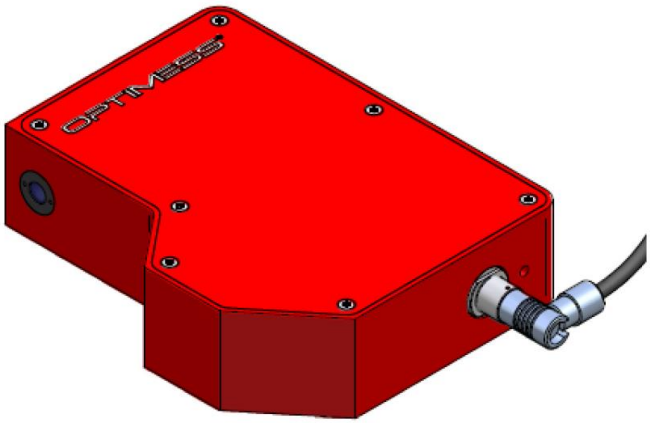
Laser distance sensor

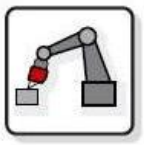
OPTI*mess* MSR CCD



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

The opto-electronic sensor OPTImess MSR CCD is a special design of the OPTImess M and 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 MSR 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 analogue value or via the CAN bus.



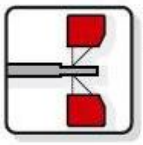
Robotics

Profile measurement

Steel industry, industrial automation

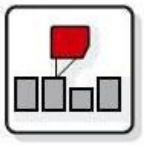
Railroad systems

Dynamic contour measurement



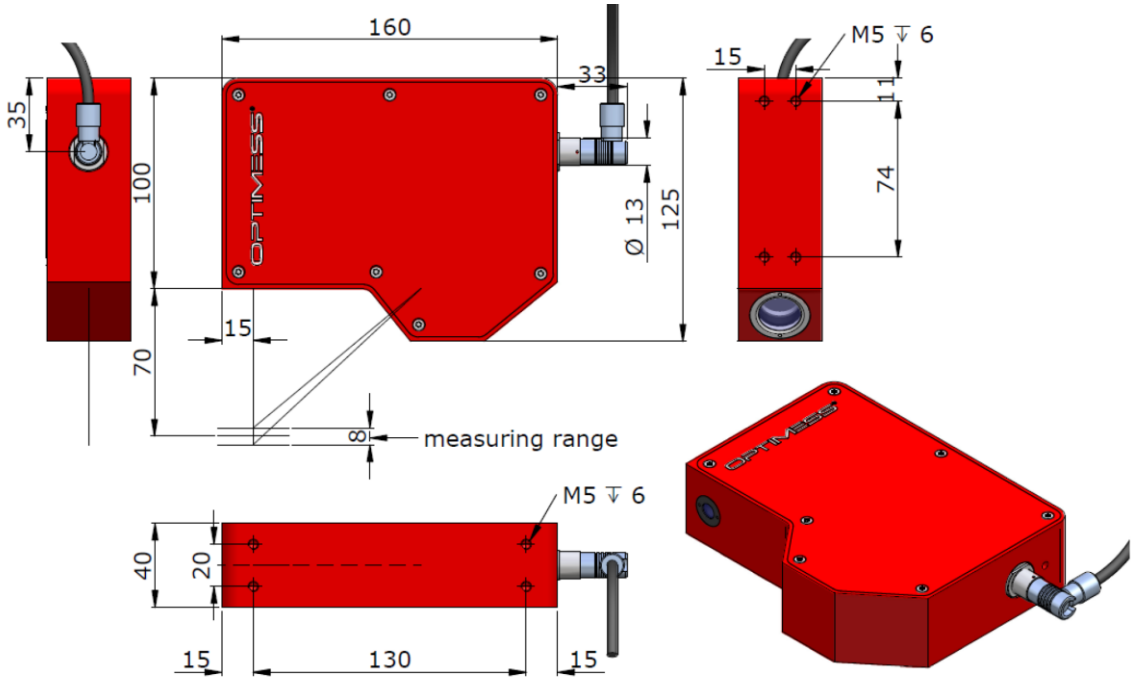
Thickness measurement

Rubber and tire industry



Distance measurement, position control

Car industry



Type	**OMS 8005**	**OMS 8006**	**OMS 8009**
Measuring range [mm *	4	6	8
Stand off [mm *	70	70	70
Resolution [mm] *	0,00025	0,0004	0,0005
Linearity *	≤ ± 0.06% of range		
Reproducibility	≤ ± 0.03% of range		
Bandwidth *	50 kHz max.		
Filter *	Digital averaging		
Measuring rate *	20 kHz max.		
Light source	Laser diode		
Spot diameter *	0.05 - 2mm		
Wave length *	400 - 790nm		
Laser safety class *	2 / 3R / 3B		
Photo detector	CCD linear image sensor		
Supply voltage	± 15V / 120mA, ± 5% or 12 - 30V / 120mA [4]		
Output *	± 5V / ± 10V / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus		
Operating temperature	-20°C up to 50°C – no condensation		
Dimensions	160 x 100 x 40mm		
Weight	ca. 1,1kg		
Protection class	IP 65		

[1] Standard settings with filter 200Hz
[2] Factory-set depending on the application
[3] Other types upon request
[4] only unipolar output and CAN Bus

* Factory-set depending on the application