

Two wire infrared sensor for rugged industrial applications

Features:

- Easy two wire installation
- Wide measurement range of -30 °C to 900 °C
- Optional USB programming interface and software
- Wide power range: $5\text{--}30\text{ V DC}$
- Optical resolution of 22:1
- Simultaneous two wire output and digital communication
- Alarm output ($0\text{--}30\text{ V} / 500\text{ mA}$)



General specifications

Environmental rating	IP 65 (NEMA-4)
Ambient temperature	$-20\text{ °C} \dots 75\text{ °C}$
Storage temperature	$-40\text{ °C} \dots 85\text{ °C}$ (sensing head)
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	350 g

Electrical Specifications

Output / analog	$4\text{--}20\text{ mA}$
Output / alarm	$0\text{--}30\text{ V} / 500\text{ mA}$ (open collector)
Output / digital	USB (optional)
Loop impedance	Max. $1000\ \Omega^1$
Cable length	8 m
Power supply	$5\text{--}30\text{ V DC}$

Measurement specifications

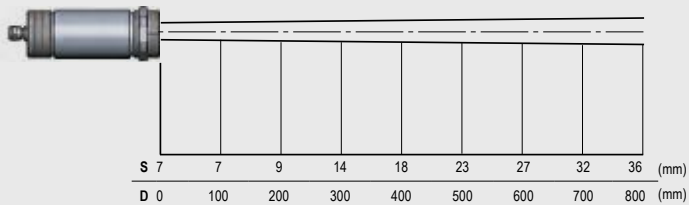
Temperature range (scalable via software)	$-30\text{ °C} \dots 900\text{ °C}$
Spectral range	$8\text{--}14\ \mu\text{m}$
Optical resolution (90 % energy)	22:1
CF-Optics (optional)	$0.6\text{ mm} @ 10\text{ mm}$
System accuracy (at ambient temperature $23 \pm 5\text{ °C}$)	$\pm 1.5\%$ or $\pm 1.5\text{ °C}^2$
Repeatability (at ambient temperature $23 \pm 5\text{ °C}$)	$\pm 0.75\%$ or $\pm 0.75\text{ °C}^2$
Temperature resolution	0.2 K
Response time (95 %)	150 ms
Emissivity / Amplification (adjustable via software)	0.100–1.100
Transmissivity (adjustable via software)	0.100–1.100
Signal processing (parameter adjustable only via optional software)	Peak hold, valley hold, average; extended hold function with threshold and hysteresis
Software	optris® Compact Connect

¹⁾ In dependence on supply voltage

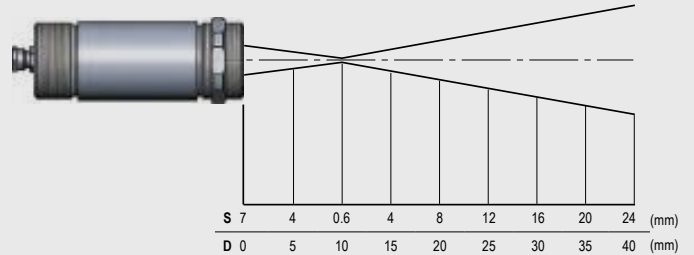
²⁾ Whichever is greater

Optical Specifications

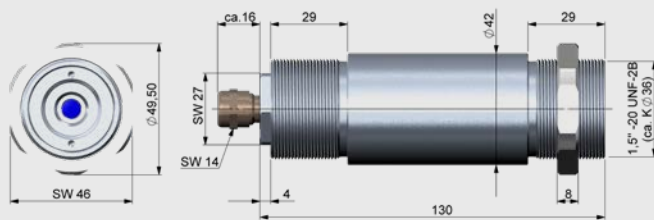
22:1 optics



22:1 optics with CF-lens

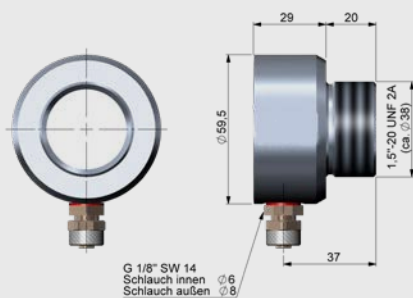


Dimensions

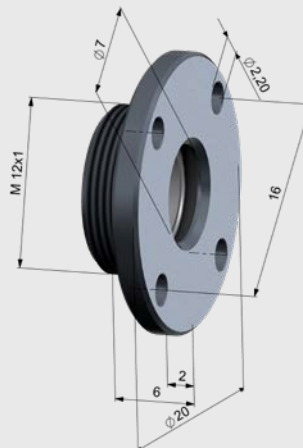


Accessories

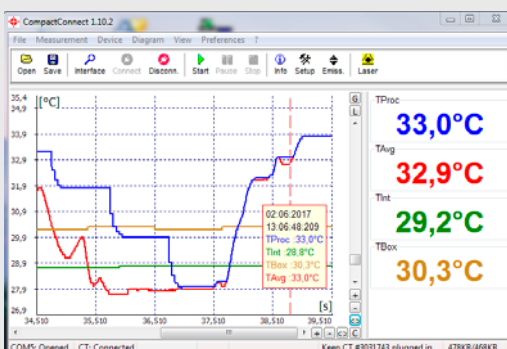
Air purge collar



CF-lens/Protective window



Compact Connect Software



- Software for easy sensor setup and remote controlling, supports multi tasking
- Graphic display for temperature trends and automatic data logging for analysis and documentation with 1 ms response time
- Adjustment of signal processing functions and programming of outputs of the sensor
- Automatic emissivity adjustment
- The software CompactConnect allows to customize the sensor to application needs of the user