

## Laser Distance Measuring Device LMC-J-0040-1

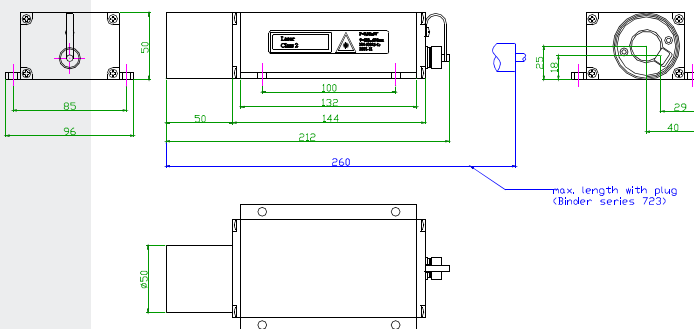
### Precise – Robust – Reflector less:

- Measures distances with millimetre accuracy
- Precisely defines positions
- Detects movements

The LMC-J-0040-1 is an opto-electronic distance measuring module for industrial applications. The module operates on basis of non-contact comparative phase measurement with amplitude modulation. The Laser diode (cw operation) has a divergence of 0.6 mrad for measurement with pinpoint accuracy. The measured result is available on the RS 232 / RS 422 data interface. A digital switching output, an analogue 4..20mA output and optional a Profibus output is also available. The sensor alignment can be easily achieved with the help of the red pilot laser. The Measuring range is on any natural surface between 0,2 to 30m, for 30 to 100m depends it on the surface reflectivity coefficient (f.e. concrete 30%, white paper 90%) and for more than 100 % we can deliver special plastic reflectors with a very high reflectivity coefficient of 2000%.

### Features:

- Laser class 2 for eye safe operation
- Non-reflector measurement
- Millimetre accuracy measurement on any surface
- Easy installation and commissioning
- Allows field bus integration (Profibus).
- Meets IP 65 protection class for industrial use
- Also available in explosion-proofed version



### Technical Data

Measuring range: *1	0.2 to 30 m on any natural surface. More than 100 m possible
Measuring accuracy: *2	± 2 mm under defined measuring condition ± 3 mm
Measuring resolution:	Depends on scale factor (1 mm with SF = 1)
Repeatability	≤ ± 0,5 mm
Measuring rate: *1	10 Hz fixed on white surface, else typically 5 Hz (up to 10 Hz)
Connector:	12 pin (Binder Series 723)
Laser divergence:	0.6 mrad
Laser classification:	≤ 1 mW under IEC 825-1, laser class 2 (red light)
Interface:	RS 232/RS 422 (switch able), baud rate 9600, format 8n1, selection of measuring functions, scaling, measuring time, output of measured values, inner temperature, error codes, single measurement mode.
Switching output:	Programmable switching threshold and hysteresis, "high-side-switch" with 0.5 A load capacity.
Analogue output:	programmable distance range limits, 4 mA to 20 mA
Operating temperature:	-10 °C to +50 °C
Supply voltage:	10 V to 30 V <1,5 W (without IAlarm)
Phys. dimensions:	212 x 96 x 50 mm (L x W x H) length with plug max. 260 mm
Weight:	About 850 g
Protection class:	IP 65
Options:	Profibus Interface, Heating, Cooling, EEx Housing

\*1 dependent on target reflectivity, stray light influences and atmospheric conditions

\*2 statistical spread 95%