

Laser Distance Sensor LMC-J-0270

COMPACT and FAST:
Up to 40000 Hz measuring and output speed!

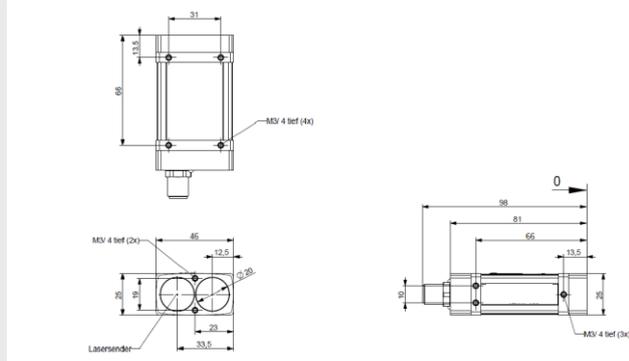
- Compact, lightweight design
- Long measuring range
- Up to 40 kHz measuring rate
- Optional waterproof version
- Optional cast shockproof version
- Low energy consumption
- Eyesafe operation

Description and Features

The LMC-J-0250 laser distance sensors are extremely compact range finding modules for general distance detection and high speed applications. Equipped with a 905 nm diode laser, a sensitive photodiode and special optics the LMC-J-0270 sensor measures distances of 150 m and more with a measuring rate of up to 40 kHz. The LMC-J-0270 rangefinder module is contained in a sealed waterproof and cast shockproof housing which makes it suitable for special applications that are subject to high impact on the rangefinder module.

Applications

- Positioning
- Distance measurement
- Proximity sensing & warning
- Automation



Technical Data

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|-------------------------------------|---|
| Measuring Range | 0.2 to 150 m on most natural targets, up to 70 m on natural surface with 10% reflectivity 0.2 to >270 m with reflector |
| Accuracy (1σ) | ± 60 mm (at 15000 Hz) |
| Repeatability (1σ) (0.2m....70m) | ±25 mm (at 15000 Hz) ±19 mm (at 1500 Hz) ± 5 mm (at 150 Hz) ± 2 mm (at 15 Hz) |
| Resolution | 1 mm |
| Measuring speed | max. 40000 Hz with binary output max. 15000 Hz with decimal output |
| Power supply | 10 to 30 VDC - 3 W |
| Serial interface | RS422 or RS232 |
| Analog interface | 4 to 20 mA |
| Alarm output | 2 digital high side switches, < 0.2 A) |
| Options | Heating (-40°C) |
| Laser class | Class 1 (EN 60825-1:2014) |
| Wave length | 905 nm |
| Laser divergence | 2 x 0.4 mrad |
| Reflector | f.e. Scotch light cube |
| Housing material | Aluminium |
| EMC | per EN61326-1 |
| Shock and Vibration | per DIN ISO 9022-3 |
| Protection class | IP 67 |
| Temperature range | -20°C to +50°C (operation) -40°C to +85°C (storage) |
| Humidity | 10 to 90 % non condensing |
| Dimension: | 98x 46 x 25 mm (L x W x H) |
| Weight | Approx. 140 g |
| MTTF | 50,000 hrs |