



## Overview

- high measurement rate up to 50 kHz
- high precision
- high robustness, IP 67
- insensitive to sunlight
- analog output or CAN Bus

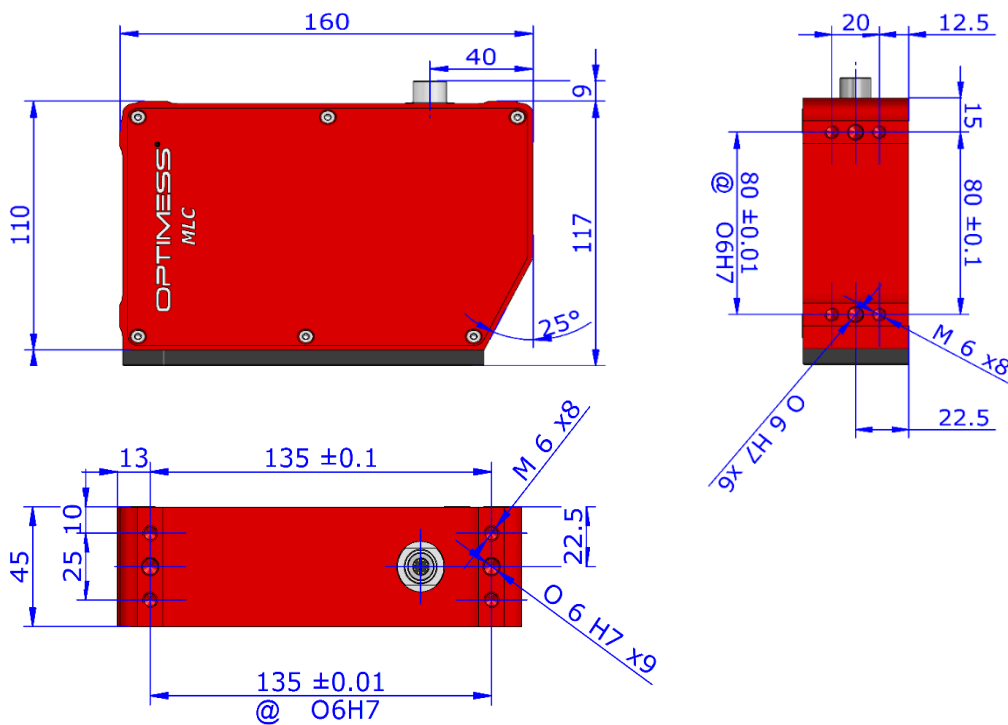
The sensor OPTIMESS MLC operates according to the triangulation principle. Due to its robustness, the sensor is particularly suited for use on vehicles, e.g., for road transverse and longitudinal profile measurement as well as driving dynamics measurement where larger measurement ranges are required. 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	4620	4630	4640	4650	4660	4680	4700	4720	4760
Measurement range [mm]	200	300	400	500	600	800	1000	1200	1600
Standoff [mm]	300	400	500	600	800	1000	1200	1500	2000
Resolution [mm] *	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.15	0.20
Repeatability	≤ 0.03								
Linearity	≤ ± 0.06								
Max. measurement rate	50 kHz								
Dimensions	160 x 117 x 45 mm								
Weight	1.1 kg								

\*Measurement rate ≤ 10 kHz

## 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	15G / 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 / $\pm 5V$ / $\pm 10V$ / 0-20mA / 4-20mA / CAN Bus



# ELAG

ELAG Elektronik AG  
 Stegackerstrasse 14  
 8409 Winterthur  
 Switzerland  
 Phone +41 52 577 50 77  
[info@elag.com](mailto:info@elag.com)  
[www.elag.com](http://www.elag.com)

