

Technical Data Sheet

LT13.10 EB

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

Temperature range:	0 ... 200 °C
Spectral range:	8 ... 14 µm
Measurement uncertainty:	± 0.8 °C plus 0.8 % of the temperature difference between measured target and instrument
Temperature resolution (NETD):	Typical value is 0.2 °C (at 300 ms, 100 °C, ε = 1) Depending on the measured temperature and the response time
Long-term stability:	Better than 0.01 % of the absolute measured temperature per month
Field of view:	5 mm at 5 mm (fixed distance)
Response time (t₉₀):	Adjustable from 30 ms to 10 s (0,03; 0,1; 0,3; 1; 3; 10 s)
Temperature unit:	°C, K or °F
Emissivity:	0.100 ... 1.000 in 0.001 steps
Lens:	Ge, ZnSe, brass gold-plated parabolic mirror

Electrical specifications / Functions

Analog output:	0 ... 20 mA or 4 ... 20 mA; resolution: 12 Bit
Function:	Actual, maximum or minimum value (scalable (minimum span 50 K))
Digital output option:	open-collector
Function:	Threshold detection Min, Max temperature value
Digital input option:	Dry contact switch, operating voltage, open-collector
Function:	Reset of memory, (de-)activate digital outputs or laser
Serial interface:	RS232 interface, bi-directional 9.6 ... 57.6 kBaud
Programmable via serial interface:	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.
Operating voltage:	DC: 10.5 ... 32 V AC: 10.8 ... 26.4 V
Power consumption:	≤ 2.5 W

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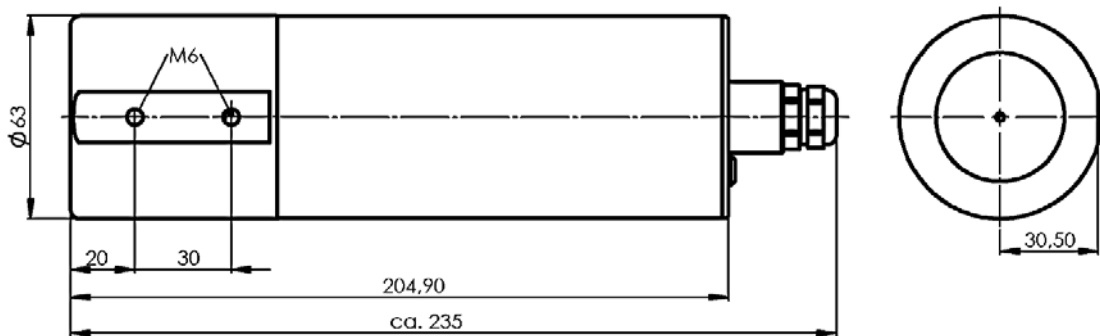
General specifications

Storage temperature:	-20 ... 85 °C
Permissible ambient temperature:	-20 ... 60 °C (further temperature ranges are available on request)
Protection class:	IP68 (IEC), (NEMA4)
Protection against oscillation:	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.
Housing:	Stainless steel / brass gold-plated
Weight:	Appr. 1.5 kg

Scope of supply and options¹

Accessories:	<ul style="list-style-type: none"> ■² Manual LT13 EB ■ Software EasyConfig □ Software EasyMeas ■ Connecting cable, hardwired 5 m length, PVC, unterminated ends □ Connecting cable, hardwired ≥ 5 m length: PTFE; PUR; PVC; TPE, unterminated ends or 12-pin female connector
Calibration certificate:	□ HEITRONICS certificate
Housing:	□ Special cooling equipment on request
Adapter and flanges:	□ See document Options and Accessories
Bus interface:	□ with transducer

Dimensions



Unit: mm

¹ Special model specification on request.

² ■ Standard function
□ Option