

CT18.04

Infrared Radiation Pyrometer CT18.04

for Non-Contact Temperature Measurement

- Rugged stainless steel housing, IP65
- Wide temperature ranges from 200 °C to 2900 °C
- Very fast response times ≥ 1 ms (programmable)
- Focusable Lens provides Fields-of-View as small as 0.7 mm
- · Laser aims the size of the Field-of-View in focus



GENERAL SPECIFICATION

 \square 200 °C to 700 °C, \square 250 °C to 1200 °C, \blacksquare 300 °C to 1400 °C, \square 350 °C to 1700 °C, \square 400 °C to 2300 °C, \square 450 °C to 2900 °C Temperature ranges:

Depends on measured temperature and response time, Temperature resolution (NETD): typical value 0.1 °C (at 100 ms, 350 °C, E= 1)

Accuracy (uncertainty): ± 0.5 °C plus 0.5% of the difference between target and sensor head temperature

Long term stability: Better than 0.01% of the absolute measured value per month

Spectral response:

Emissivity, environmental temperature, analog output, function of analog output, Programmable functions via serial response time, temperature unit, valley/peak picker with decay function, reset after

time, laser function, alarm values and output

Emissivity: 0.050 to 1.000 in 0.001-steps

Response time: From 1 ms to 10 s (0.001, 0.003, 0.01, 0.03, 0.1, 0.3, 1, 3, 10 s)

°C, K or °F Temperature unit:

interface:

Linear 0 - 20 mA or 4 - 20 mA or 0 - 10 V scalable temperature span ≥ 200 °C Analog output (Hardware):

Analog output (Functions): Actual value, max-value or min-value

Analog output (Resolution): 16 bit

Valley/peak picker programmable: Reset: internal

Reset: external input

Reset: after time (programmable)

RS232-interface, bi-directional, 9.6 kbps to 230 kbps and Serial interface: RS485 interface, Half-Duplex or Full-Duplex, 9.6 kbps to 230 kbps (switchable) for programming and data transfer

Alarm output: Programmable dry contact (relay)

10.5 VDC to 30 VDC Operating voltage:

Power consumption: ≤ 2.5 W

Permissible ambient temperature: -25 to 70 °C

With protective and cooling housing WK15 up to 300 °C

Storage temperature:

IP65 (IEC), (NEMA 4 equivalent) Protective class:

> Housing: Stainless steel

PC-based Software: EasyConfig: Software for parameter setting

EasyMeas: Software for parameter setting, data recording, data storage and data

evaluation

 Standard function □ Option



OPTICS

Objectives (Lenses): ■ Focusable from 132 mm to infinitive

Field of view diameter: ■ From Ø 0.7 mm, depends on lens

Field of view marking:

Laser built-in: aims the center and the size of the field of view in focus

Laser function:

Time out or permanent operation, while flashing or continuous marking

Through the lens view finder:

displays the Field of View of the target

APPLICATION

FIELD OF VIEW DIAGRAM (Example)

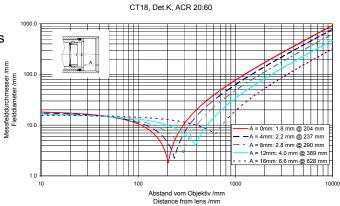
Temperature Measurement of:

- Metals
- Metal oxid
- Semiconductors
- Glass
- Graphite
- Silicium

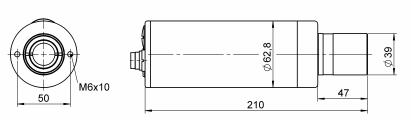
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Prozess Temperatures in:

- Hardening
- Soldering
- Forging
- Induction heating
- Epitaxy
- Casting
- Annealing



DIMENSIONS



Dimensions in mm

ACCESSORIES

