

# Laser Distance Sensor

## OPTImess MMR CCD (large measuring range)



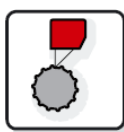
- Large measuring ranges
- High measuring rate
- High accuracy
- Digital processing of measured values
- Analog output or CAN bus

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



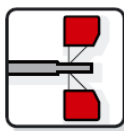
Steel industry,  
Industrial  
automation



Railway



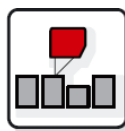
Dynamic  
contour  
measurement



Thickness  
measurement



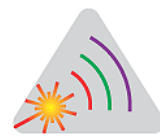
Rubber and  
tire measurement

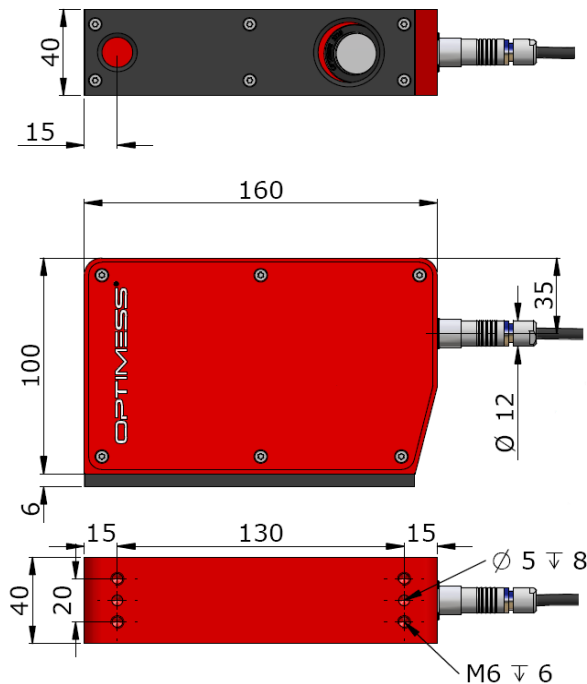


Distance  
measurement,  
Position control



Car industry





Measuring range [mm]	900	1260
Stand off [mm]	1100	1630
Resolution [mm] [1]	0,22	0,8
Linearity	≤ 0.2% FSO	
Reproducibility	≤ 0.08% FSO	
Bandwidth [2]	16 kHz max.	
Filter [2]	digital, averaging	
Measuring rate [2]	20 kHz max.	
Light source	Laser diode	
Spot diameter [2]	0.05 - 5mm	
Wave-length [2]	660 - 780nm	
Laser safety class [2]	3R / 3B	
Photo detector	CCD linear image sensor	
Supply voltage	± 15V / 150mA, tolerance ± 5% or 10 - 30V (only 0...5V output)	
Output [2]	± 5V / ± 10V / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus	
Operating temperature	-20°C to 50°C non condensation	
Dimensions	160 x 100 x 40mm	
Weight	ca. 1000g	
Protection class	IP 65	

[1] Standard settings with filter 20Hz [2] Factory-set depending on the application

