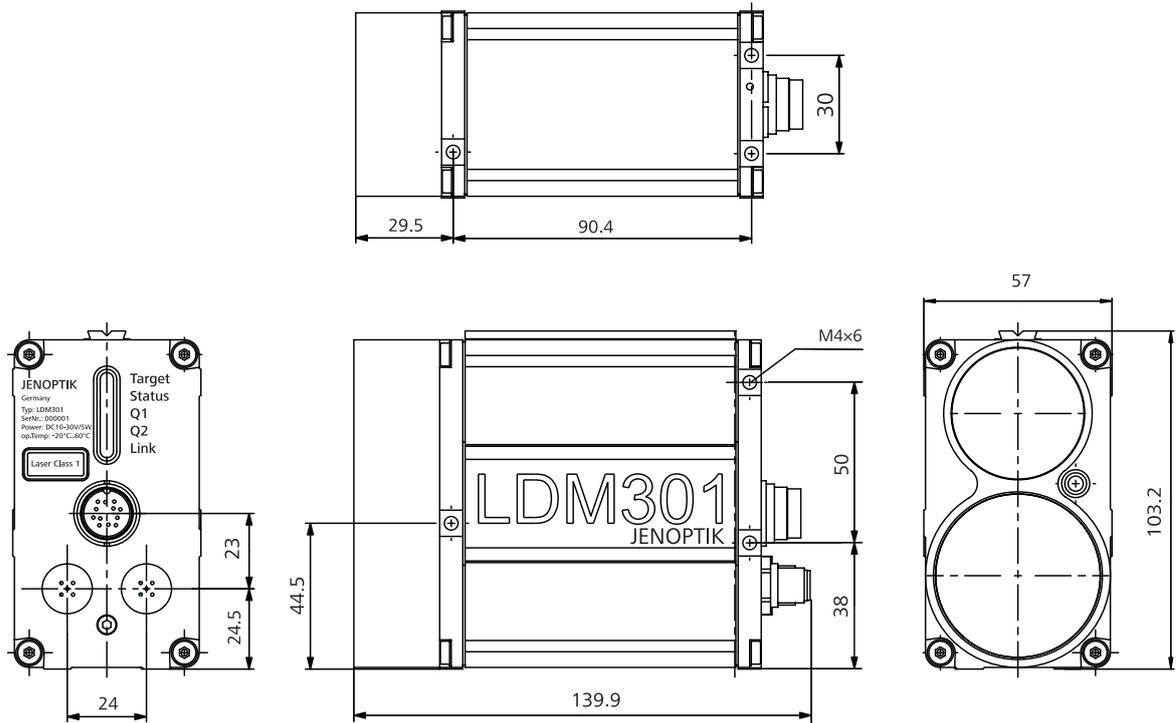


For measuring large distances and calculating object speed with total precision.
The LDM301 sensors are your optimal tools if range and speed are crucial.

Technical specifications	LDM301 series
Measurement capabilities	
Total range	From 0.5 m to 3,000 m
Range on target board	From 30 m to 3,000 m
Range on natural surface, 80% reflectivity ¹	From 0.5 m to 300 m
Range on natural surface, 6% reflectivity ¹	n/a
Accuracy	± 60 mm
Repeatability	n/a
Measured value resolution	1 mm
Measurement frequency, max.	2 kHz 10 kHz (model-specific)
Laser	
Wavelength	905 nm (invisible, near-infrared)
Divergence	1.7 mrad 10 mrad (model-specific)
Class	Measurement: Laser Class 1, EN 60825-1:2014 Pilot: Laser Class 2, EN 60825-1:2014
Connectivity and I/O options	
Interface options	RS-232, RS-422 (max. 460.8 Kbaud) Profibus DP-V0 Slave, SSI 24 bit
Switching output	2× "high side", up to 0.2 A, short-circuit-proof, adjustable windowing
Analog output	From 4 mA to 20 mA
Trigger	1× in/out, up to 30 V DC, flank/delay adjustable
Measuring modes	Single, continuous, average, external trigger, near-field suppression, windowing
Connectors	12-pole M16 (Binder 423) 5-pole M12 B-encoded (Binder 766)
Display / Controls	LEDs
Power	
Power supply	From 10 V DC to 30 V DC
Power consumption	Standard: < 5 W Heating mode, 24 V DC: 11.5 W
Ambient conditions	
Operating temperature	From -40°C to +60°C
Storage temperature	From -40°C to +70°C
Humidity	From 15% to 90%, non-condensing
Integrated heating	Yes
Standards	
Shock / Vibration	DIN ISO 9022-3
Protection class	IP67
EMC	EN 61326-1
Physical	
Dimensions (L × W × H)	136 mm × 57 mm × 104 mm
Weight	Approx. 800 g

¹ Measurement range for naturally diffuse reflecting surfaces, depending on target reflectivity, stray light, and environmental conditions.

LDM301



All dimensions in millimeter (mm)