OPTIMESS® M

Overview

- **high measurement rate up to 100 kHz**
- **high precision**
- **very high robustness, IP 67**
- **insensitive to sunlight**
- **analog output or CAN Bus**

The sensor OPTIMESS M operates according to the triangulation principle. Due to its high robustness, the sensor is particularly suitable for use on rail vehicles, e.g., for corrugation and ripple measurements as well as driving dynamics measurements on road vehicles where larger measurement ranges are required. Applications in the industrial sector in demanding environments are also part of the application range. This sensor is characterized by a high degree of independence of measurement accuracy on different surfaces and from ambient light. The processor integrated in the sensor processes the optical distance information and outputs it as an analog value or via the CAN bus.

Type OMS	8008	8012	8020	8040	8080	8120	8198	8200	8400
Measurement range [mm]	8	12	20	40	80	120	200	200	400
Standoff [mm]	50	75	100	150	200	300	300	400	600
Resolution [mm] *	0.001	0.001	0.002	0.004	0.010	0.015	0.025	0.025	0.050
Repeatability	≤ 0.03 %								
Linearity	≤ ± 0.06 %								
Max. measurement rate	100 kHz								
Dimensions	120 x 106 x 40 mm								
Weight	820g								

*Measurement rate ≤ 10 kHz

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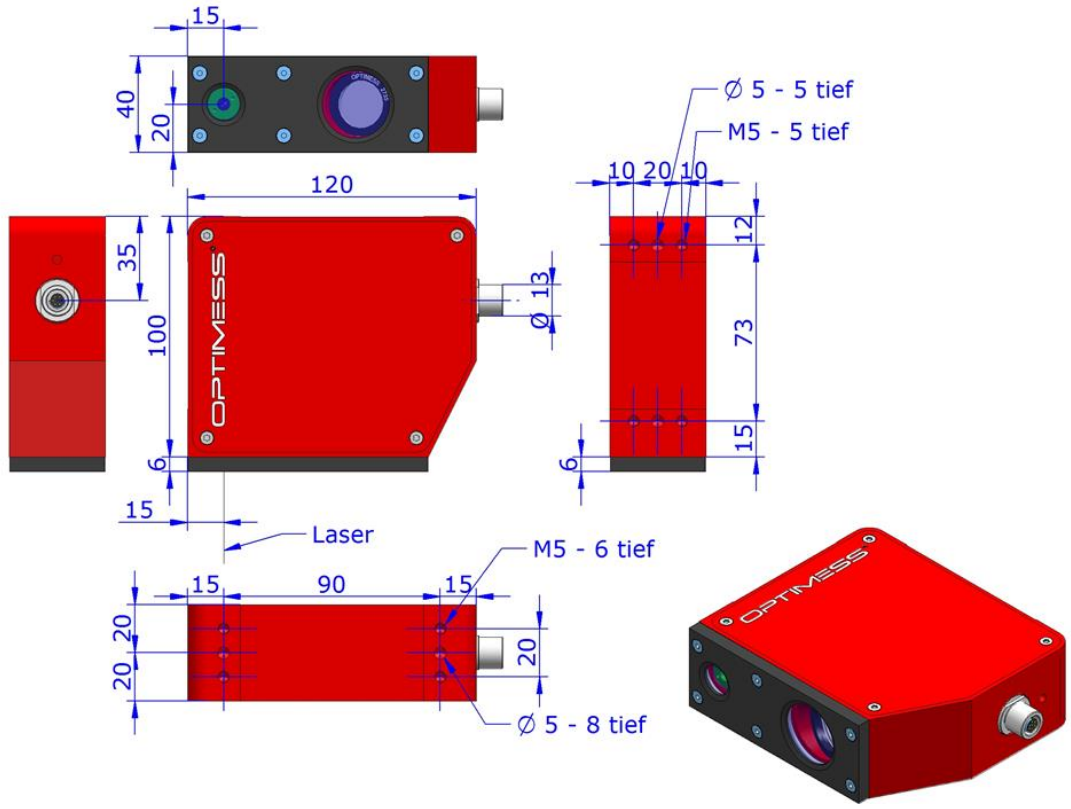
General specifications

OPTIMESS 1D		
Environmental conditions	Temperature range	-20°C bis 60°C (optionally extendable up to -40°C)
	Humidity	5% - 95%, non-condensing
	Protection type	IP67 (even when unplugged)
	Ambient light	> 100,000 lux (sunlight)
	Vibration	10-100Hz, 2mm
	Shock	50G / 6ms, EN 60068
	Environment, safety	EN 50155
	Certifications	CE
Laser	Laser protection class	1, 2, 3R, 3B
	Wave lengths	405nm – 850nm, depending on application
Connections	Supply voltage	10 - 32 V DC
	Power	2-4 W
	Output / APIs	0-5V / 0-10V / ± 5V / ± 10V / 0-20mA / 4-20mA / CAN Bus



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