

# More Precision.



## optris® CX

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 - 30 V DC
- Optical resolution of 22:1
- Simultaneous two wire output and digital communication
- Alarm output (0 - 30 V / 500 mA)

General specifications	
Environmental rating	IP 65 (NEMA-4)
Ambient temperature	-20 - 75° C
Storage temperature	sensing head: -40 - 85°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	350 g
Electrical specifications	
Output /analog	4 - 20 mA
Output / alarm	0 - 30 V / 500 mA (open collector)
Outputs/digital (optional)	USB
Loop impedance	max. 1000Ω <sup>1)</sup>
Cable length	8 m
Power supply	5 - 30 V DC

1) in dependence on supply voltage

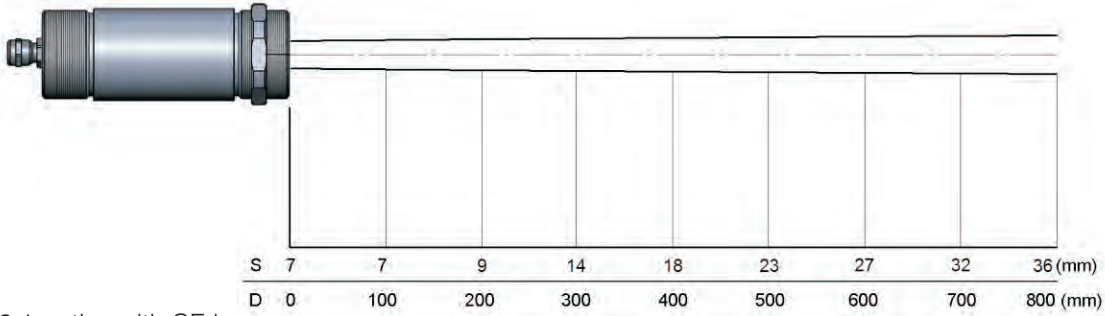
Measurement specifications	
Temperature range (scalable via software)	-30 - 900°C
Spectral range	8 - 14 μm
Optical resolution (90% energy)	22:1
CF-Optics (optional)	0.6 mm @ 10 mm
System accuracy (at ambient temperature 23 ±5°C)	±1% or ±1,4°C <sup>1)</sup>
Repeatability (at ambient temperature 23 ±5°C)	±0.5% or ±0.7°C <sup>1)</sup>
Temperature resolution	0.1°C
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

<sup>1)</sup> whichever is greater

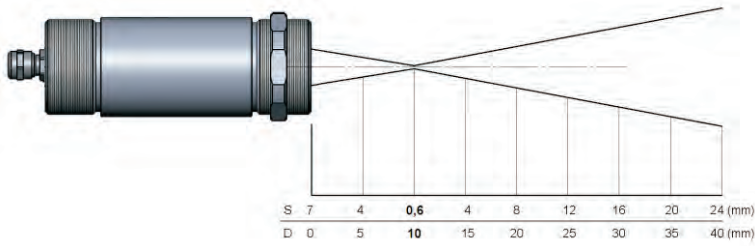
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## Optical specifications

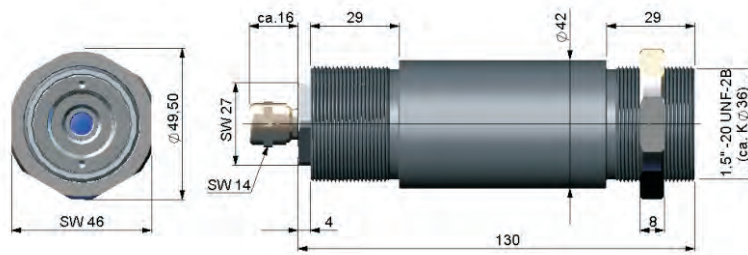
22:1 optics



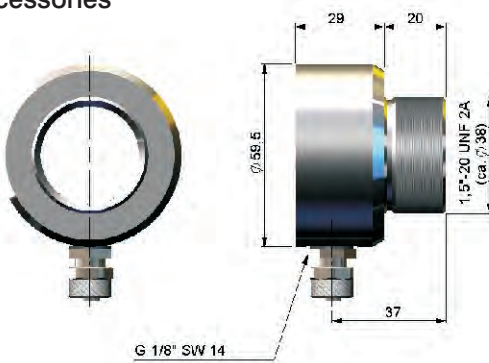
22:1 optics with CF-lens



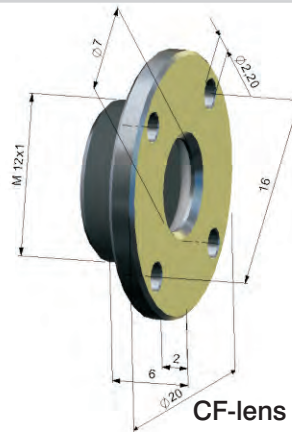
## Dimensions



## Accessories

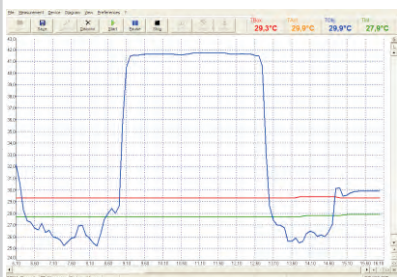


Air purge collar



CF-lens / Protective window

## CompactConnect 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