

## Laser Distance Meters | LAM60 Series

Measuring on hot surfaces and in bright environments



### Description and Features

The LAM60 laser distance meters are specialized for distance measurement on hot surfaces, e.g. red hot, glowing steel, and for outdoor use in bright lighting conditions with high constant or stray light levels.

Suitable measurement targets can be almost all natural surfaces, liquids, or reflectors.

Within a range of 500 meter LAM60 laser sensors provide a maximum measurement accuracy of 1 mm and a measurement frequency of up to 100 Hz.

For convenient data display and parameterization LAM60 sensors are equipped with an OLED display and touch-keys. Due to their standard interfaces, LAM60 sensors are optimized for easy system integration into industrial automation engineering solutions.

### Benefits

- Distance measurement on hot surfaces
- Outdoor measurement in bright lighting conditions
- Broad measuring range & millimeter accuracy
- Visible measuring beam (red)
- Industrial standard interfaces
- Digital & analog data output, trigger functionality
- Device control via OLED display and touch-keys

### Applications

- Non-contact distance measurement & - tracking
- Steel working industry & rolling mills
- Positioning: transportation, handling & conveying systems
- Measurement of filling levels, object thickness & length
- Industrial automation and process control

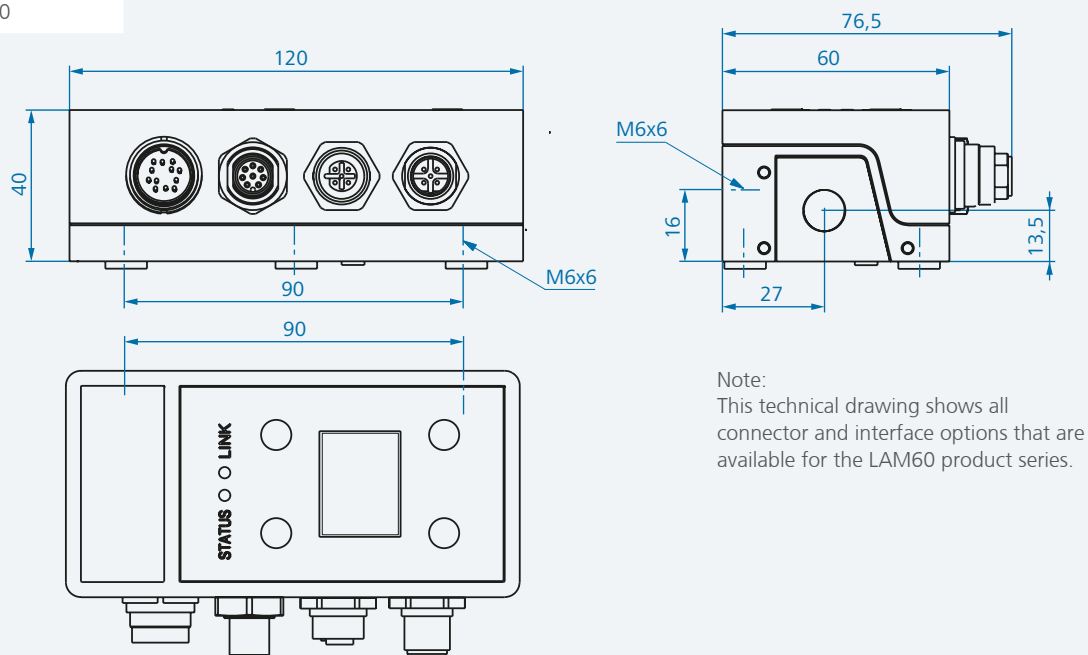
# Laser Distance Meters | LAM60 Series

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| Type   | LAM60  |
|--|--|
| Measuring range <sup>1</sup>   | 0.15 m ... 500 m   |
| Typical maximum measuring range <sup>1</sup><br>on target boards<br>on natural surfaces <sup>2</sup> | 500 m<br>100 m   |
| Measuring accuracy (1 $\sigma$ )   | $\pm 1$ mm   |
| Measured value resolution  | 0.1 mm   |
| Maximum measuring frequency  | 100 Hz   |
| Laser classification   | Laser Class 2, EN 60825-1:2007   |
| Wavelength   | 635 nm (red)   |
| Laser divergence   | 0.2 mrad (50% laser energy)  |
| Interface options<br>(depending on specific device configuration)                                    | RS-232, RS-422, RS-485, SSI (200 / 250 / 300 kHz),<br>Profibus DP-V0 Slave, 9.6 kBaud ... 12 MBaud, IEC 61158, IEC 61784 |
| Switching output   | 3x "high side", up to 0.2 A  |
| Analog output  | 4 mA ... 20 mA   |
| Trigger  | 1x trigger in/out, 3 VDC ... 30 VDC  |
| Connectors <sup>3</sup>  | standard: 1x 12-pole M16   optional: 3x 5-pole M12   |
| Display and controls   | 2 status LEDs   OLED dot-matrix display   4 touch keys   |
| Power supply   | 10 VDC ... 30 VDC  |
| Power consumption (max.)   | < 10 W   < 42 W (in heating mode, 24 V)  |
| Operating temperature <sup>3</sup>   | -40 °C ... +60 °C  |
| Humidity   | 15% ... 90%, not condensing  |
| Protection class   | IP 67  |
| EMC  | EN 61326-1   |
| Dimensions   | 120 mm x 76.5 mm x 40 mm (LxWxH, including connectors)   |
| Weight   | approx. 700 g (depending on device configuration)  |

<sup>1</sup> Measuring range depending on measuring frequency, target reflectivity, stray light and environmental conditions. <sup>2</sup> For natural, diffuse reflecting surfaces. <sup>3</sup> Depending on device type / configuration.

Dimensions LAM60



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.