

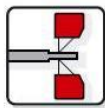
Laser-Distance-Sensor OPTIMESS MR PSD



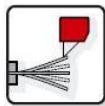
- Large measuring ranges
- High measuring rate
- High accuracy
- High immunity against ambient light

The opto-electronic sensor OPTIMESS MR PSD 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.

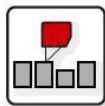
OPTIMESS MR PSD works according to the triangulation principle. The laser spot projected by a laser diode via an optical system is represented at an angle on a PSD (position sensitive detector) by a receiving optical system. The processor integrated in the sensor processes the optical distance information and outputs them as an analog value.



Thickness measurement



Vibration measurement



Distance measurement, position control



Steel industry, industrial automation



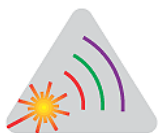
Rubber and tire industry

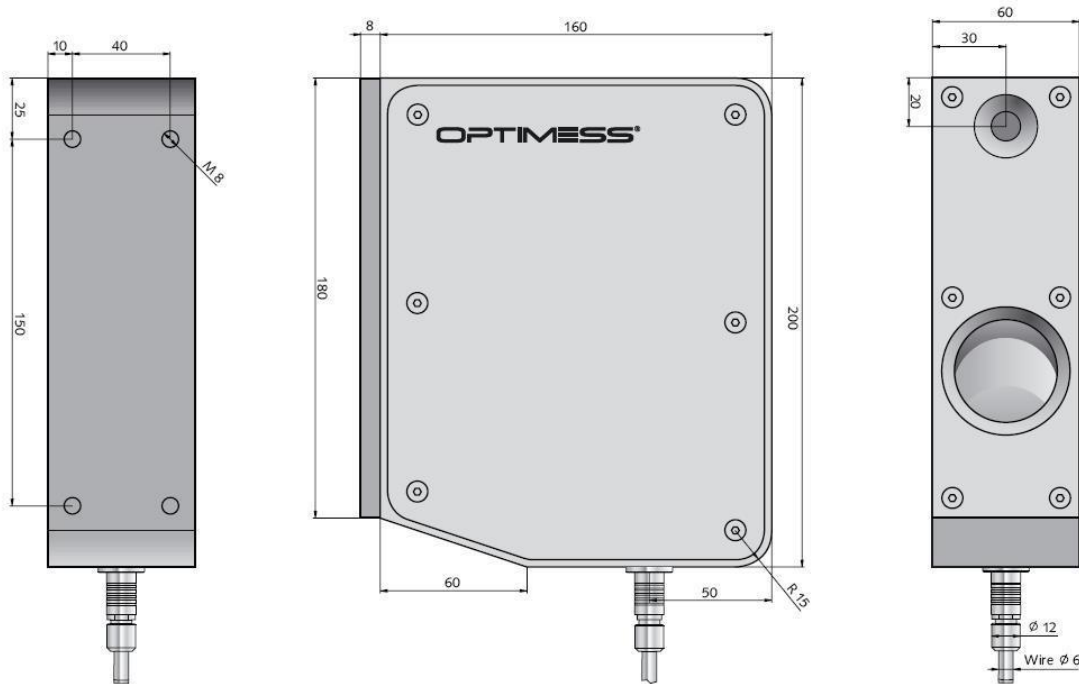


Car industry



Railroad systems



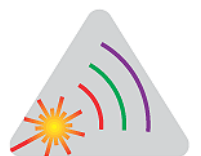


Technical data

	OMS 7005	OMS 7010	OMS 7020	OMS 7040	OMS 7060	OMS 7080
Measuring range [mm][3]	50	100	200	400	600	800
Stand off [mm][3]	200	300	400	800	1000	1200
Resolution [mm] [1]	0.025	0.050	0.100	0.200	0.300	0.400
Linearity	≤0.2% FSO					
Reproductibility	≤0.05% FSO					
Bandwidth [2]	20 kHz max.					
Filter [2]	Bessel or Butterworth					
Measuring rate	50 kHz					
Light source	Laser diode					
Spot diameter [2]	0.05-5mm					
Wave-length [2]	660-780nm					
Laser safety class [2]	2 / 3a / 3b					
Photo detector	PSD					
Supply voltage	±15V, ±5% / 150mA					
Output [2]	±5V / ±10V, optional: 0-5V / 0-10V / 0-20mA / 4-20mA / CAN-Bus					
Operating temperature	-20°C bis 50°C (no condensation)					
Dimensions	200 x 160 x 60mm					
Weight	ca. 2700g					
Protection class	IP 65 (without protection unit: IP 54)					

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

Dr. D. Wehrhahn
Meßsysteme für die Qualitätssicherung



Hildesheimer Straße 140 D-30173 Hannover

Fon +49 511 51 26 65

Mail info@drwehrhahn.de

Fax +49 511 52 21 52

Web www.drwehrhahn.de