

Laser Distance Sensor LDS30 – Measuring range up to 250m



Description

The LDS30 laser distance sensor is dedicated for general ranging applications that require instantly triggered and fast data acquisition. The sensor provides measurement rates as fast as 30 kHz within a total measurement range of up to 250 m with an absolute measurement accuracy in the centimeter range. It operates fully eye safe at a wavelength of 905 nm. The LDS30 sensor is optimized for easy system integration.

It is fitted into a ready-to-use IP67 proof housing. The LDS30 is shockproof and suitable for applications that impose high impact on the sensor, for example in industrial environments.

Benefits

- Compact, lightweight design
- High repetition rate
- Long measuring range
- Eye safe operation
- IP67 proof housing
- Industrial standard interfaces
- Digital and analog output
- Easy system integration

Applications

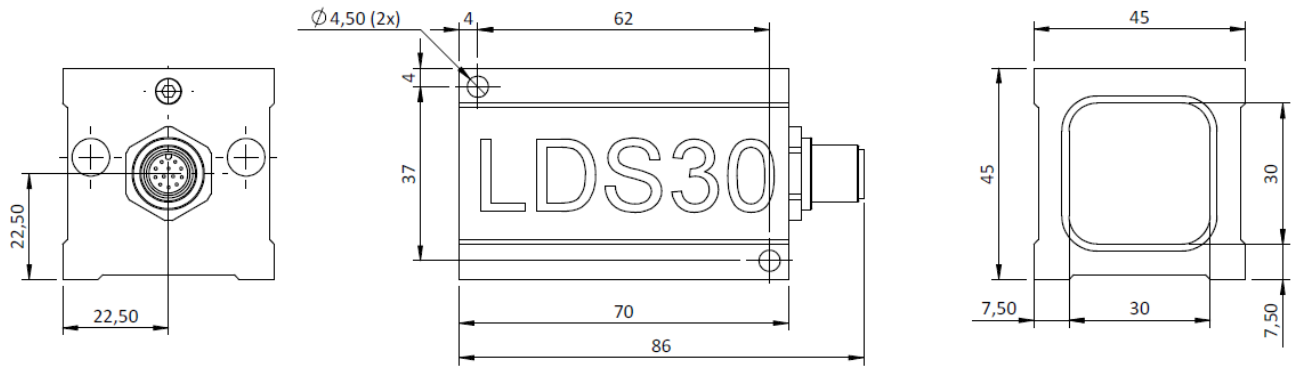
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Technical data:

Type	LDS30	Module LDS30
Total measuring range		0,2m ... 250m
Typical measuring range		
for special targets (e.g. Scotchlite Cube 3000x)		250m
▪ for target reflectivity 10% ₁		30m
Measuring accuracy (for single measurement, 1 σ)		
Absolute accuracy		\pm 5 cm
▪ Reproducibility		\pm 2 cm
Measured value resolution		1 cm
Maximum measuring rate		
binary data output		30kHz
▪ decimal or binary data output		16kHz
Laser classification		Laser class 1, EN 60825-1 :2007
Wavelength		905 nm
Laser divergence		3 mrad x 1 mrad
Serial data interface	RS232 ; RS422	RS422 ; CMOS
Switching output	2x „High side”, up to 0,2A	/
Analog output	4 ... 20 mA	/
Power supply	10 Vdc ... 30 Vdc	6,5 Vdc ... 7,0 Vdc
Power consumption (max.)		3W
Operating temperature		-20 °C ... +50 °C
Humidity		10% ... 90% - not condensing
Internal protection class	IP67	/
Shock / vibration	DIN ISO 9022-3	
EMC	EN 61326-1	
Dimensions	86 mm x 45 mm x 45mm	86 mm x 45 mm x 45mm
Weight	ca. 125 g	ca. 50 g



Technical drawing:



LDS30 Module

