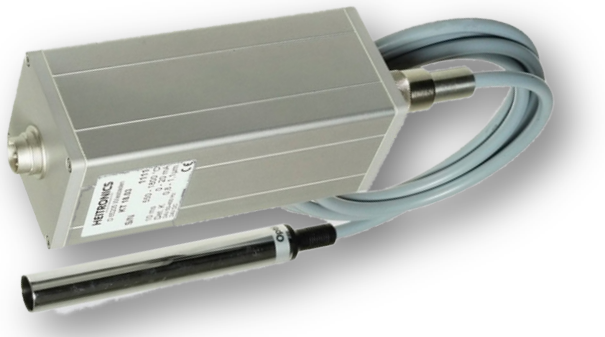
HEITRONICS
Infrarot Messtechnik

Technical Data Sheet

KT18.03RDLL

Infrared Radiation Thermometer



- Dual and Single Wavelength
- Fibre optics with optic system
- Light beam aiming device
- Ambient temperature fibre optic and optic: 150 °C without cooling

Measurement specifications	
Temperature range:	600 … 1600 °C, 800 … 1800 °C, 900 … 2000 °C, 1000 … 2500 °C or 1000 … 3000 °C
Temperature span:	600 ... 3000 °C
Measurement uncertainty:	0.5 % of the measured value in °C ± 1 °C (ε = 1, $T_{amb.}$ = 23 °C, T_{95} = 1 s)
Reproducibility:	0,1 % of the measured value in °C ± 1 °C (ε = 1, $T_{amb.}$ = 23 °C, T_{95} = 1 s)
Field of view:	from Ø 0.7 mm (± 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: **Function:**	0 … 20 mA; 4 … 20 mA Actual, maximum value
Digital output option: **Function:**	open-collector 24 VDC / max. 100 mA Min. intensity, limit
Digital input option: **Function:**	Push button (customized) Reset of memory, (de-)activate digital outputs or laser
Serial interface:	RS232 isolated ± 50 V or RS485 isolated 2500 V RMS
Aiming options:	Light beam aiming device, 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 ± 10 % AC: 18 V ± 10 %
Power consumption:	< 160 mA

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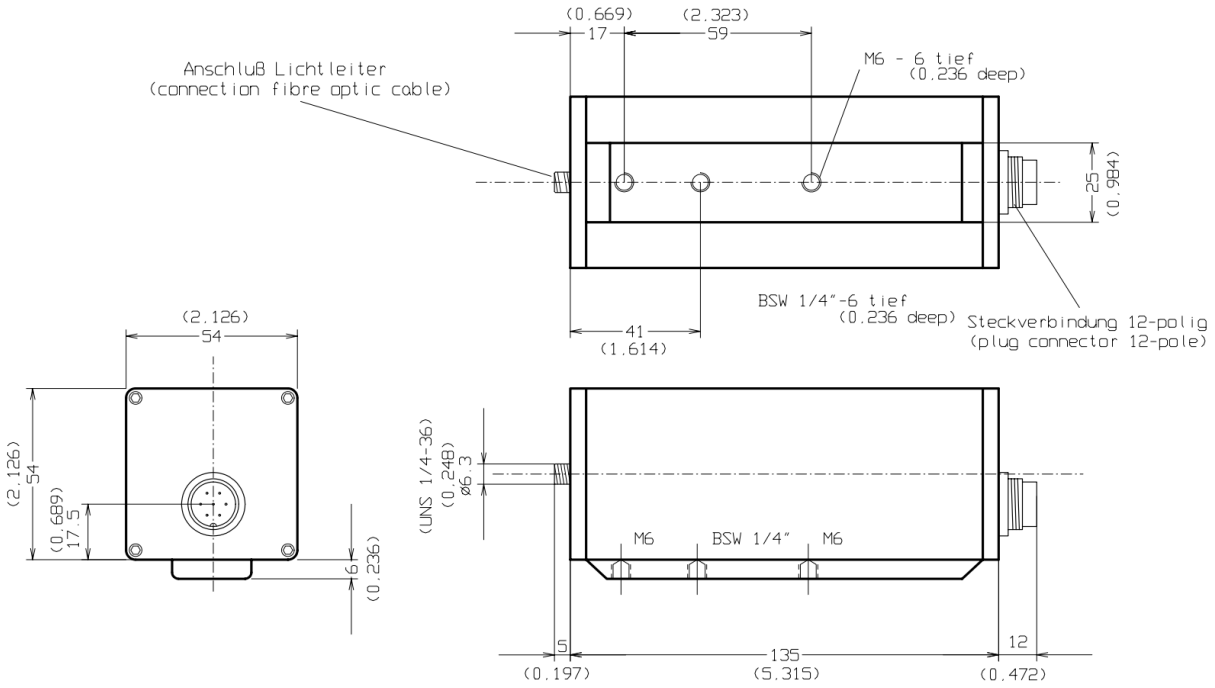
General specifications	
Storage temperature:	-10 … 70 °C
Permissible ambient temperature:	0 … 50 °C (optic system up to 150 °C)
Protection class:	IP65
Housing:	Aluminum
Weight:	Appr. 0.6 kg

Scope of supply and options[1]	■ Standard function; □ Option	
Accessories:	■[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



Unit: mm

1 Special model specification on request.
2 ■ Standard function
□ Option

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Technische Änderungen und redaktionelle Irrtümer vorbehalten. Specifications are subject to change without notice.