

The easy access to  
non-contact temperature  
measurement:  
Smart, safe and fast  
from -50 to 1030 °C

Features:

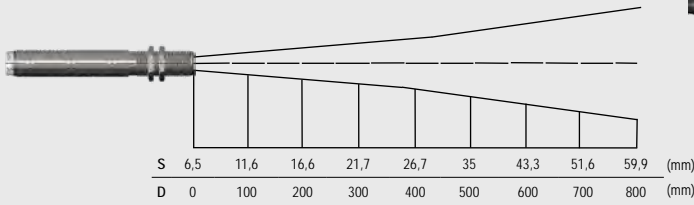
- Temperature range: -50 °C to 1030 °C
- Response time: 14 ms
- Optical Resolution: 15:1
- Green LED alarm indication, aiming support, selfdiagnostic or temperature code indication
- Usable up to 80 °C ambient temperature without cooling
- Several outputs selectable: 0-10 V or 0-5 V free scalable or thermocouple type K, alarm output or digital output
- Easy adjustment via IRmobile Android App and Windows software (CompactConnect)
- Power supply: 5-30 V DC



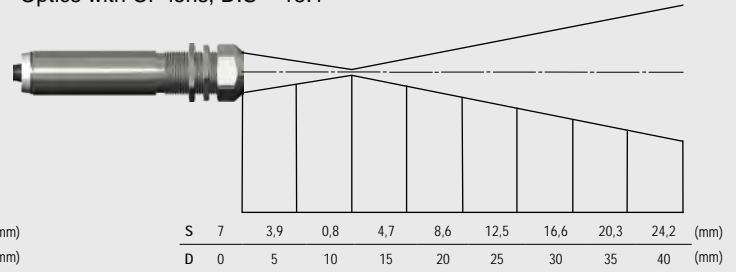
General Specifications		Measurement Specifications	
Environmental rating	IP 63	Temperature range (scalable via software)	-50 °C ... 1030 °C
Ambient temperature	-20 °C ... 80 °C	Spectral range	8 - 14 μm
Storage temperature	-40 °C ... 85 °C	Optical resolution (90 % energy)	15:1
Relative humidity	10 - 95 %, non condensing	CF-lens (optional)	0,8 mm @ 10 mm
Vibration	IEC 68-2-6: 3 G, 11 - 200 Hz, any axis	System accuracy (at ambient temp. 23 ±5 °C)	±1,5 % or ±1,5 °C <sup>1)</sup>
Shock	IEC 68-2-27: 50 G, 11 ms, any axis	Repeatability (at ambient temp. 23 ±5 °C)	±0,75 % or ±0,75 °C <sup>1)</sup>
Weight	58 g	Temperature coefficient	±0,05 K/K or ±0,05 % / K <sup>2)</sup>
Electrical Specifications		NETD	50 mK <sup>3)</sup>
Output / analog	Selectable: 0 - 5 V or 0 - 10 V free scalable or thermocouple type K/ alarm with adjustable voltage levels	Response time (90 %)	14 ms (adjustable up to 999 s)
Output / alarm	0 - 30 V / 50 mA (open collector)	Emissivity/Gain (adjustable via 0 - 10 V DC input or software)	0,100 - 1,100
3-state alarm output	Adjustable threshold values and voltage level for: no alarm, pre-alarm, alarm	Transmissivity (adjustable via software)	0,100 - 1,100
Output / digital	Uni/ bidirectional, 9,6 / 115,2 kBaud (adjustable via software), 0/3 V digital level/ USB optional	Signal processing (parameter adjustable via software)	Peak hold, valley hold, average; extended hold function with threshold and hysteresis
Input (0 - 10 V)	Programmable functional input for external emissivity setting/ambient temperature adjustment, triggered signal output or peak-hold function	Software / App	optris CompactConnect / IRmobile
LED-functions	Alarm indication, automatic aiming support, self diagnostic, temperature indication (via .temp.code)	<sup>1)</sup> Object temperature > 0°C ; whichever is greater <sup>2)</sup> For ambient temperatures <18°C and >28°C; whichever is greater <sup>3)</sup> At time constant 200 ms and T <sub>Obj</sub> 200°C	
Cable length	1 m (standard), 3 m, 8 m, 15 m		
Power supply	5 - 30 V DC		
Current draw	4 mA (without LED) / 10 mA		

## Optical Specifications

Optics, D:S = 15:1

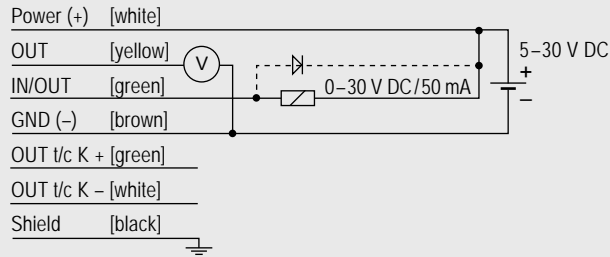


Optics with CF-lens, D:S = 15:1



## Connections

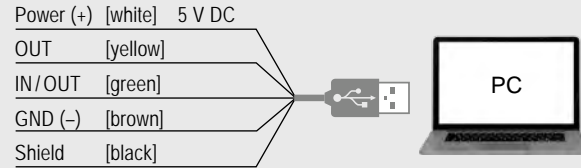
Connection analog with open collector alarm output (e.g. to actuate a relay)



The CS LT can be connected to a smartphone via the IR app connector.

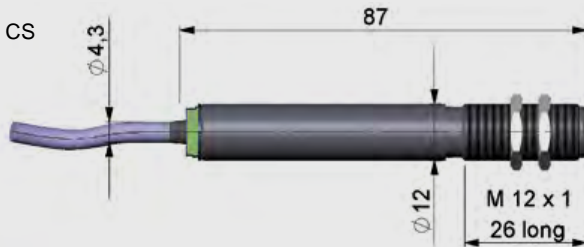


Connection digital with the optional IR app connector

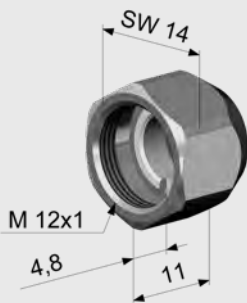


## Dimensions / Accessories (examples)

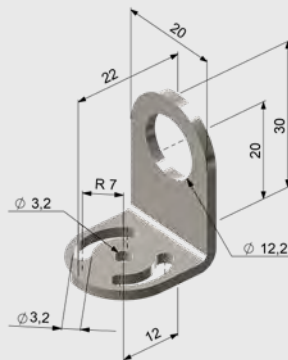
Dimensions optris CS



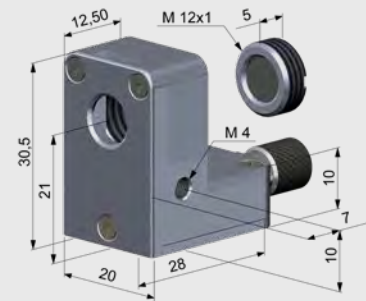
CF-lens (ACCTCF)



Mounting bracket, fixed (ACCTFB)



Air purge collar, optional with integrated CF-lens (ACCTAPLCF)



Specifications are subject to change without notice · CS LT DS-EN2020-09-A