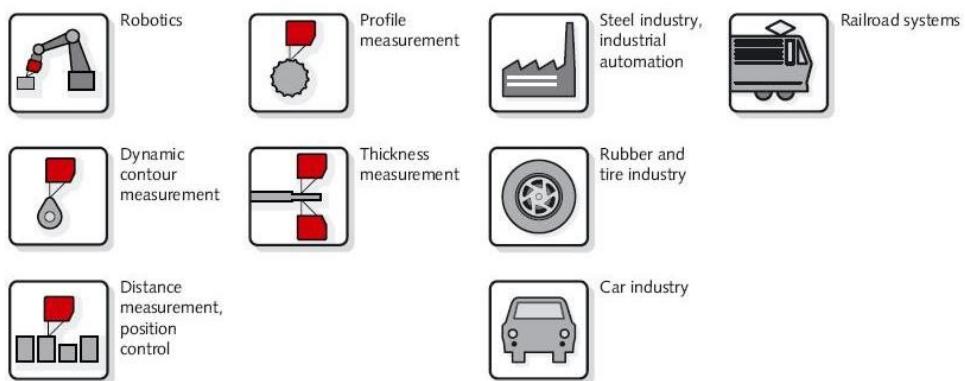
## OPTImess M CCD

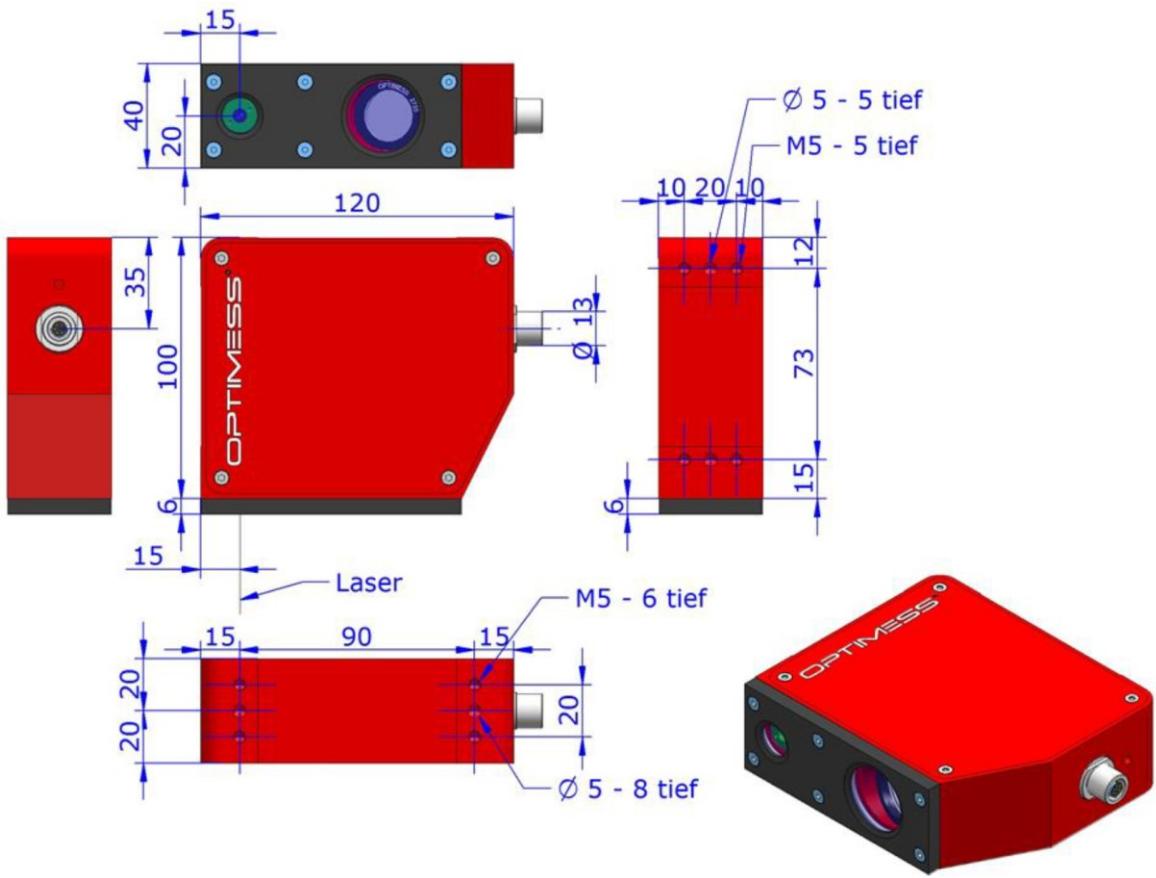


- High measuring rate up to 100 kHz
- High accuracy
- Very high robustness, IP 67
- Insensitive to sunlight
- Analog output or CAN bus

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.

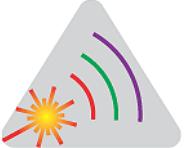




Type OMS	8008	8012	8020	8040	8080	8120	8200
Measuring range [mm]	8	12	20	40	80	120	200
Stand off [mm]	50	75	100	150	200	300	400
Resolution [mm] *	0.001	0.001	0.002	0.004	0.010	0.015	0.050
Linearity	$\leq \pm 0.06\%$ of measuring range						
Reproducibility	$\leq \pm 0.03\%$ of measuring range						
Max. measurement rate	100 kHz.						
Wave length	405 – 850 nm, depending on the application						
Laser safety class	1 / 2 / 3R / 3B						
Vibration	10 – 100 Hz, 2mm						
Supply voltage	10 - 32V DC						
Output	$\pm 5V$ / $\pm 10V$ / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus						
Ambient light	> 100.000 Lux (sun light)						
Shock	50G / 6ms, EN 60068						
Temperature range	-20°C bis 60°C (optionally expandable up to -40°C)						
Humidity	5% - 95%, no condensation						
Dimensions	120 x 106 x 40mm						
Power	2 – 4 W						
Weight	ca. 820g						
Protection class	IP 67 (even when unplugged)						
Environment, security	EN 50155						
Authorization	CE						

[\*] Measurement rate  $\leq 10$  kHz

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