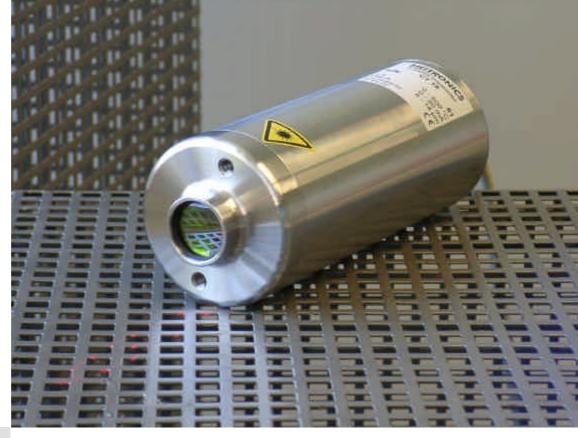**E**xtreme high Stability using Chopped Radiation Method

Robust Stainless Steel Housing with NEMA 6 Rating

Very high Resolution 0.03°C

Fast Response Times from 5 ms on

Application

Manufacturing and processing of:

- **Rubber**
- **Plastics**
- **Ceramics**
- **Varnish**
- **Food**
- **Textiles**

Beneficial in case of:

- **NEMA 6 rating**
- **precise and drift free measurement**
- **small targets**
- **measurement in harsh environments**
- **very fast measurements**
- **wide temperature range**

Infrared Radiation Thermometer

CT 15.10

The Universal Infrared Radiation Thermometer for Non Contact Temperature Measurement

HEITRONICS
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Infrared Radiation Thermometer CT15.10 at a Glance

Features

- **Rugged stainless steel housing, NEMA 6**
- **Wide temperature range from -25°C to 900°C**
- **Very fast response times ≥ 5 ms** (programmable)
- **Fields of view as small as 1.7 mm**
- *Focus laser* **marks field of view area**
- **High accuracy** (0,7%) **and long term stability**
- **Chopped Radiation Method** for very high temp. stability

Functions

- **µP based signal operation**
- **All parameters configurable via serial interface:**
  - **Temperature measuring range**
  - **Analog output** 0/4-20mA; actual or Min/Max-value
  - **Integrated valley/peak picker** w/ decay function
  - **Emissivity setting**
  - **Reflected environmental temperature**

General Specifications

Temperature range	**-25°C ... 900°C**
Temperature resolution (NETD)	Depends on measuring temperature and response time, **typical value 0,1°C**
Accuracy (uncertainty)	**± 0.5°C plus 0.7%** of the difference between target and housing temperature
Long term stability	**Better than 0,01%** of the absolute measured temperature per month
Field of view diameter	From **Ø 1,7mm**, depends on lens
Field of view marking	*Focus laser*, built-in: aims the size of the field of view in focal distance
	Pilot laser, built-in: aims the center of the field of view in any distance
	More mechanical pointers are available
Laser function	**Time out** or **permanent** operation, while **flashing** or **continuous marking**
Spectral range	8 – 14 µm
Programmable functions via serial interface	Emissivity, Environmental temperature, Analog output, Function of analog output, Response time, Temperature unit, Valley/ Peak-picker with decay function, Laser operation
Emissivity	**0,100 to 1,000** in 0,001-steps
Response time	from **5 ms to 10 s** (0,03, 0,1, 0,3, 1, 3, 10 s)
Temperature unit	**°C, °F or K**
Analog output (Hardware)	**4 scalable output signals**, temperature linear 0-10V, 0-1V, 0-20mA or 4-20mA, Zoom function for temperature span > 50 K
Analog output **(Functions)**	**Actual value, Maximum value or Minimum value**
Serial interface	**RS232-Interface, bi directional, 9.600 to 115.000 bps**, for programming and data transfer
Thermal switch	Monitors the instrument temperature
Power requirements	**22-30 VDC or 24 VAC** ± 10%, 48-400 Hz
	≤ 150 mA @ 24 VDC
Permissible operating temperature	**-20°C ... 60°C**
Storage temperature	-20°C ... 70°C
Protective class, Weight	**IP67 (IEC), NEMA 6; 1.3 kg**
Housing	**Stainless steel**

Housing dimensions in mm

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