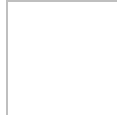


## Laser Measuring Device LLB 500 (H) - A

LLB500-A-1-GB-1  
06/12 Revision 04  
010203-0400XX99-9999



- + Analog interface: 0...20 mA or 4...20 mA
- + RS232 -, RS422 -, SSI - interface
- + Detection of positions
- + Non contact distance measurement
- + Distance measurements on
  - natural surfaces : 0.05 up to approx. 65 m
  - reflective target plate : 0.5 up to approx. 500 m
- + LLB500-00600, LLB500-00601: without heating
- + LLB500-00610, LLB500-00611: with heating
- + Programmable

### Characteristics

Supply voltage.....	9...30 VDC
- with heating.....	24...30 VDC
Current consumption without load.....	≤ 0.6 A
- with heating.....	≤ 2.5 A
Measuring range	
- on natural surfaces .....	typically 0.05...65 m
- on orange reflective target plate.....	typically 0.5...500 m
Smallest unit displayed.....	0.1 mm
Measuring accuracy	
- LLB500-00600, LLB500-00610 .....	typically ± 1 mm at 2 σ
- LLB500-00601, LLB500-00611 .....	typically ± 3 mm at 2 σ
Time for a measurement	
- Single measurement.....	typically 0.3 s...4 s
- Tracking Mode .....	typically 40 ms...4 s
Light source.....	Laser diode, red light
- Wavelength λ .....	620...690 nm
- Laser protection class.....	2 accor. IEC 60 825-1:2007 / FDA 21CFR 1040.10 and 1040.11
- Beam divergence.....	0.16 x 0.6 mrad
- Pulse duration .....	0.45 x 10 <sup>-9</sup> s
- Radiant power.....	≤ 0.95 mW
- Life time .....	> 50.000 h at 20 °C
Analog interface <sup>1)</sup> .....	0...20 mA, 4...20 mA, ≤ 500 Ω
Configuration interfaces.....	RS232 Point to Point, RS422 Master – Slave, max. 10 devices
Data interface <sup>1)</sup> .....	SSI
Digital switching outputs .....	Open Drain, 30 VDC, 200 mA
- 2 Digital outputs for level control <sup>1)</sup> .....	programmable
- 1 Digital output.....	Device error
Digital input <sup>1)</sup> .....	external triggering
- Switching level .....	1-level > +9V...< +30 V, 0-level < 2 V
Mass.....	690 g, 720 g with heating

<sup>1)</sup> programmable parameter

Subject to change

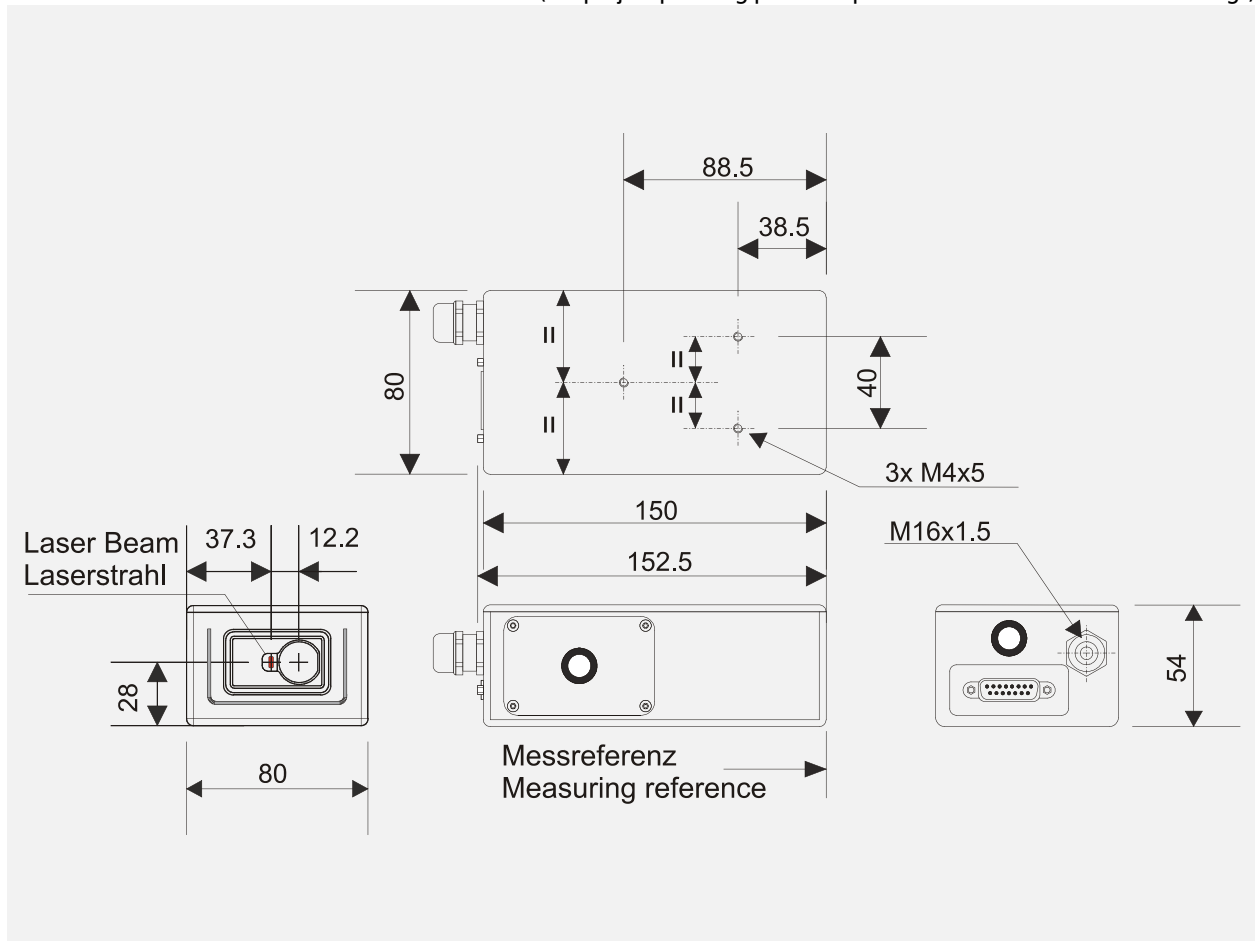
**Environmental conditions**

Vibration, DIN EN 60068-2-6: 1996 .....	≤ 50 m/s <sup>2</sup> , Sinus 50-2000 Hz
Schock, DIN EN 60068-2-27: 1995 .....	≤ 300 m/s <sup>2</sup> , Halbsinus 11 ms
<b>EMV</b>	
- Entladung statischer Elektrizität, IEC 61000-4-2: 1995+A1+A2	
- Störfestigkeit, DIN EN 61000-6-2: 2001	
- Störaussendung DIN EN 61000-6-4: 2001	
<b>Arbeitstemperatur</b>	
- Standard .....	-10 °C...+50 °C
- im Tracking Mode .....	-10 °C...+45 °C
<b>Arbeitstemperatur mit Heizungsoption</b>	
- Standard .....	-40 °C...+50 °C
- im Tracking Mode .....	-40 °C...+45 °C
Lagertemperatur.....	-40 °C...+70 °C, trocken
Schutzart, DIN EN 60529: 1991 <sup>2)</sup> .....	IP 65

<sup>2)</sup> gültig mit aufgeschraubtem Gegenstecker und/oder verschraubter Kabelverschraubung

**Dimension drawing**

(For project planning please request customized dimensional drawing!)



Subject to change