

For measuring distances within millimeter accuracy and precisely locating objects.  
 The LDM41/42/43 are proven workhorses for heavy-duty industrial applications.

Technical specifications	LDM41 series	LDM42 series	LDM43 series
Measurement capabilities			
Total range	From 0.1 m to 150 m		
Range on target board	From 25 m to 150 m		
Range on natural surface <sup>1</sup>	From 0.1 m to 30 m		
Accuracy	± 3 mm (from +15°C to +30°C)   ± 5 mm (from -40°C to +50°C)		
Repeatability	n/a	n/a	n/a
Measured value resolution	0.1 mm	0.1 mm	0.1 mm
Measurement frequency, max.	10 Hz	50 Hz	50 Hz
Laser			
Wavelength	650 nm (red)		
Divergence	0.6 mrad		
Class	Laser Class 2, EN 60825-1:2014		
Connectivity and I/O options			
Interface options	RS-232, RS-422 (max. 38.4 Kbaud)	RS-232, RS-422 (max. 38.4 Kbaud)	Profibus (max. 12 Mbaud) SSI, 24-bit (max. 1 MHz)
Switching output	1x	1x	2x
Analog output	Yes	Yes	Yes
Trigger	Yes	Yes	Yes
Measurement operation modes	Single, continuous	Single, continuous	Single, continuous
Connectors	12-pole M16	12-pole M16	5-pole M12, 12-pole M16
Display / Controls	Status LED	Status LED	Status LED
Power			
Power supply	From 10V DC to 30V DC		
Power consumption, max.	Standard: 3.2W   Heating mode: 25.7W		
Ambient conditions			
Operating temperature	Standard: from -10°C to +50°C   Heating mode: from -40°C to +50°C		
Storage temperature	From -40°C to +70°C		
Humidity	From 10% to 90%, non-condensing		
Integrated heating	Optional		
Standards			
Shock / Vibration	DIN ISO 9022-3		
Protection class	IP 65		
EMC	EN 61326-1		
Physical			
Dimensions (L × W × H, incl. connectors)	205 mm × 96 mm × 50 mm	205 mm × 96 mm × 50 mm	210 mm × 96 mm × 50 mm
Weight	760 g	760 g	770 g

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

