

Technical Data Sheet

KT18.03RD

Infrared Radiation Thermometer

- Dual and Single Wavelength
- Very fast response time from 1 ms on
- Laser aiming LED or view finder
- Robust design for heavy industry



Measurement specifications

Temperature range:	600 ... 1600 °C, 750 ... 2500 °C, 900 ... 3000 °C or 1000 ... 3300 °C
Temperature span:	600 ... 3000 °C
Measurement uncertainty:	0.5 % of the measured value in °C \pm 1 °C ($\epsilon = 1$, $T_{amb.} = 23$ °C, $T_{95} = 1$ s)
Reproducibility:	0,1 % of the measured value in °C \pm 1 °C ($\epsilon = 1$, $T_{amb.} = 23$ °C, $T_{95} = 1$ s)
Field of view:	from \varnothing 1.3 mm (\pm 5 %) on, depending on optic and detector
Response time (t_{90}):	From 1 ms on
Temperature unit:	°C or °F
Emission ratio	-0.8 ... 1.2

Electrical specifications / Functions

Analog output:	0 ... 20 mA; 4 ... 20 mA
Function:	Actual, maximum value
Digital output option:	open-collector 24 VDC / max. 100 mA
Function:	Min. intensity, limit
Digital input option:	Push button
Function:	Reset of memory, (de-)activate digital outputs or laser
Serial interface:	RS232 isolated \pm 50 V or RS485 isolated 2500 V RMS
Aiming options:	Green LED, laser or sight
Programmable via serial interface:	Emissivity, digital output, analog output, partial measuring range, temperature unit, Max value memory, average value, light beam aiming device switchable
Operating voltage:	DC: 24 V \pm 10 % AC: 18 V \pm 10 %
Power consumption:	< 160 mA

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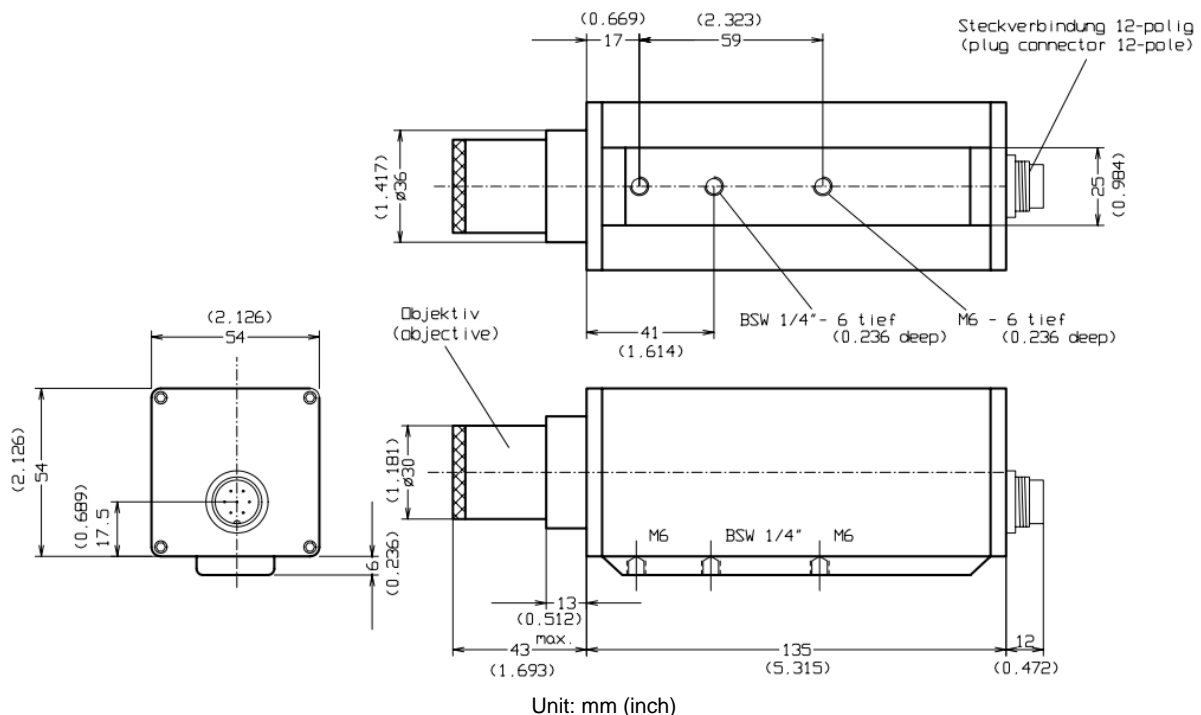
General specifications

Storage temperature:	-10 ... 70 °C
Permissible ambient temperature:	0 ... 50 °C (optic system up to 150 °C)
Protection class:	IP65
Housing:	Aluminum
Weight:	Appr. 0.6 kg

Scope of supply and options¹

Accessories:	<ul style="list-style-type: none"> ■² Manual ■ Software EasyLog ■ Connecting cable with 12-pin female connector 2 m length, PVC, unterminated ends □ Connecting cable, ≥ 5 m length: PTFE; PUR; PVC; TPE, unterminated ends or 12-pin female connector
Calibration certificate:	□ HEITRONICS certificate
Housing:	□ Protective cooling jacket (water) for ambient temperatures above 60 °C
Mechanical accessories:	□ Air purge fitting, beam deflection 90°...
Bus interface:	□ With transducer (Profibus, Profinet, Ethernet, Ethercat, USB 2.0)

Dimensions



¹ Special model specification on request.

² ■ Standard function
□ Option