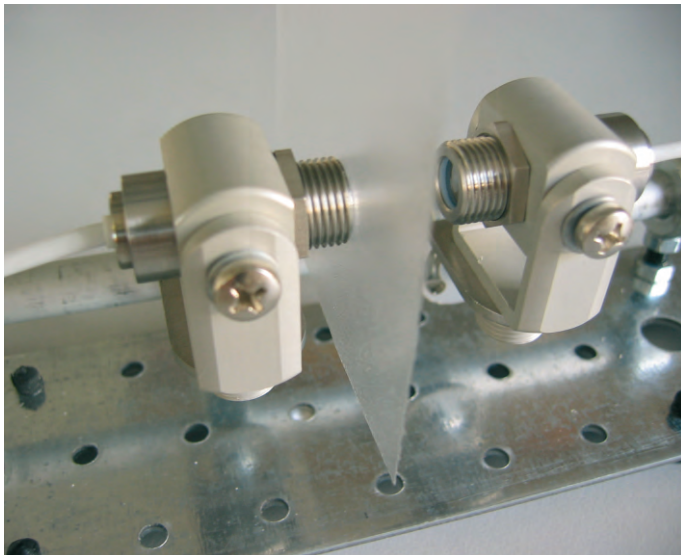


# More Precision.



## optris® CTtrans

Mobile measuring system for thermal material analysis



### FEATURES

- Combination of miniaturized infrared radiator and optris CT - infrared sensor
- Different modes for evaluation of the material parameters transmissivity, emissivity and reflexion
- 0-10 V - output allows transmission of the determined emissivity to a following CT sensor
- Infrared temperature measurement with automatic material detection
- Available as a mobile system (with carrying case) or for fixed installations
- High life span of the infrared source (40,000 h operating time)

General specifications	
Environmental rating	IP 65 (NEMA-4)
Ambient temperature	sensing head -20°C to 100°C
	IR source -20°C to 100°C
Storage temperature	sensing head -40°C to 120°C
	IR source -40°C to 120°C
Relative humidity	10 - 95 %, non condensing
Vibration	IEC 68-2-6: 3 G, 11 - 200 Hz, any axis
Shock	IEC 68-2-27: 50 G, 11 ms, any axis
Weight	sensing head 40 g
	IR source 40 g
	electronics 450 g

Electrical specifications	
Outputs/analog	0/4 - 20 mA, 0 - 5/10 V
Output/digital	3.3 V/30 mA
Relay output (optional)	2 x 60 V DC/42 V AC <sub>eff</sub> ; 0.4 A; optic.isolated
Outputs/digital (optional)	USB, RS232, RS485 (optional)
Output impedances	mA max. 500 Ω (with 8 - 36 V DC)
	mV min. 100 k Ω load impedance
thermocouple	20 Ω
Input/digital	Calibration input
Cable length	3 m (standard)
Current draw	max. 150 mA
Power supply	10 - 24 V DC

Measurement specifications	
Transmissivity	0 - 100 %
Reflexion	0 - 100 %
Emissivity	10 - 100 %
Spectral range	8 - 14 μm
Probe size	> 7 mm
Repeatability (at ambient temperature: 23 ±5°C)	±2,5 %
Measurement cycle	0.1 - 99 s
Recommended distance (IR source - sensing head)	30 - 60 mm

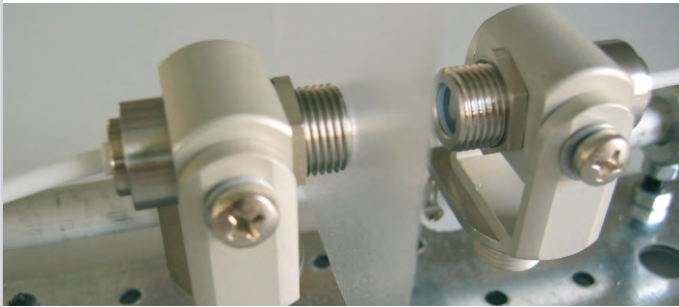
### Scope of supply

- optris CT 15:1 sensing head
- High temperature IR source
- CTtrans electronics with LCD display & programming keys
- Power pack (AA batteries)
- Adjustment tool
- Operators manual
- Carrying case



# optris® CTtrans

## Measurement modes

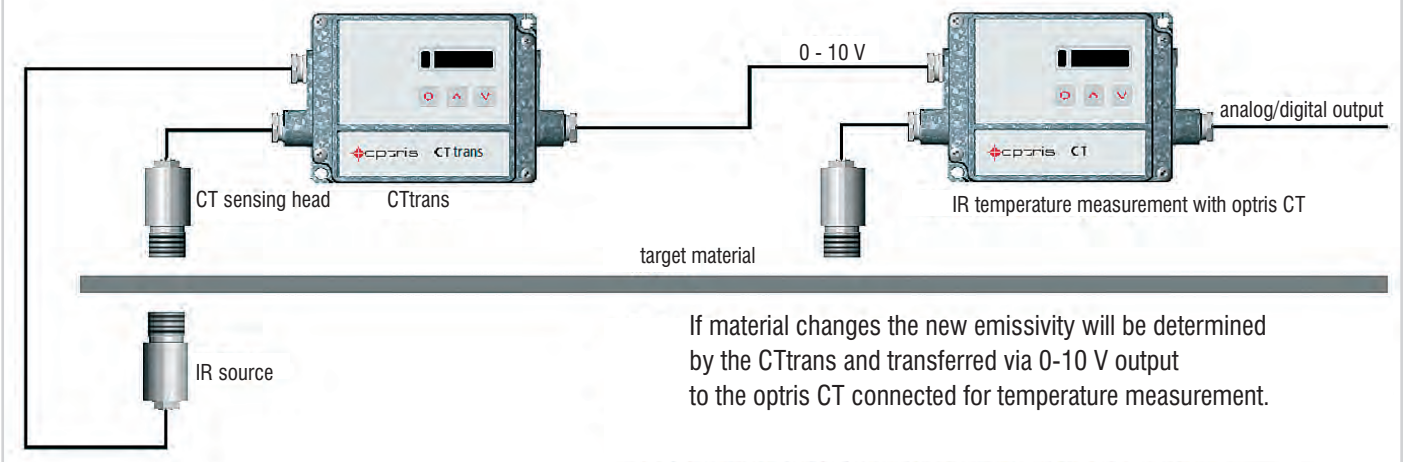


Determination of transmissivity and emissivity (indirectly)



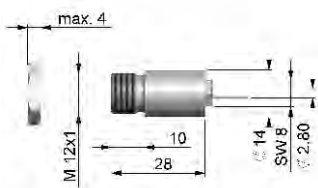
Determination of reflexion

## Application

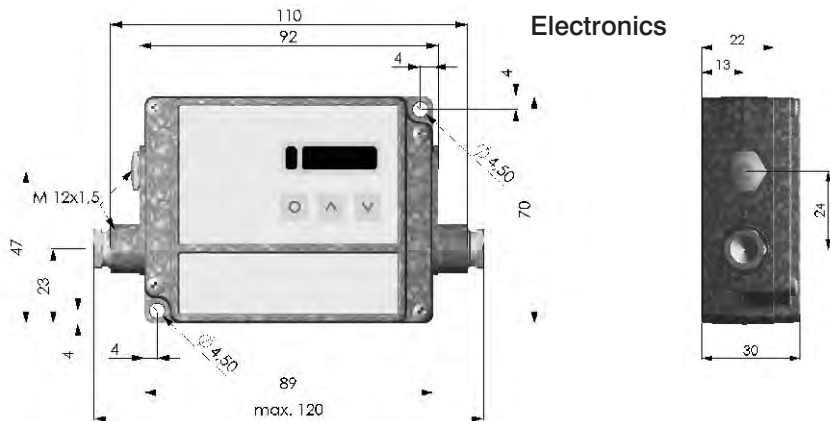


## Dimensions

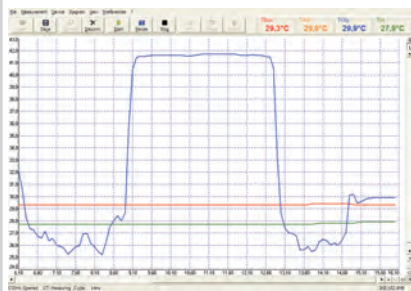
### Sensing head/IR source



### Electronics



## Compact Connect Software



- easy sensor setup and remote controlling
- automatic data logging for analysis and documentation
- graphic display of temperature trends
- adjustment of extended signal processing functions
- programming of analog and digital input for external emissivity and ambient temperature compensation

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Specifications are subject to change without notice.  
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