



by **KELLER**
infrared
temperature
sensors
ITS



PYROMETER

CellaPort

PT 14x, 16x

Ident no.: 1117996

05/2022

QUICK GUIDE

General

This guide gives you the minimum information to properly install the pyrometers of the PT series. For detailed information please refer to the user guide CellaTemp PT. You can download it under the following link:

www.keller.de/en/its/temperature-pyrometers-downloads/

Explanation of symbols

Important safety-related references in this manual are marked with a symbol.



CAUTION: This symbol points out hints and information which should be heeded for efficient and trouble-free operation..



Action: This symbol instructs the operator to take action



Reaction, Result: This symbol indicates the result of the action taken.

Charging the batteries

Connect the battery charging socket of the CellaPort to the provided power supply (9 V DC). The charge indicator lights as long as the batteries are being charged. A complete charging cycle takes approx. 15 hours.



Only use the power supply which comes with the pyrometer. Do not use any other power supply as this may cause irreparable damage to the device.



The charger is only for charging the battery. The rechargeable battery is only charged when the pyrometer is switched off.

Preparing the pyrometer for measurements

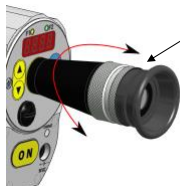
EN

Diopter compensation



The pyrometer offers diopter compensation to adjust the sighting device to the user's vision. Turn the ring until you see a sharp image of the target spot indication in the viewfinder.

Brightness control to protect the eye



Instruments with a measuring range of $> 2000\text{ }^{\circ}\text{C}$ are equipped with a polarisation filter to control brightness and protect the user's eye.

Focusing the pyrometer

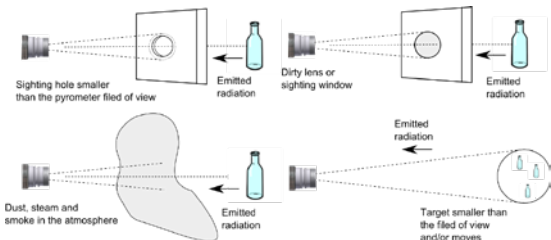


The pyrometer is equipped with focusable optics. Turn the lens until the target object **and** the target marker (distinctly marked in the viewfinder) **both** appear in sharp focus simultaneously

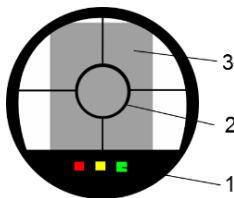
Align the pyrometers

Direct the CellaPort to the object to be measured. The measurement should take place at an angle of 90° to the measuring object. The angle should not be less than 45° from the vertical. When measuring with a two-colour pyrometer, the field of view does not have to be filled entirely by the target object. There might even be particles like dust, steam and

smoke in the viewing path that weakens the infrared radiation. The integrated traffic light function in the viewfinder signals an inadmissible partial illumination and the measurement is stopped.



Performing a measurement



- 1) Traffic light indicates
- 2) Measurement area
- 3) Target object

Press the ON button to switch on the device. Measurement is in progress as long as you press the ON button. The temperature (depending on the configured mode) is displayed on the rear panel when you release the ON button. As an option, the measurement readings can be transmitted via interface.

The two-colour pyrometer detects the infrared radiation of the target object on two wavelengths. The temperature is then defined by the ratio of these two signals. The emissivity, i.e. the radiation characteristics of the target may change due to the nature of the surface or in relation to the temperature, but with simultaneous changes over both wavelengths there is no influence on the measurement.



Please note: Changing the emissivity ratio can compensate for the difference between measured temperature and true temperature when selective interfering factors or material-related different emissivities are affecting Lambda 1 and Lambda 2.

The emissivity ratio is set as follow

▶ Press [▲ or ▼] until the desired emissivity ratio is shown.

▶ Release [▲ or ▼]

> The current temperature value is displayed and the new emissivity ratio coefficient is stored.

It is recommended to use the ATD function for the measurement. All parameters can be set directly at the pyrometer. Record the adjusted parameters.

Shipping, packing and disposal

Inspection after shipping

Unpack and inspect the entire shipment immediately upon receipt to make sure it is complete and undamaged. If the container/package shows visible signs of damage, please refuse the shipment. If this is not possible, accept the shipment on the condition that the freight carrier's delivery record is noted with the extent of the damage in order to file a claim. Should you discover a concealed loss or damage, report it to the shipper or freight carrier immediately. If the period for filing claims has expired, you will no longer be able to make any claims for compensation of damage or loss.

Packing

The packages used are made of carefully selected, environmentally compatible materials and are thus recyclable. Please ensure that they are disposed of in an ecologically sound manner.

Disposal of the old device



Old electrical and electronic devices frequently still contain valuable materials. These devices can be returned for disposal to the manufacturer or they must be disposed properly by the user. For the improper disposal of the device by the user, the company KELLER HCW is not responsible..



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Please note:

Unless otherwise stated in this instruction manual, the instruments described herein are subject to change without prior notice, particularly modifications for the sake of technological advancement.