



**N1** in terms of  
ACCURACY  
RELIABILITY  
INNOVATION

# **KITS** – KELLER Infrared Temperature Solutions

Digital Service





## Smart service for optical temperature measurement

Modern information and communication technology offers innovative solutions for the location and time-independent provision of data and information far beyond common practice. Thus, digitisation provides interesting new fields of action for companies, especially in the service sector.

For this purpose, KELLER ITS - one of the leading manufacturers of optical temperature measuring devices - follows this development and has developed the **KITS** App.

**KITS** is a digital information and communication platform for this service. It meets the various possibilities of a modern digital service management to provide assistance quickly and easily, at any time and anywhere in the world, and to provide the necessary information.

The Industrial Solution Guide supports interested parties in finding the most suitable system solution for optical temperature measurement for the requested industry and application. All information

required for a product, such as technical data, operating instructions, dimensional drawing, commissioning and maintenance instructions, is available directly via the app in 22 languages using a tablet or smartphone. In addition to the product information, technical and application information can be found in the media library.

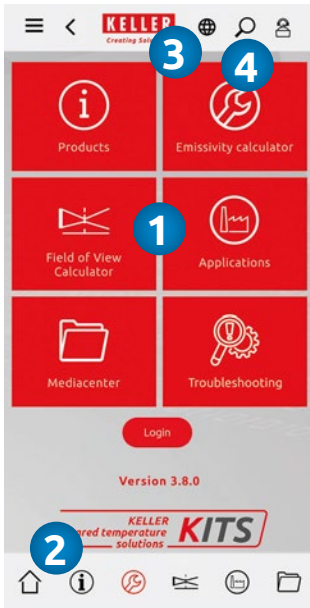
The field-of-view calculator and emissivity calculator are useful tools for selecting and commissioning the devices.

For quick help, the App gives you direct access to the service hotlines and local contacts.

The ticket system offers the possibility for simple and fast communication with the service team.

The Troubleshooting Guide provides support in systematically finding solutions to technical problems.

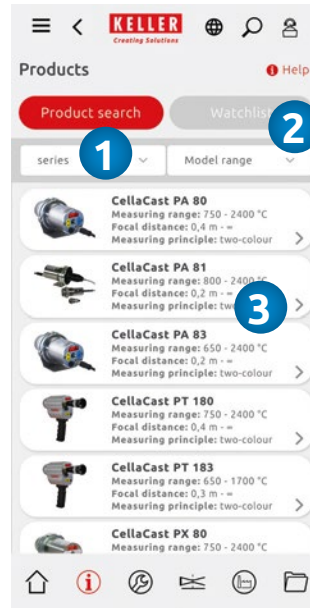
## Overview of functions of the KITS Service App **KITS**



### Start menu for selecting the modules

The App has 6 function modules. The desired module can be called up either by tile view mode **1** or by navigation bar **2**. The flag **3** is used to select the language.

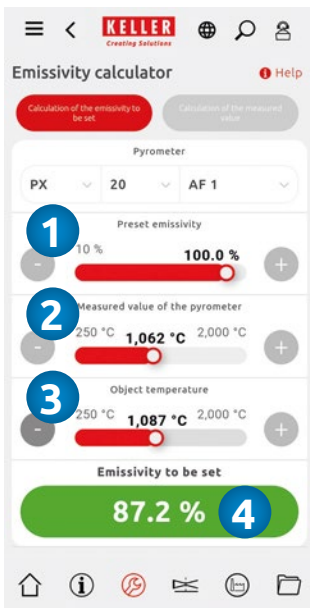
The magnifying glass **4** can be used to search for information directly via text field or scan function.



### Product information module

Start with the selection of the pyrometer via series and model range **1** or via the watchlist **2**. After selecting the series **3**, the product description, all technical data and documents are available for the corresponding device types.

A marked article can be called up again immediately using the watchlist **2**.



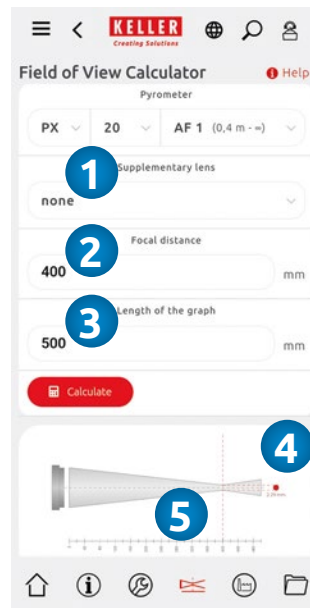
### Emissivity calculator module

Pyrometry is an optical temperature measurement. The temperature is determined from the thermal radiation emitted by a measured object. The surface and material have a great influence on the measurement result. The radiation property of the object to be measured is set by parameterising the emissivity on the device.

The emissivity calculator is an important tool for commissioning a pyrometer or for estimating a measurement error depending on the metrological conditions.

It determines the correct value **4** to be set on the device from the emissivity **1** preset on the device, the measured temperature **2** and a reference temperature **3**. Alternatively, the measurement deviation can be determined for a selected object temperature by varying the emissivity, i.e. a possible change in the material or the surface.

With a two-colour pyrometer, the calculations can be carried out independently for both the two-colour temperature and the two one-colour temperatures.



Measuring distance	Spot diameter
0.00 mm	18.00 mm
16.00 mm	17.37 mm
32.00 mm	16.74 mm
48.00 mm	16.11 mm
64.00 mm	15.49 mm
80.00 mm	14.86 mm
96.00 mm	14.23 mm
112.00 mm	13.60 mm
128.00 mm	12.97 mm
144.00 mm	12.34 mm
160.00 mm	11.71 mm
176.00 mm	11.09 mm
192.00 mm	10.46 mm

### Field-of-view calculator

The field-of-view calculator is a useful tool for determining the complete field-of-view, the size of the measuring area in relation to the distance, the maximum measuring distance and the minimum spot size depending on the optical properties of the device when selecting and commissioning the device.

After entering the measuring distance **2** and the length of the measuring distance **3**, the resulting dimensions of the spot size **4** and the field of view in relation to the distance **5** are displayed graphically and are shown in a table **6**. If the pyrometer is operated with an attachment lens, this must be selected from the list **1**.

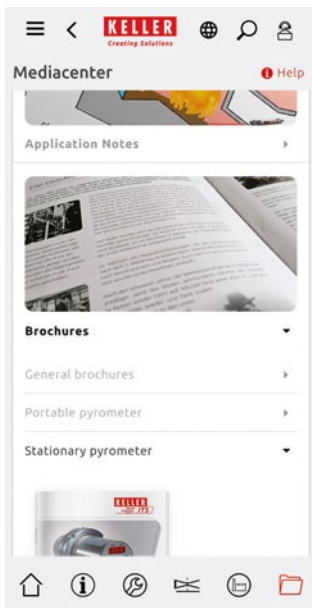
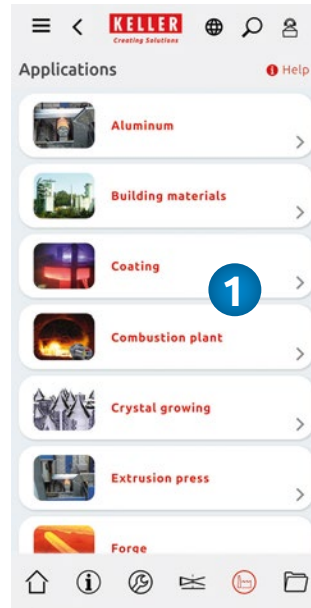
From the data, the exact diameter of the measuring field can be checked for the respective measuring distance in order to exclude a cut-off and thus an incorrect measurement when measuring through a viewing opening.

## Overview of functions of the KITS Service App **KITS**

### Industrial Solution Guide module

When selecting a pyrometer, the physical and measuring conditions given for an application, the functional requirements for a device or the integration into the plant control system must be considered.

The Industrial Solution Guide is used to select the appropriate measuring system **3** for the conditions and measuring location **2** in the production plant after selecting the industry and application **1**. All information and documents are available for the selected application solution.



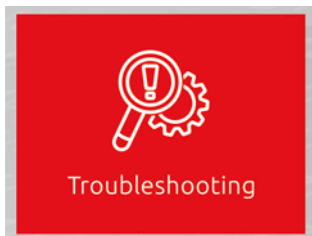
### Media Library module

In addition to product information and manuals, the media library also contains application notes and technical reports on optical temperature measurement as well as videos on applications and service instructions.



### Service Hotline module

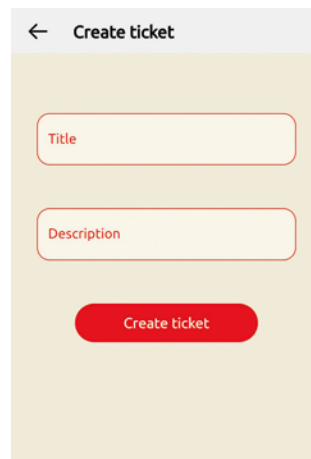
For support with the installation and commissioning of the devices or other technical questions, the contact details of the service hotline as well as the country-specific contacts can be found here.



### Troubleshooting Guide module

The Troubleshooting Guide is a structured guide for efficient troubleshooting and solving of the most common connection-related and metrological problems during commissioning or during operation.

The Troubleshooting Guide helps to directly and quickly identify the causes of a defect or metrological deviation, to eliminate the problem and to restore the pyrometer to a working condition.



### Ticket system with Chat function

A service ticket can be generated for quick and direct help. Modern digital communication with the exchange of information, pictures or documents takes place via the chat function.

## Our product range



### CellaTemp® PX

Pyrometers with IO-Link interface, focusable lens, through the lens sighting or laser spotlight.



### CellaTemp® PX-LWL

Pyrometers with IO-Link interface, fibre optics, focusable measuring heads and laser spot light.



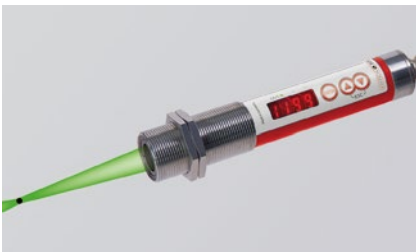
### CellaTemp® PA

Versatile pyrometers with focusable lens, through-the-lens sighting/ laser spotlight or video camera.



### CellaTemp® PA-LWL

Versatile fiber optics pyrometers with focusable head and laser spotlight.



### CellaTemp® PK(L)

Compact infrared thermometer for cramped environments. Optional with LED spot light.



### CellaTemp® PKF

Compact infrared thermometer with optical fibre and optical sensor head.



### CellaPort PT

Portable single-colour and two-colour pyrometers with through-the-lens sighting and USB interface.



### CellaCast PT

Portable pyrometer for non-contact temperature measurement of molten metal at automated casting machines and blast furnaces.

Since 1967, the Division Infrared Thermometer Solutions (ITS) of KELLER HCW GmbH develops and manufactures precision instruments and systems solutions for non-contact temperature measurements. Thanks to the continuous development of its range, KELLER ITS now is one of the leading providers for infrared thermometers and pyrometers worldwide.

With its very large product range of more than 250 models and systems KELLER ITS offers solutions for all standard applications and a variety of special measuring tasks.

Following the KELLER philosophy, the key focus in the development and production of the devices is set to the high measuring accuracy and reliability. Therefore, KELLER grants a warranty of 5 years on its products.

A global network of distributors and service points ensures competent and personal consultation on site.



# KELLER

Creating Solutions

infrared  
temperature  
solutions

## ITS



- Headquarters
- Sales and Service Center
- Sales abroad



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