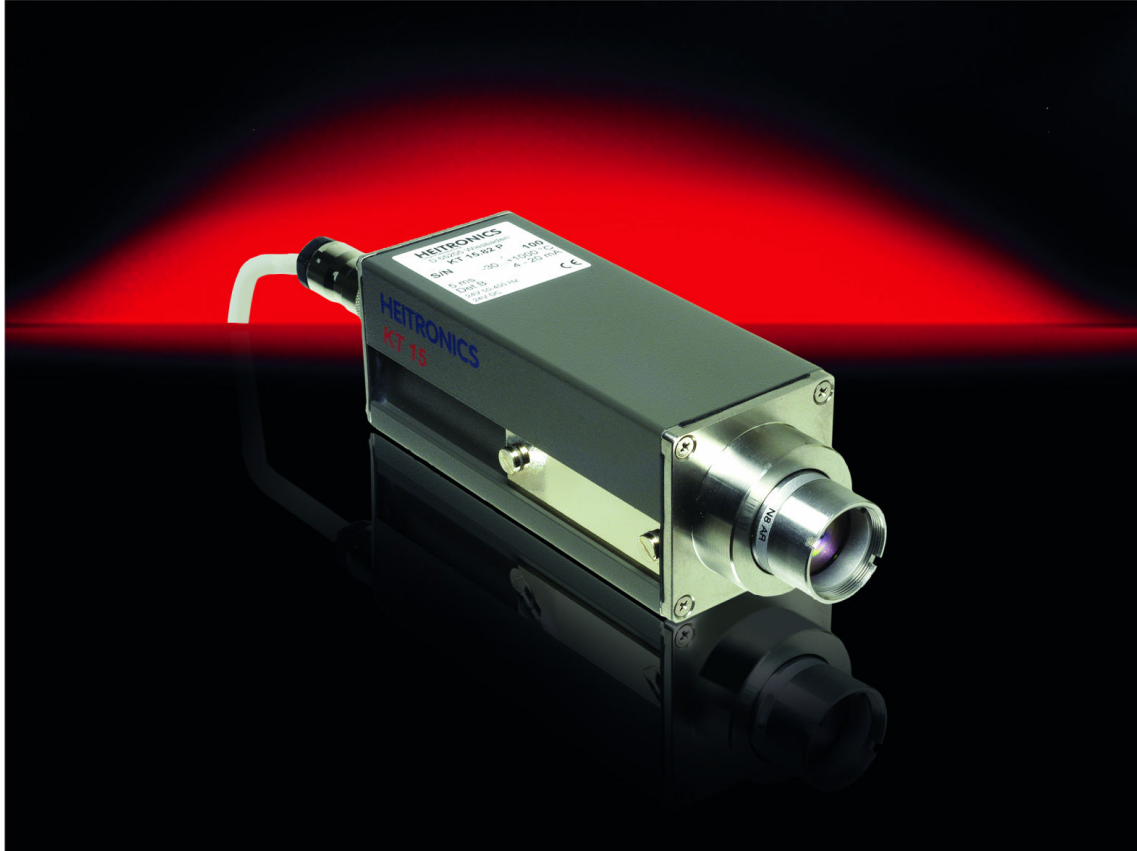


Extreme high
Stability - using
Chopped
Radiation Method

Very high
Resolution 0.03°C

Fast Response
Times from 5 ms
on low
Temperatures

Wide Temperature
Ranges -50°C to
3000°C



Features

- Focus on application – all spectral ranges from freeze drying to melt
- Stainless steel cooling and protecting housing up to 320°C
- Fast target measurement
- Focus laser marks field of view
- Very high linearization accuracy 0.02K
- User interface software for complete programming and measurement
- Wide range of accessories e.g.
- Vacuum tight lenses

Infrared Radiation Pyrometer

KT 15 IIP

**Non Contact Temperature
Measurement in the most
Advanced Technology**

HEITRONICS
Infrarot Messtechnik

Infrared Radiation Pyrometer KT15 IIP Series at a Glance

Selection Guide

Application / Material	Model / Type	Temperature Range / °C
Metal / Metal oxide / Ceramic		
Metal / metal oxide / ceramic	KT15.01 IIP	250 - 2500
	KT15.02 IIP	140 - 2500
Thin Plastic Film		
... / oil / paint	KT15.21 IIP	80 - 400
PE, PP, PVC, ...	KT15.23 IIP	0 - 400
PET, PA, ...	KT15.24 IIP	0 - 400
PTFE, PET, PVC, ...	KT15.25 IIP	0 - 400
Natural material, Paint, Chemicals, Rubber ...		
Paper, textiles, ceramics, asphalt, wood, electronic components, building materials, food, ...	KT15.81 IIP	0 -1000
	KT15.82 IIP	-30 - 1000
	KT15.83 IIP	0 - 500

Application / Material	Model / Type	Temperature Range / °C
Incinerator		
Burning gas temperature	KT15.69 IIP	0 - 1700
Through flames and gas	KT15.41 IIP	250 - 2500
Glass / Quartz		
Glass volume	KT15.01 IIP	250 - 2500
Glass volume	KT15.41 IIP	250 - 2500
Surface	KT15.42 IIP	100 - 2500
Thin material / in furnace	KT15.43 IIP	0 - 1400
Meteorological, biological measurement		
Meteorology	KT15.85 IIP	-25 - 200
Special applications		
Temperature of hot gases	KT15.6x IIP	400-2500
All materials	KT15.99 IIP	-50 - 3000

General Specifications

Temperature range	-50°C ... 3000°C, depends on model, see table above
Temperature resolution (NETD)	Depends on model, measuring temperature and response time, typical value 0,06°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 0,7mm , depends on detector type and 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 Laser pointer as accessory for non transparent lenses More mechanical pointers are available
Laser function	Time out or permanent operation , while flashing or continuous marking
Spectral responses	Depends on model
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 600 s (0.005, 0.01, 0.03, 0.1, 0.3, 1, 3, 10, 30, 60, 120, 240, 360, 480, 600 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	IP65 (IEC), NEMA 4 equivalent, 1.3 kg
Housing	Stainless steel and aluminum

Housing Dimensions in mm [inches]

