

CT09 Series

Infrared Radiation Thermometer CT09

- Rugged stainless steel housing, IP65
- Wide temperature range from -30 to 900 °C
- Very fast response times ≥ 50 ms (programmable)
- Fields-of-view as small as 1 mm
- Compatible to Infrared Radiation Thermometer KT12



GENERAL SPECIFICATION

Temperature range:	<ul style="list-style-type: none"> ■ -30 to 500 °C; □ 0 to 900 °C
Temperature resolution (NETD):	<ul style="list-style-type: none"> ■ Depends on measured temperature and response time, typical value 0.2 °C (at 300 ms, 100 °C, $\epsilon=1$)
Accuracy (uncertainty):	<ul style="list-style-type: none"> ■ ± 1.0 °C plus 0.6 % of the difference between target and sensor head temperature as a function of housing temperature: 0.01 % / °C for housing temp. others than 25 °C
Long term stability:	<ul style="list-style-type: none"> ■ Better than 0.01% of the absolute measured value per month
Field of view diameter:	<ul style="list-style-type: none"> ■ From \varnothing 1 mm, depends on lens
Spectral response:	<ul style="list-style-type: none"> ■ 8 to 14 μm
Programmable functions via serial interface:	<ul style="list-style-type: none"> ■ Emissivity, environmental temperature, analog output, function of analog output, response time, temperature unit, valley/peak picker with decay function, alarm values and output (B)
Emissivity:	<ul style="list-style-type: none"> ■ 0.100 to 1.000 in 0.001-steps
Response time:	<ul style="list-style-type: none"> ■ From 50 ms to 10 s (0.05; 0.1; 0.3; 1; 3; 10 s)
Temperature unit:	<ul style="list-style-type: none"> ■ °C, K or °F
Analog output (Hardware):	<ul style="list-style-type: none"> ■ Linear 0 - 20 mA, or 4 - 20 mA, scalable temperature span ≥ 50 °C
Analog output (Functions):	<ul style="list-style-type: none"> ■ Actual value, max-value or min-value
Analog output (Resolution):	<ul style="list-style-type: none"> ■ 12 bit
Valley/peak picker programmable:	<ul style="list-style-type: none"> ■ Reset: internal □ Reset: external input
Serial interface:	<ul style="list-style-type: none"> ■ RS232-interface, bi-directional, 9.6 to 57.6 kbps, for programming and data transfer
Alarm output:	<ul style="list-style-type: none"> □ Programmable (open collector)
Operating voltage:	<ul style="list-style-type: none"> ■ 16 VDC to 32 VDC □ 10 VDC to 15 VDC
Power consumption:	<ul style="list-style-type: none"> ■ Approx. 1.6 W
Permissible ambient temperature:	<ul style="list-style-type: none"> ■ -25 to 70 °C □ With protective and cooling housing WK11 up to 300 °C
Storage temperature:	<ul style="list-style-type: none"> ■ -40 to 85 °C
Protective class:	<ul style="list-style-type: none"> ■ IP65 (IEC), (NEMA 4 equivalent)
Housing:	<ul style="list-style-type: none"> ■ Stainless steel
PC-based Software:	<ul style="list-style-type: none"> ■ EasyConfig: Software for parameter setting □ EasyMeas: Software for parameter setting, data recording, data storage and data evaluation

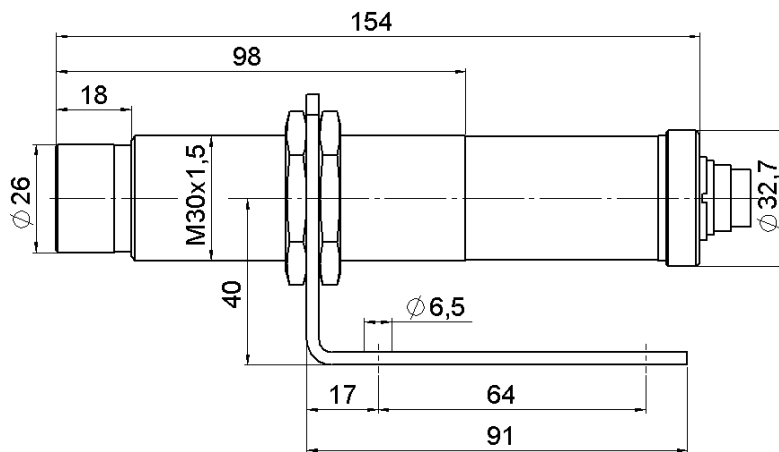
■ Standard function
 □ Option

(B) with option „Alarm output“

SELECTION GUIDE
FOR CT09-Series

<u>CT09 Lens type</u>	<u>Field of view @ mm distance</u>
CT09.K	40 mm @ 1 m
CT09.L	3 mm @ 110 mm
CT09.M	1 mm @ 25 mm
CT09.N	4.5 mm @ 165 mm

DIMENSIONS



CT09 Dimensions in mm

ACCESSORIES



Protective and cooling housing WK11