

CT18.04LL

Infrared Radiation Thermometer CT18.04LL

for Non-Contact Temperature Measurement

- Rugged stainless steel housing, IP65
- Wide temperature ranges from **250 °C to 2900 °C**
- Very fast response times $\geq 1 \text{ ms}$ (programmable)
- Fields-of-view as small as **0.9 mm**
- Laser aims the center and the size of the field-of-view in focus



GENERAL SPECIFICATION

Temperature ranges:	<ul style="list-style-type: none"> □ 250 °C to 1200 °C, □ 300 °C to 1400 °C, ■ 350 °C to 1700 °C, □ 400 °C to 2300 °C, □ 450 °C to 2700 °C
Temperature resolution (NETD):	<ul style="list-style-type: none"> Depends on measured temperature and response time, typical value 0.1 °C (at 100 ms, 350 °C, $\epsilon = 1$)
Accuracy:	<ul style="list-style-type: none"> 0.1 °C \pm < 0.4% of the measured value in temperature units at an ambient temperature of 25 °C for the given temperature range
Temperature drift:	<ul style="list-style-type: none"> 0.004% of the measured temperature where the internal temperature of the radiation thermometer deviates from 25 °C
Long term stability:	<ul style="list-style-type: none"> Better than 0.01% of the absolute measured value per month
Spectral response:	<ul style="list-style-type: none"> 1.6 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, reset after time, laser function, alarm values and output
Emissivity:	<ul style="list-style-type: none"> 0.050 to 1.000 in 0.001-steps
Response time:	<ul style="list-style-type: none"> From 1 ms to 10 s (0.001, 0.003, 0.01, 0.03, 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 or 0 - 10 V scalable temperature span $\geq 200 \text{ °C}$
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"> 16 bit
Valley/peak picker programmable:	<ul style="list-style-type: none"> Reset: internal Reset: external input Reset: after time (programmable)
Serial interface:	<ul style="list-style-type: none"> RS232-interface, bi-directional, 9.6 kbps to 230 kbps and RS485 interface, Half-Duplex or Full-Duplex, 9.6 kbps to 230 kbps for programming and data transfer
Alarm output:	<ul style="list-style-type: none"> Programmable dry contact (relay)
Operating voltage:	<ul style="list-style-type: none"> 10.5 VDC to 30 VDC
Power consumption:	<ul style="list-style-type: none"> $\leq 2.5 \text{ W}$
Permissible ambient temperature:	<ul style="list-style-type: none"> -20 °C to 70 °C □ With protective and cooling housing WK15 up to 300 °C
Storage temperature:	<ul style="list-style-type: none"> -20 °C to 80 °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

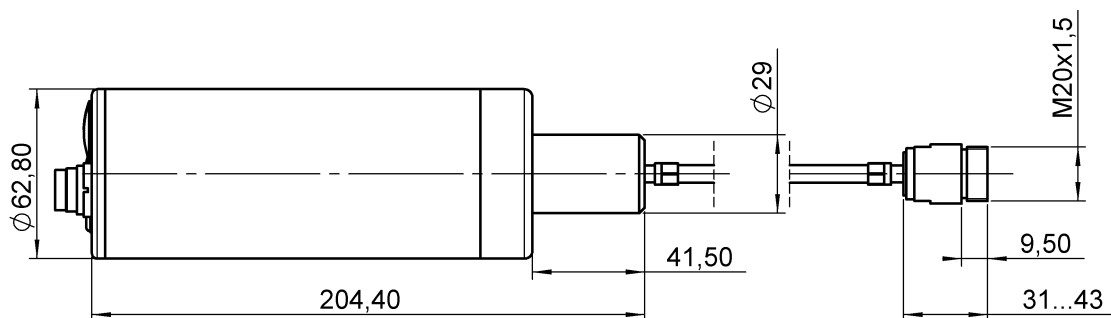
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OPTICS

Fibre optic with objective (lens)

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| Objectives (Lenses): | ■ | Focusable from 47 mm to infinity |
| Field of view diameter: | ■ | From \varnothing 0.9 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 |
| Permissible ambient temperature: | □ | -25 °C to 200 °C |
| Protective class: | □ | IP54 |

DIMENSIONS



Dimensions in mm

ACCESSORIES



Protective and cooling housing WK15



Protective and cooling housing with airpurge and extension tube