

CT09 Series

Infrared Radiation Thermometer

- Temperature ranges for -30 to 900 °C (-22 to 1652 °F)
- ≥ 50 ms response time
- Optical resolution 25:1 or 36:1
- Target Size ≥ 1 mm (0.04 in.)
- Stainless steel housing, IP65
- Digital electronics with programmable features



Standard Housing
with connector of
wiring cable shown



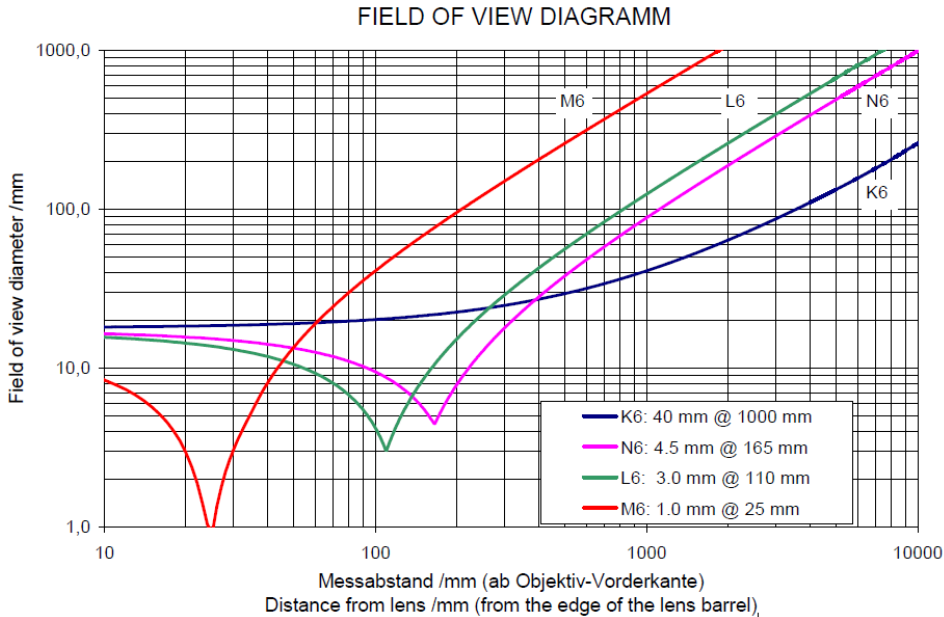
WK11 Protective Cooling
Housing; Air Purge not shown

GENERAL SPECIFICATION

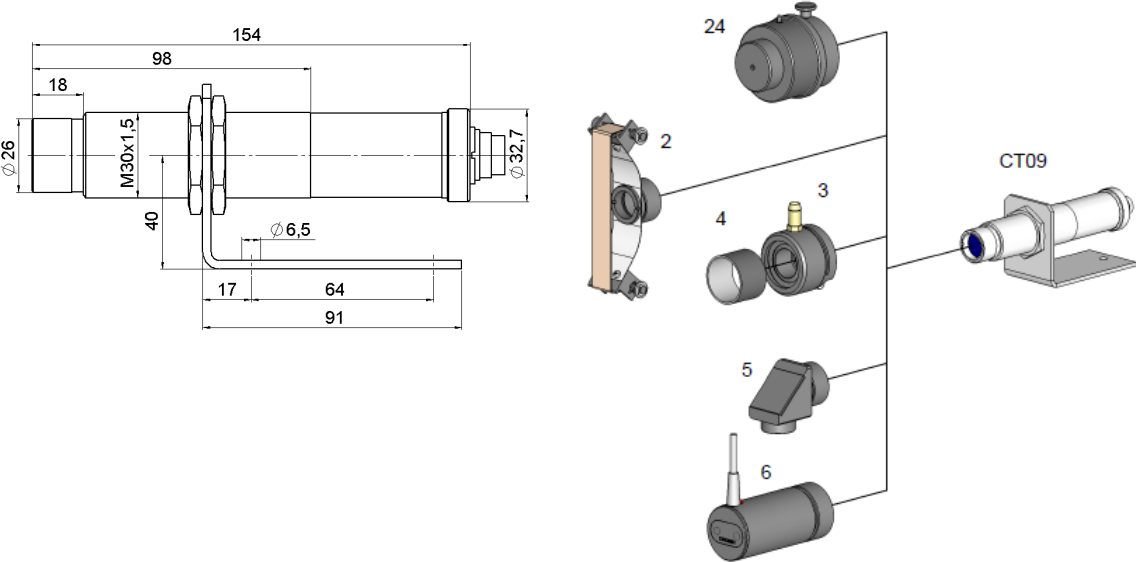
Temperature range:	-30 to 500 °C (-22 to 932 °F) or 0 to 900 °C (32 to 1650 °F) – <i>field adjustable span</i>
Temperature resolution (NETD):	Depends on measured temperature, response time & emissivity setting, example; NETD = ± 0.2 °C (± 0.4 °F) for 100 °C (212 °F) target with 300ms & $\epsilon = 1.00$ settings
Accuracy:	1.0 °C (1.8 °F) $\pm 0.6\%$ of the difference between target and thermometer temperature
Long term stability:	Better than 0.01% of the absolute measured value per month
Field of view diameter:	Specify lens K6, L6, M6 or N6. K6 = 1.6 inch diameter @ 39 inches distance L6 = 0.12 in. @ 4.3 in.; M6 = 0.04 in. @ 1 in.; N6 = 0.18 in. @ 6.5 in.
Spectral range:	8 to 14 μm (<i>others available on special request</i>)
Emissivity:	0.100 to 1.000 in 0.001-steps
Response time:	50 ms to 10 s (0.05; 0.1; 0.3; 1; 3; 10 s)
Temperature unit:	°C, °F or K
Analog output:	Linear 0 - 20 mA, or 4 - 20 mA, scalable span ≥ 50 °C (90 °F). Actual value, Max-value or Min-value. 12 bit resolution
Valley/peak picker, programmable:	Reset: internal <input type="checkbox"/> Reset: external input (<i>note: cannot be combined with Alarm Output option</i>)
Serial interface:	RS232-interface, bi-directional, 9.6 to 57.6 kbps, for programming and data transfer
Alarm output:	<input type="checkbox"/> Programmable (open collector) 15 to 32 VDC
Operating voltage:	<input type="checkbox"/> 10 to 15 VDC
Power consumption:	Approx. 1.6 W = 67mA @ 24V
Permissible ambient temperature:	-25 to 70 °C (-13 to 158 °F) <input type="checkbox"/> With protective and cooling housing WK11 up to 300 °C (572 °F)
Storage temperature:	-40 to 85 °C (-40 to 185 °F)
Protective class:	IP65 (IEC), (NEMA 4 equivalent)
Housing:	304 stainless steel
PC-based Software:	EasyConfig: Software for parameter setting (<i>supplied with each CT09</i>) <input type="checkbox"/> EasyMeasure: EasyConfig features plus data recording, storage & evaluation (<i>option</i>)
Programmable functions via RS232:	Emissivity, background temperature compensation, analog output scaling, response time, temperature unit, valley/peak picker with decay function and optional alarm output (<i>Alarm Output cannot be combined with External Reset option</i>)

= Option

SELECTION GUIDE
FOR CT09-Series



ACCESSORIES and OPTIONS for Housings and Mountings (partial listing of what is available)



Clockwise from top left: CT09 Housing & Mounting Bracket dimensions in mm ; 2 – Emissivity Converter for rotating polished rolls ; 24 – Laser Pointer ; 4 & 3 Short Sight Tube and Air Purge ; 5– Right Angle Mirror ; 6 – SW15 Portable Blackbody Calibration source ;