

INFRAcheck Type R2810

Product information and Operating instructions

INFRAcheck is a high precision instrument that allows an easy and quickly on site check of your pyrometer.

A highly precise, long term stable control system guarantees a control accuracy for the radiation source of ± 2 °C.

The emittance of the target area is nearly 1.

Thus you are able:

- exactly to check the long term stability resp. the performance of your pyrometer or your infrared camera,
- to recognize changes to measurement characteristics caused e.g. by soiled optics,
- to recognize faults in post-processing (indication, process control system).



Application

Because the conditions of assembling, surrounding and pyrometer settings are not always ideal, you should proceed as follows:

Having installed the pyrometer at the measuring point and adjusted the emittance to suit the measurement duty, take a reference measurement with **INFRAcheck**. Note the measured value. Take reference measurements in regular intervals and compare the measurement with the first measurement. If the deviation is greater than the allowed inaccuracy of your measuring system, a fault has occurred or the gage length is soiled.

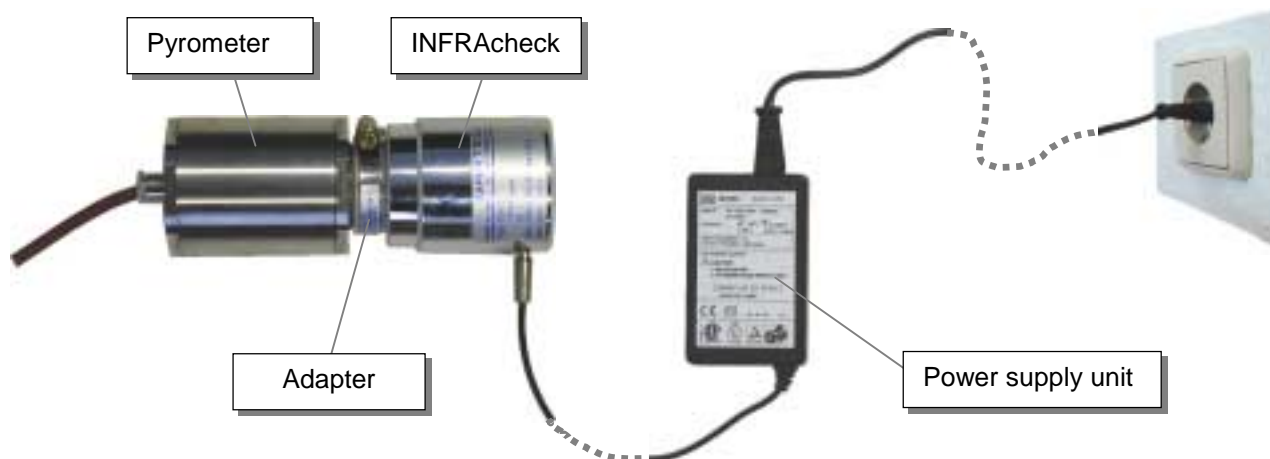
Operation

Connect the connection cable of the power supply unit to the socket at the **INFRAcheck** and connect the power supply unit to a mains socket (AC 230 V).

5 minutes after the LED switches from red to green the specified temperature is reached with a tolerance of $\pm 0,4$ °C.

For the different types of pyrometers are matching adapters available. Attach **INFRAcheck** always with the matching adapter to the pyrometer.

The pyrometer should display the temperature, that is specified at the **INFRAcheck**.



Safety precautions



When taking measurements you should always fasten the **INFRAcheck** with the matching adapter. Holding the instrument briefly with your hand causes invalid measurements.

The **INFRAcheck** must not touch the pyrometer longer than 1 minute. The pyrometer will get hot, therefore the measuring values can temporary drift

INFRAcheck is a high quality instrument. Hard shocks, high humidity, dirt and storage below 0°C should be avoided!

Technical Data


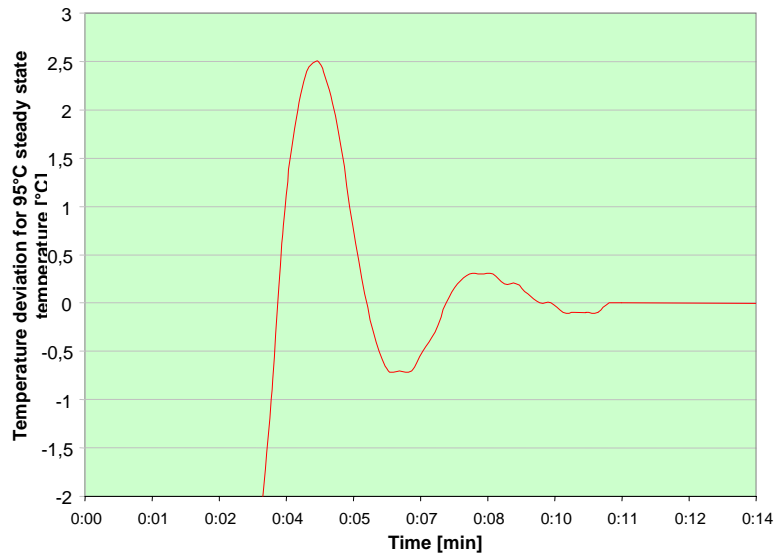
Temperature of radiator	95 °C
Emittance ϵ	≈ 1
Response time	see diagram
Accuracy	Depending on ambient temperature. At 22 °C ambient temperature: deviation from specified steady-state temperature $<0,4$ °C.
Operating status indication	Dual-LED Red: „uncorrected“ state Green: „corrected“ to $\pm 1,5$ °C
Technology	IR-blackbody-radiator for checking contactless temperature meters (pyrometers, IR-cameras) by radiating a „gray“ radiation signal
Target area	$\varnothing 52$ mm
Operating voltage	DC 24 V
Current consumption	max. 2 A
Dimensions	

Diagram :
Response time at 22 °C ambient temperature
and 95 °C steady state temperature



Order information

Designation	Type	Remarks	Order No.
INFRAcheck	R2810	including power supply unit and bag	030112810
Pyrometer adapter	2810-10	for Pyrometer R20, R21	03011281010
Pyrometer adapter	2810-11	for Pyrometer R22	03011281011
Pyrometer adapter	2810-12	for Pyrometer R25xx, R26xx	03011281012
INFRAcheck-adapter for WN272		for air nozzle WN272	03011281013
INFRAcheck-adapter for WN286		for cooling jacket WN286	03011281014