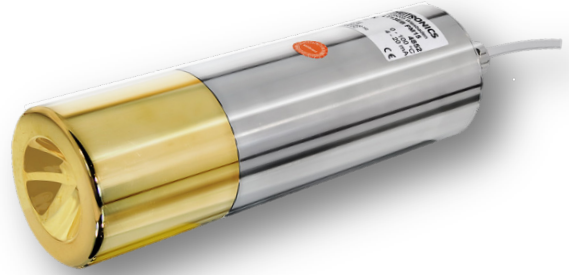


## Technical Data Sheet

# LT13.10EB

### Infrared Radiation Thermometer

- For highly reflective surfaces at very low emission
- Multiple reflections provide non-contact measurements
- Temperature range possible from 0 °C on
- Typical temperature resolution: 0.2 °C



#### Measurement specifications

<b>Temperature range:</b>	0 ... 200 °C
<b>Spectral response:</b>	8 ... 14 µm
<b>Measurement uncertainty:</b>	± 0.8 °C plus 0.8 % of the temperature difference between measured target and instrument
<b>Temperature resolution (NETD):</b>	Typical value is 0.2 °C (at 300 ms, 100 °C, ε = 1) Depending on the measured temperature and the response time
<b>Long-term stability:</b>	Better than 0.01 % of the absolute measured temperature per month
<b>Field of view:</b>	5 mm at 5 mm (fixed distance)
<b>Response time (t<sub>90</sub>):</b>	Adjustable from 30 ms to 10 s (0,03; 0,1; 0,3; 1; 3; 10 s)
<b>Temperature unit:</b>	°C, K or °F
<b>Emissivity:</b>	0.100 ... 1.000 in 0.001 steps
<b>Lens:</b>	Ge, ZnSe, brass gold-plated parabolic mirror

#### Electrical specifications / Functions

<b>Analog output:</b>	0 ... 20 mA or 4 ... 20 mA; resolution: 12 Bit
<b>Function:</b>	Actual, maximum or minimum value (scalable (minimum span 50 K))
<b>Digital output option:</b>	open-collector
<b>Function:</b>	Threshold detection Min, Max temperature value
<b>Digital input option:</b>	Dry contact switch, operating voltage, open-collector
<b>Function:</b>	Reset of memory, (de-)activate digital outputs or laser
<b>Serial interface:</b>	RS232 interface, bi-directional 9.6 ... 57.6 kBaud
<b>Programmable via serial interface:</b>	Emissivity, analog output, analog output function, response time, temperature unit, Min and Max value memory adjustable with decay rate, reset by contact or temperature threshold, alarm switching point, time period etc.
<b>Operating voltage:</b>	DC: 10.5 ... 32 V                      AC: 10.8 ... 26.4 V
<b>Power consumption:</b>	≤ 2.5 W

## Technical Data Sheet

### General specifications

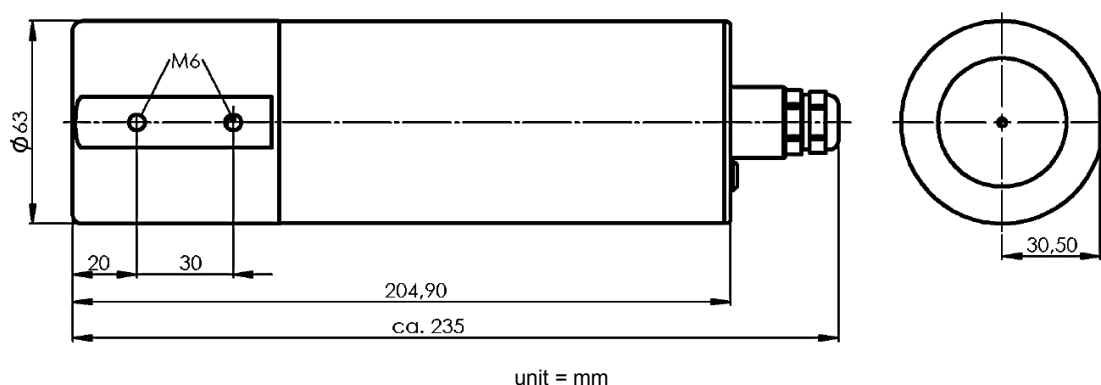
<b>Storage temperature:</b>	-20 ... 85 °C
<b>Permissible ambient temperature:</b>	-20 ... 60 °C (further temperature ranges are available on request)
<b>Protection class:</b>	IP68 (IEC), (NEMA4)
<b>Protection against oscillation:</b>	DIN 40046 BL.8, test: FC, vibration resistance: A B1 E frequency range: 10 ... 55 Hz amplitude: ± 0.2 mm Duration of test: 30 min.
<b>Housing:</b>	Stainless steel / brass gold-plated
<b>Weight:</b>	Appr. 1.5 kg

### Scope of supply and options<sup>1</sup>

■ Standard function; □ Option

<b>Accessories:</b>	<ul style="list-style-type: none"> <li>■<sup>2</sup> Manual LT13EB</li> <li>■ Software EasyConfig</li> <li>□ Software EasyMeas</li> <li>■ Connecting cable, hardwired 5 m length, PVC, unterminated ends</li> <li>□ Connecting cable, hardwired ≥ 5 m length: PTFE; PUR; PVC; TPE, unterminated ends or 12-pin female connector</li> </ul>
<b>Calibration certificate:</b>	□ HEITRONICS certificate
<b>Housing:</b>	□ Special cooling equipment on request
<b>Adapter and flanges:</b>	□ See document Options and Accessories
<b>Bus interface:</b>	□ with transducer

### Dimensions



<sup>1</sup> Special model specification on request.

<sup>2</sup> ■ Standard function  
□ Option