

# Laser Distance Sensor

## OPTImess MMR CCD (short measuring range)



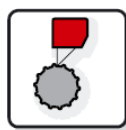
- Short measuring ranges
- High measuring rate
- High accuracy
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor **OPTImess MMR** is a device for non-contact distance measurement especially for bigger distances. This sensor distinguishes itself by a great independence of the measurement accuracy on different material surfaces and of the ambient light.

The **OPTImess MMR** 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



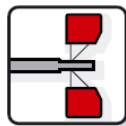
Steel industry,  
Industrial  
automation



Railway



Dynamic  
contour  
measurement



Thickness  
measurement



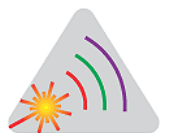
Rubber and  
tire measurement

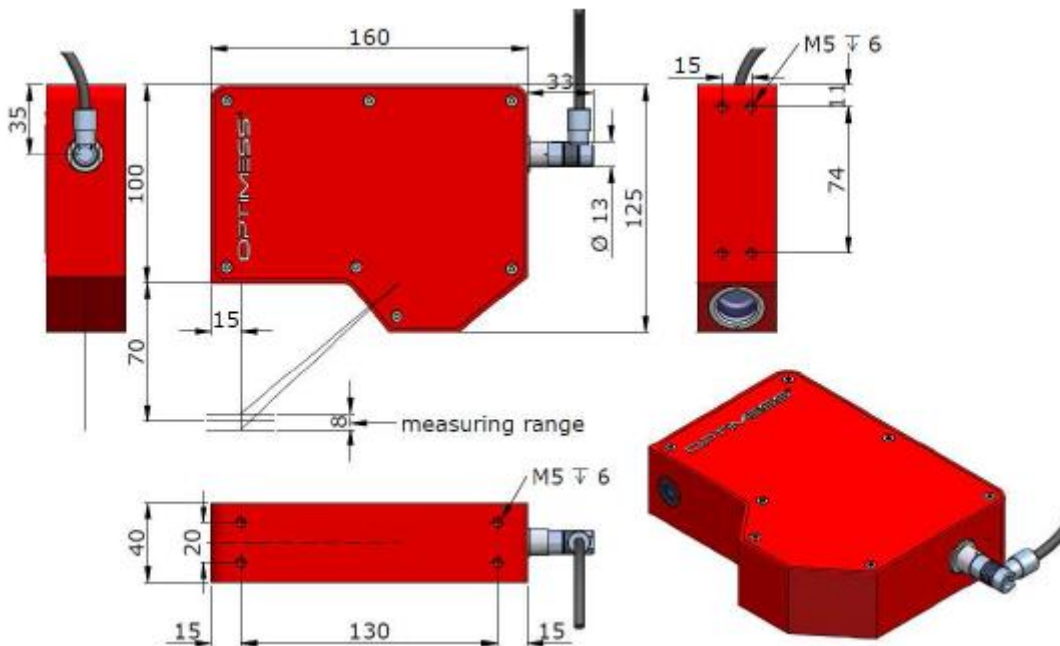


Distance  
measurement,  
Position control



Car industry





Type	OMS 8005	OMS 8009	OMS 8012
Measuring range [mm] [1]	4	8	12
Stand off [mm] [1]	70	70	70
Resolution [mm] [1]	0,00025	0,0005	0,00075
Linearity [1]	≤ 0.06% of measuring range		
Reproducibility [1]	≤ 0.03% of measuring range		
Limiting frequency [1]	20 kHz max.		
Filter type [1]	digital, averaging		
Measuring frequency [1]	20 kHz max.		
Light source	Laser diode		
Spot size [1]	0.05 - 2mm		
Wavelength [1]	650 - 790nm		
Laser class [1]	2 / 3R / 3B		
Photo detector	CMOS linear image sensor		
Power supply	10 - 30V / 120mA		
Output signal [1]	± 5V / ± 10V / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus		
Temperature range	-20°C bis 50°C not condensing		
Dimensions	160 x 100 x 40mm		
Weight	ca. 1100 g		
Protection class	IP 65		

[1] Specification may vary and are stated on the specification sheet provided with each sensor