

CT13.77

Infrared Radiation Thermometer CT13.77

- Rugged stainless steel housing, IP68
- Wide temperature range from 0 to 500 °C
- Very fast response times ≥ 30 ms (programmable)
- Pilot laser aims the center of the field-of-view (option)



SPECIFICATIONS

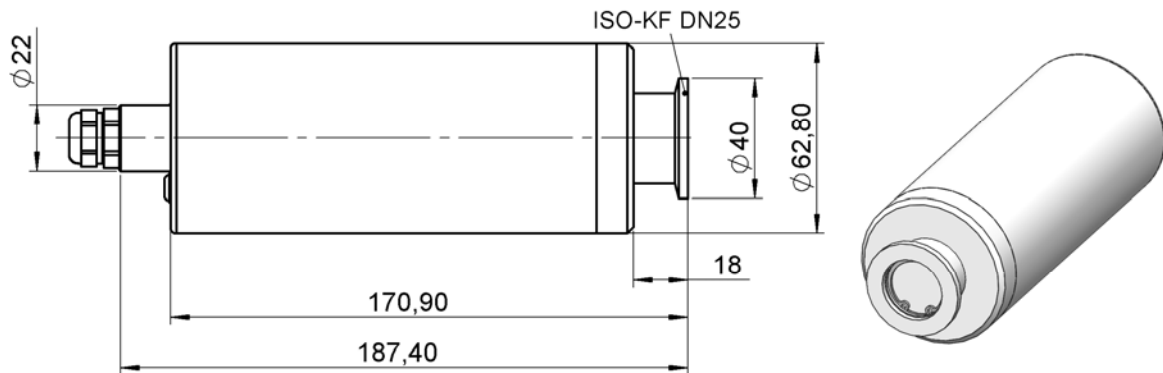
Temperature range:	■	0 to 500 °C
Temperature resolution (NETD):	■	Depends on measured temperature and response time, typical value < 1 °C (at 1 s, 300 °C, $\epsilon = 1$)
Accuracy (uncertainty):	■	± 0.8 °C plus 0.8% of the difference between target and sensor head temperature
Long term stability:	■	Better than 0.01% of the absolute measured value per month
Field of view diameter:	■	16 mm @ 470 mm
Field of view marking:	□	<i>Pilot laser</i> , built-in: aims the center of the field of view at any distance
Laser function:	■	Time out or permanent operation, while flashing or continuous marking (A)
Spectral response:	■	7.5 to 7.85 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 function (A), alarm values and output (B)
Emissivity:	■	0.100 to 1.000 in 0.001-steps
Response time:	■	From 30 ms to 10 s (0.03, 0.1, 0.3, 1, 3, 10 s)
Temperature unit:	■	°C, K or °F
Analog output (Hardware):	■	Linear 0 - 20 mA, or 4 - 20 mA, scalable temperature span ≥ 50 °C
Analog output (Functions):	■	Actual value, max-value or min-value
Analog output (Resolution):	■	12 bit
Valley/peak picker programmable:	■	Reset: internal
	□	Reset: external input
Serial interface:	■	RS232-interface, bi-directional, 9.6 to 57.6 kbps, for programming and data transfer
Alarm output:	□	Programmable (open collector)
Operating voltage:	■	10.5 VDC to 30 VDC / 12 (-10 %) VAC to 24 (+10 %) VAC
Power consumption:	■	≤ 2.5 W
Permissible ambient temperature:	■	-25 to 60 °C
	□	With protective and cooling housing WK15 up to 300 °C
Storage temperature:	■	-40 to 85 °C
Protective class:	■	IP68 (IEC), (NEMA 4 equivalent)
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	(A) with option "Pilot laser"
□ Option	(B) with option "Alarm output"

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<u>Application / Material</u>	<u>Temperature range / °C</u>
Glass surface	0 ... 500

DIMENSIONS



FIELD OF VIEW DIAGRAM

CT13.77, 7.5...7.85 μm , Det.E, VZ7.001

