

LT13.10 EB

Infrared Radiation Pyrometer LT13.10 EB

- Measurement of very low emissivities (> 0.02)
- Highly reflecting gold mirror (compensated)
- Defined spot size



GENERAL SPECIFICATION

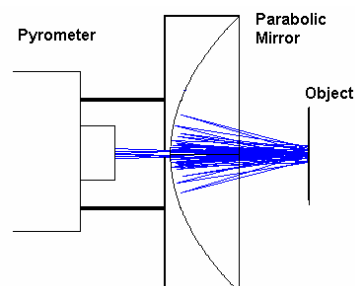
Temperature range:	■ 0 to 500 °C
Temperature resolution (NETD):	■ Depends on measured temperature and response time, typical value 0.2 °C (at 300 ms, 100 °C, $\epsilon = 1$)
Accuracy (uncertainty):	■ ± 0.8 °C plus 0.8% of the difference between target and sensor head temperature
Long term stability:	■ Better than 0.01% of the absolute measured value per month
Field of view diameter:	■ 5 mm at 5 mm (fixed distance)
Spectral response:	■ 8 to 14 μm
Programmable functions via serial interface:	■ Emissivity, environmental temperature, analog output, function of analog output, response time, temperature unit, valley/peak picker with decay function, alarm values and output (B)
Emissivity:	■ 0.100 to 1.000 in 0.001-steps
Response time:	■ From 30 ms to 10 s (0.03, 0.1, 0.3, 1, 3, 10 s)
Temperature unit:	■ °C, K or °F
Analog output (Hardware):	■ Linear 0 - 20 mA, or 4 - 20 mA, scalable temperature span ≥ 50 °C
Analog output (Functions):	■ Actual value, max-value or min-value
Analog output (Resolution):	■ 12 bit
Valley/peak picker programmable:	■ Reset: internal □ Reset: external input
Serial interface:	■ RS232-interface, bi-directional, 9.6 to 57.6 kbps, for programming and data transfer
Alarm output:	□ Programmable (open collector)
Operating voltage:	■ 10.5 VDC to 32 VDC / 10.8 VAC to 26.4 VAC
Power consumption:	■ Approx. 2.5 W
Permissible ambient temperature:	■ -25 to 60 °C
Storage temperature:	■ -40 to 85 °C
Protective class:	■ IP68 (IEC), (NEMA 4 equivalent)
Housing:	■ Stainless steel / brass gilds
PC-based Software:	■ EasyMeasConfig: Software for parameter setting □ EasyMeas: Software for parameter setting, data recording, data storage and data evaluation

■ Standard function
□ Option

(B) with option "Alarm output"

PRINCIPLE OF OPERATION FOR LT13-SERIES

A gold plated parabolic mirror focuses the measured spot on to itself. Thus IR radiation is captured between object and mirror. Due to multiple reflections the radiance in this area is up to 15 times higher than without mirror.



APPLICATIONS

<u>Applications / Material</u>	<u>Model / Type</u>	<u>Temperature Range / °C</u>
Paper industry		
Glossy finish rolls	LT13.10	150 - 200
Metal industry		
Galvanized steel, Aluminium foil	LT13.10	50 - 300
Aluminium casting, ...	LT13.2	450 - 600
Printing industry		
Holographic stencils	LT13.10	20 - 100
Quality control		
Compensation of temperature expansion in quality control	LT13.10	20 - 60

DIMENSIONS (in mm)

