CT18.04LL

Infrared Radiation Pyrometer 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 ≥ **1 ms** (programmable)
• Fields-of-view as small as **0.4 mm**
• Laser aims the center and the size of the field-of-view in focus

GENERAL SPECIFICATION

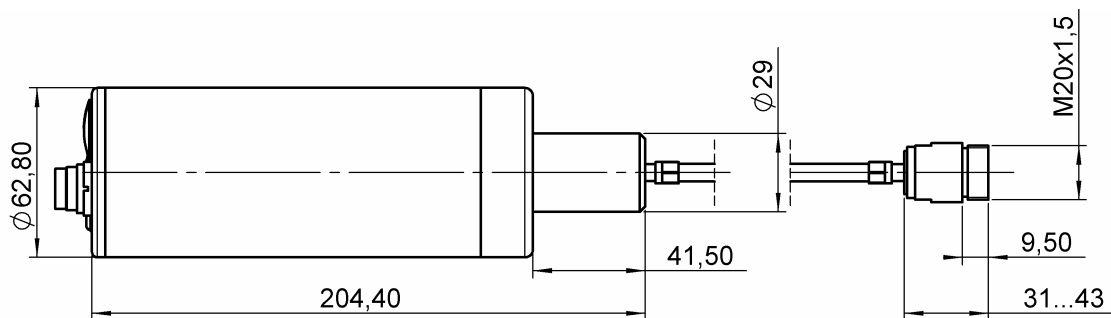|	
Temperature ranges: ■	□ 250 °C to 1200 °C, □ 300 °C to 1400 °C, ■ 350 °C to 1700 °C, □ 400 °C to 2300 °C, □ 450 °C to 2700 °C
Temperature resolution (NETD): ■	Depends on measured temperature and response time, typical value 0.1 °C (at 100 ms, 350 °C, ε= 1)
Accuracy (uncertainty): ■	± 0.5 °C plus 0.5% 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: ■	1.6 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, 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)
Temperature unit: ■	°C, K or °F
Analog output (Hardware): ■	Linear 0 - 20 mA or 4 - 20 mA or 0 – 10 V scalable temperature span ≥ 200 °C
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)
Serial interface: ■	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: ■	Programmable dry contact (relay)
Operating voltage: ■	10.5 VDC to 30 VDC
Power consumption: ■	≤ 2.5 W
Permissible ambient temperature: ■	-20 °C to 70 °C
□	With protective and cooling housing WK15 up to 300 °C
Storage temperature: ■	-40 °C to 85 °C
Protective class: ■	IP65 (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
□ Option

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OPTICS — Fibre optic with objective (lens)

Objectives (Lenses):	■	Focusable from 55 mm to infinitive
Field of view diameter:	■	From Ø 0.4 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 cm

ACCESSORIES

Protective and
cooling housing WK15

Protective and cooling housing
with airpurge and extension tube