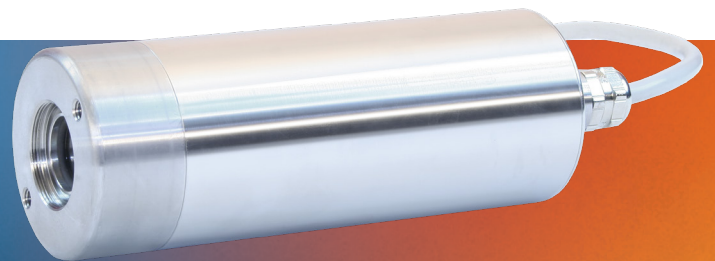


CT15 SERIES

ADVANCED INFRARED RADIATION THERMOMETERS WELL SUITED FOR PROCESSES THAT UNDERGO CLEANING AND DISINFECTION AS WELL FOR OTHER APPLICATIONS WITH HARSH ENVIRONMENTS



MAIN FEATURES

- ✓ Wide temperature measuring range
(from -25 to 3000 °C)
- ✓ Very fast response time ≥ 5 ms
- ✓ Several spectral ranges
(between 2 and 14 μm)
- ✓ Chopped Radiation Method for highest accuracy and long-term stability
- ✓ Robust stainless steel housing, IP67



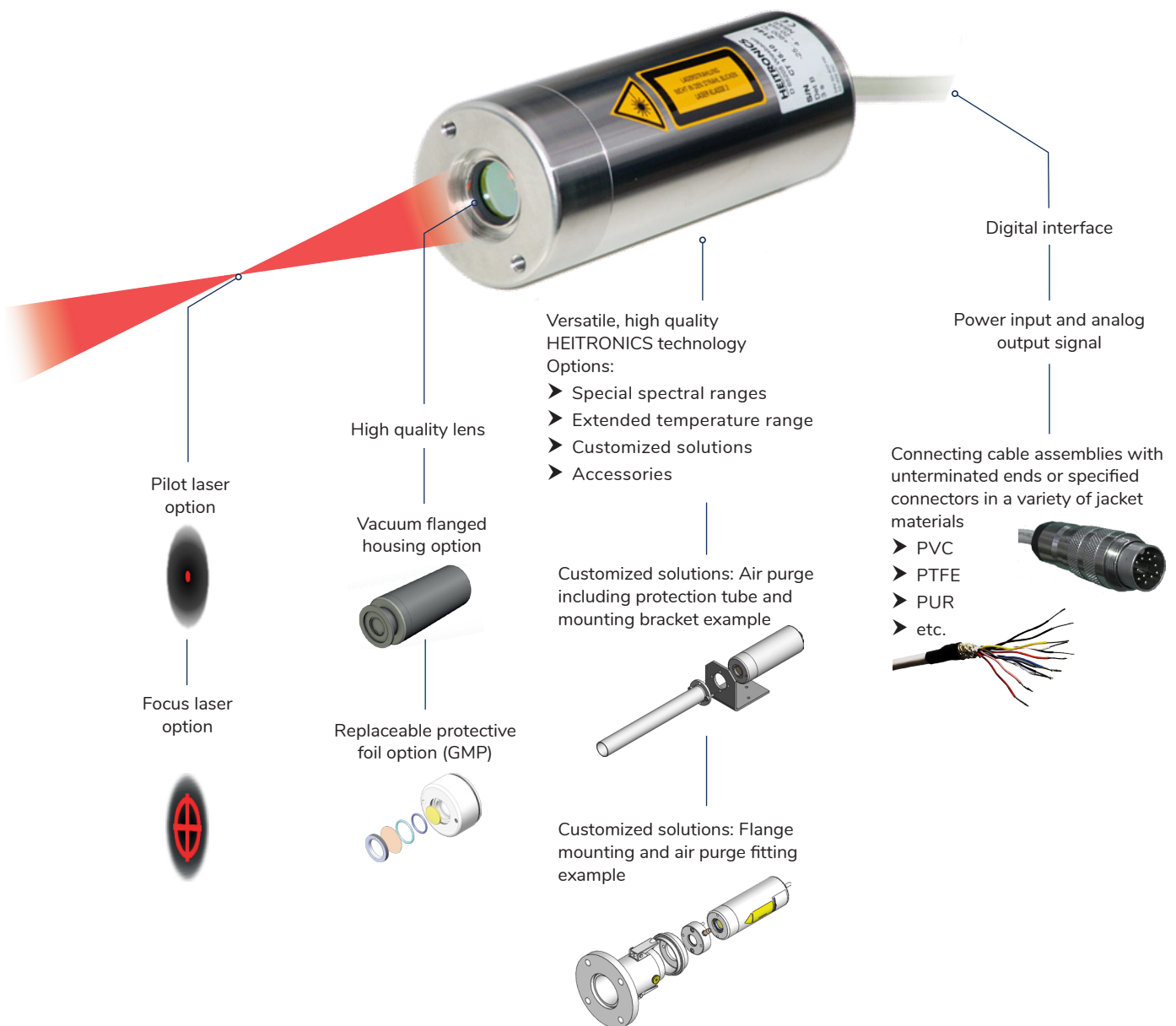
HEITRONICS CT15 Infrared Radiation Thermometers are ideal for use in harsh environments thanks to a robust stainless steel housing. Including high speed processes and for real-time measurements, they ensure precise and drift-free measurements of objects from ≥ 1 mm diameter.

MAIN FEATURES

In addition to the IP67 stainless steel housing CT15 Radiation Thermometers offer a wide range of spectral ranges within 2 to 20 μm and temperature ranges from -25 to 3000 $^{\circ}\text{C}$ or higher. Measured temperature values are transmitted via an individually scalable analog output and a serial interface. Via the serial interface, it is also possible to set parameters of the CT15 Series and to set the parameters for the measured value.

The CT15 Series offers a wide variety of options and amenities such as lenses, pilot or focus laser, RS485 as well as protective mounting equipment and other accessories. CT15 Series meets almost any requirement. A calibration certificate can be issued upon customer request.

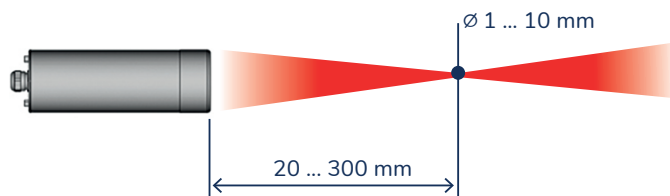
OVERVIEW



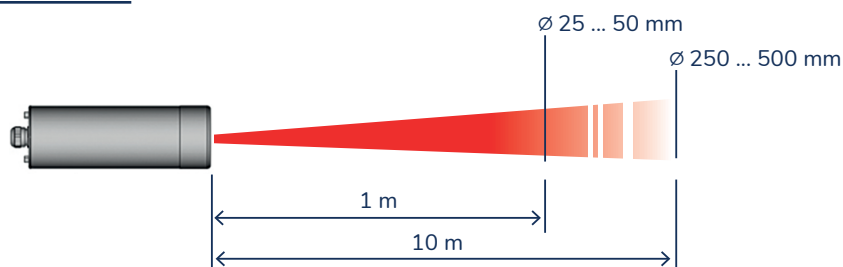
LENSES

A large selection of lenses is available to optimize the required measurement. The following figures show the measuring spot sizes depending on the distance between the thermometer and the object to be measured. Detailed field of view diagrams depend on temperature range, spectral range and other specific application criteria.

CLOSE FOCUS



FAR FIELD FOCUS



INTERFACES

CT15 Radiation Thermometers have a configurable analog output. It can be set as voltage or mA output and scaled to a desired temperature range. The devices can be parameterized via the serial interface using HEITRONICS EasyConfig or EasyMeas software.

Measured (value) data is indicated by serial ASCII protocol and can be evaluated via EasyMeas software or with software provided by the customer.

ANALOG INTERFACES

Analog output

- 0 ... 1 V, 0 ... 10 V; 0 ... 20 mA, 4 ... 20 mA
- Actual, maximum or minimum value (scalable)

Analog input option

- 0 ... 10 V
- Compensation of ambient temperature influence, transmittance, reflection and emissivity

Thermal switch option

- Switching temperature > 70 °C
- Maximum load ≤ 48 V, ≤ 0.5 A
- Internal temperature alarm

DIGITAL INTERFACES

Standard: RS232

- RS485 option
- BUS interface via module on request

Software

- EasyConfig configuration and display software
- EasyMeas includes recording and playback (option)

ASCII universal protocol to use with

- other hyperterminal software (not supplied by HEITRONICS)
- customer based Data exchange

Digital output option

- 2x open-collector-output
- Threshold detection Min, Max temperature value
- Alarm status

Digital input option

- Dry contact switch
- Operating voltage or open-collector
- Reset of memory, (de-)activate digital outputs or laser

MODELS

MODEL	SPECTRAL RANGE	APPLICATION	
CT15.2	2.00 ... 2.70 μm	<ul style="list-style-type: none"> ➤ Metal surfaces (heating) ➤ Ceramic surfaces ➤ Induction heating ➤ Furnaces 	Metals, Metal oxide, Ceramic, Glass volume
CT15.4	3.90 \pm 0.10 μm	<ul style="list-style-type: none"> ➤ Incinerators ➤ Refractory lining in incinerators ➤ Measurement through hot gases and flames ➤ Refractory lining in rotary kilns ➤ Grate in combustion chamber 	Glass, Glass volume
CT15.5	5.20 μm (4.90 ... 5.60 μm)	<ul style="list-style-type: none"> ➤ Surface temperature of glass/quartz ➤ Glass processing 	Glass, quartz (all types)
CT15.7	7.93 \pm 0.15 μm	<ul style="list-style-type: none"> ➤ Thin plastic films (e.g. PET, PA, fluorcarbon) 	Plastic films
CT15.8	7.50 ... 8.20 μm	<ul style="list-style-type: none"> ➤ Surface temperature of glass/quartz 	Glass, Quartz, Ceramic, Thin glass
CT15.10	8.00 ... 14.00 μm	<ul style="list-style-type: none"> ➤ Paper, rubber, wood, ceramics, plastic (> 1 mm) ➤ Painted or coated surfaces, asphalt, building materials ➤ Electronic components ➤ Food processing, microwave drying, freeze drying, liquids ➤ Sterilization processes for medical devices, pharmaceutical and food industries ➤ Tire production ➤ Plastics processing, blow molding containers, extrusion processing, coating process ➤ Cloud monitoring, surface of water and land ➤ Textile processing, refinement and drying ➤ Glass processing, glass coating 	Materials without high surface reflectivity
CT15.85	9.60 ... 11.50 μm	<ul style="list-style-type: none"> ➤ Meteorological, biological measurements ➤ Agricultural studies ➤ Rubber ➤ Large measuring distances 	Natural material, Chemicals
CT15.99		<ul style="list-style-type: none"> ➤ Customized 	Special applications

MOUNTING AND ACCESSORIES



Water cooling



Black Body Radiation Source
SW40



Temperature Meter MS40

HEITRONICS

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Specifications are subject to change without notice.