

## OVERVIEW

The infrared Emitter IR-E is a cost-effective, easy-to-handle device that emits a stable infrared radiation similarly to a Blackbody with a known temperature. The IR-E allows to establish a known reference temperature that can be used to define the temperatures observed by a thermal camera.

## APPLICATIONS

The IR-E device board could be used in the following applications:

- Radiometry applications, e.g. temperature referencing of infrared cameras
- Industrial processes with temperature control
- Laser processes referencing

## DESCRIPTION

The IR-E board developed by EXOM Engineering is a device for radiometry applications where a known reference temperature is required. The IR-E main function is to emit a radiation in the infrared wavelength spectrum equivalent to a heated body with a given temperature value. The actual wavelength of the emitter device is between 2-6  $\mu\text{m}$ .

The IR-E has a display where information from the device is shown, and push buttons to control its functionalities. Additionally, the board has interfaces for remote communications with external hardware, which enables to change the reference temperature from the user PC.



The IR-E device

## KEY FEATURES

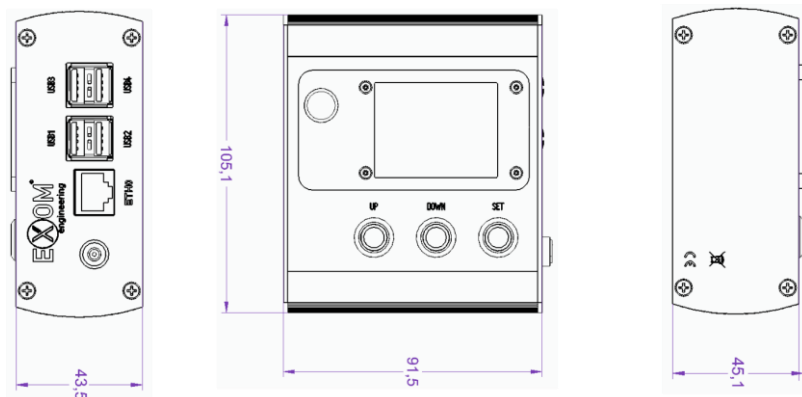
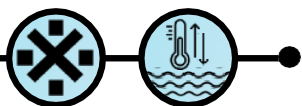
The IR-E board has the following key features.

- Precise control of reference temperatures between 120 - 600 [°C]
- Screen and push button controls for simple user interaction
- Simple, robust and cost-effective temperature reference device
- Remote control capabilities
- Ethernet (ETH0) port can be used for communications with external hardware
- Emitter device in the 2-6  $\mu\text{m}$  radiation wavelength

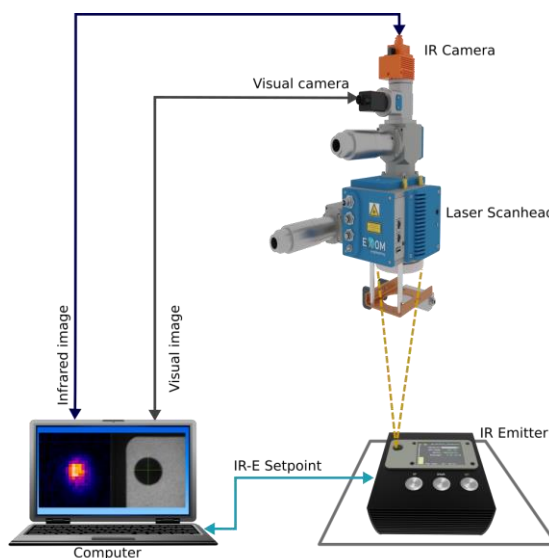


IR-E display detail

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## TYPICAL APPLICATION



## TECHNICAL DATA

- Power supply: 24 VCD, 3 A max. Current
- Temperature range between 120–600±10[°C]
- Temperature set point stabilization time: 5 minutes
- 1 Ethernet: Gigabit Ethernet transceiver
- Emitter device in the 2–6 μm radiation wavelength
- Weight: 430g
- Dimensions: 105.1 x 91.5 x 45.1 mm (LxWxH)
- Power consumption: 60 W
- Ambient temperature: 0–50°C
- Housing material: Aluminum

FOR FURTHER INFORMATION PLEASE DON'T HESITATE TO CONTACT US!

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