

Laser Distance Measuring Device LMC-J-0310

The laser distance-meter LMC-J-0310 is robustly engineered especially for industrial applications. It works at distances up to 3000 m. Up to 300m and more (depending on target reflectivity) no special reflector is needed. Measuring values are provided continuously via the integrated RS422/RS232 or analogue 4..20 mA interfaces. As option, ProfiBus and SSI interface is available. In this way the device is providing position and velocity information during the production process.

The LMC-J-0310 can be used in distance and speed measurement mode. All measuring parameters are adjustable.

The high measuring speed allows the distance measurement of extremely fast moving objects.

The operation principle of the LMC-J-0310 is time delay measurement, the measuring time is adjustable between 0,5 and 1000 ms (a special version with 0,1ms is also available). Within a fraction of second one distance measurement is obtained by means of several hundreds or thousands of individual measures.

For easy positioning up to approx. 20m to the target, the sensor has an integrated pilot laser. For larger distances a optional scope is available.

Additional features of the device are a free programmable trigger in/output and 2 switch outputs with an adjustable threshold, that can be used for distance warning like in collision protection applications.

Status LED's at backside show's important infos directly:



Technical Data

Power supply	10 - 30 VDC
Power consumption	< 5W (with heating 11,5 W)
Serial Interface	RS422 / RS232 (cannot be changed) BR 1.200 460.800 (standard 9600)
Analogue Interface	4..20mA
Alarm output	2 adjustable high side switch, with window function, max 0,2A
Trigger	1 fully adjustable trigger in/output
Optional	ProfiBus, SSI
Temperature	Internal Temperature measurement with adjustable internal heater control(output via RS interface possible)
Signal Quality	Output of the signal strength via RS interface possible
Laser class	Class 1 (EN 60825-1:2003-10) For special applications 1M
Wave length	905nm
Pilot laser	integrated 650nm, < 1mW, for easy positioning
Range	0,5 ...3000 m (reflector) 0,5..300m (without reflector)
Speed	0..100m/s (distance 0,5...700m)
Measuring time distance	0,5 ... 1000ms (0,1 ms special version)
Divergence	1,7 mrad (optional 10 mrad)
Accuracy	+/- 20 mm (at 100Hz) +/- 60 mm (at 2 kHz)
Statistical spread	+/- 1cm
Resolution	1 mm
Reflector	Diamond grade foil, reflector less operation possible
Connection	1x M18, 12-pole (Binder Series 723) Optinal: 2x M12, 4 or 5-poles acc. to the Bus Interface
Material of housing	Aluminium
Protection class	IP 67
EMV	acc. to 2004/108/EG
Temperature range	-40 ... +60°C (built in heater)
Dimension	136mm x 57mm x 104mm (LxBxH)
Weight	0,8 kg