



MLB LASER TRIANGULATION SENSORS



- **Advanced Laser Technique & Line Scan Camera with digital signal processing.**
- **Non-Contact Measurement of Distance, Displacement, Thickness & Difference.**
- **Works on almost any surface.**
- **Measurement ranges: 115 - 550 mm.**
- **Resolution: 0.05 mm - 0.1mm.**
- **Serial RS232 Interface.**
- **4 - 20mA Analog Output.**

Performance

Model	MLB165	MLB215	MLB265	MLB350
Measured range	115 - 215mm	115 - 315mm	115 - 415mm	150 - 550mm
Center distance	165mm	215mm	265mm	350mm
Resolution	0.01mm	0.05mm	0.06mm	0.1mm
Linearity (of Full Scale)	±0.1mm	±0.2mm	±0.3mm	±0.4mm
Laser Spot Size	Ø 1mm	Ø 1.5mm	Ø 2mm	Ø 3mm

Typical Applications

- **Liquid Level Control**
- **Distance measurement**
- **Thickness Measurement**
- **Weight/Volume Control**
- **Constant Tension Control**
- **Roll Diameter**
- **Profile measurement**
- **Control of vacuum in containers**
- **Measurements for feedback in productions lines**
- **Measurements for quality control and statistics**
- **Vibration Monitoring of a Rotating Object**
- **Control of surface treatments**

General Description

The MLB Laser Triangulation Sensor is a compact unit with integrated optics and signal processor for precise measurement of distance or product thickness and width. A focused laser spot is illuminated on the object and the image distance determined by internal Line Scan Camera. LED's indicate when object at center or outside measuring range. Installation disc provided for connection via IBM PC and display of measured values. Measurement data via RS232 and analog outputs.

Laser OFF and ON and Output Frequency can be controlled via serial interface. The sensor can be programmed to output a moving averaged value, calculated over a stored number of measuring points with suppression of zero/error values.

This Laser Triangulation Sensor has a broad range of usage for measurement off surfaces where other devices fail. Ideal for measuring off wood, plastic, rubber, paper, foam, textiles, food product, metals as well as various liquids.

MODULOC Technology - Lasers for Precise Product Measurement

MODULOC Control Systems Ltd.

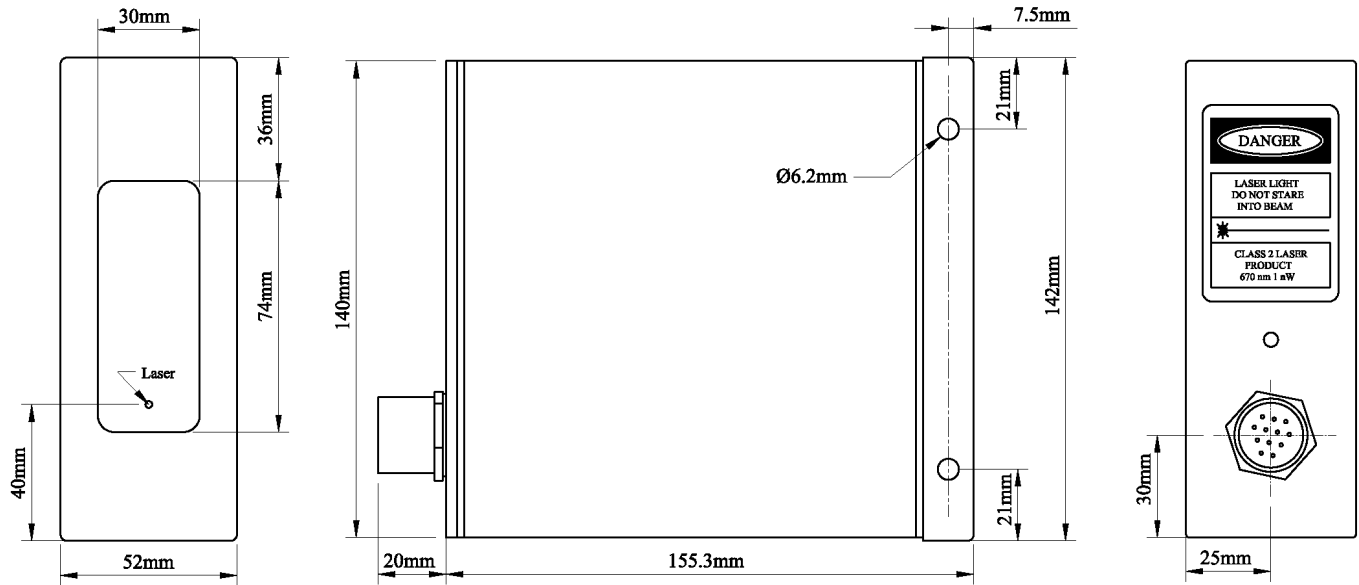
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Dimensions

Housing: Aluminum/Glass
Housing Rating: IEC IP65
Weight w/o Cable: 1.6 Kg
Cable Length: 2.5 M, Optional 6M



General Specifications

Serial Output	RS232 Standard up to 38400 baud	Supply Voltage	22 - 36VDC
Analog Output	4-20mA	Power Consumption	<4.5 Watt
Measuring Frequency	1000 Hz	Humidity	Max 90% RH (non condensing)
Output Frequency	10 - 1000 Hz (switch selectable)	Operating Temperature	0°C to +45°C (32°F to 113°F)
Laser Class	II, IEC 2, 1 mW	Storage Temperature	-20°C to +70°C (-4°F to 158°F)
Temperature Deviation	±0.03% of F.S./°C	Light Source	Visible Red 670nm laser

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Control Systems

We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

Your Local Sales Representative:



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