

## optris<sup>®</sup> 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: 5-28 V DC
- Optical resolution of 22:1
- Simultaneous two wire output and digital communication
- Alarm output (0-30 V / 500 mA)

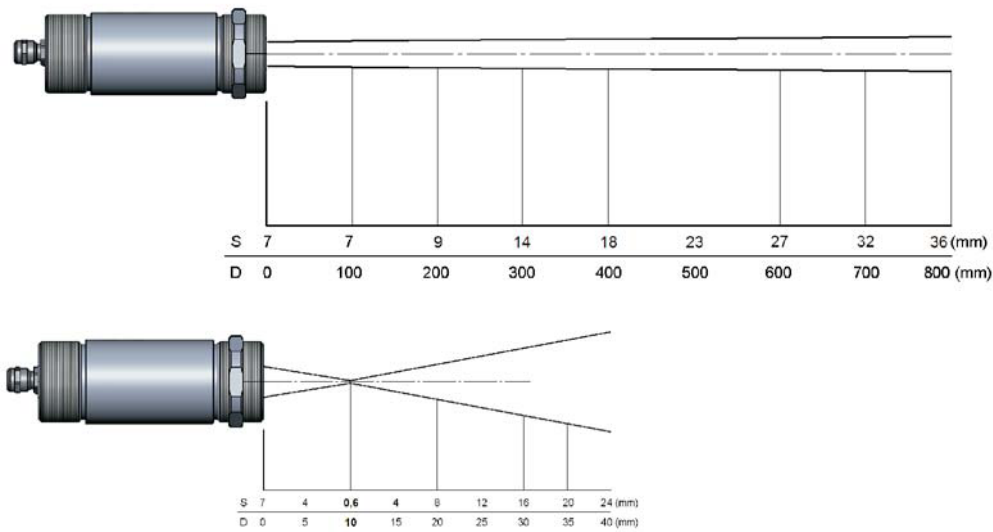
| General specifications     |                                      |
|----------------------------|--------------------------------------|
| Environmental rating       | IP 65 (NEMA-4)                       |
| Ambient temperature        | -20 - 75° C                          |
| Storage temperature        | 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. 1000 Ω                          |
| Cable length               | 5 m                                  |
| Power supply               | 5 - 28 V DC                          |

| Measurement specifications                                          |                                                                                       |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Temperature range (scalable via software)                           | -30 - 900°C                                                                           |
| Spectral range                                                      | 8 - 14 μm                                                                             |
| Optical resolution                                                  | 22:1                                                                                  |
| CF-Optics (optional)                                                | 0.6 mm @ 10 mm                                                                        |
| System accuracy (at ambient temperature 23 ±5°C)                    | ±1,5 % or ±1,5°C <sup>1</sup>                                                         |
| Repeatability (at ambient temperature 23 ±5°C)                      | ±0.75 % or ±0.75°C <sup>1</sup>                                                       |
| Temperature resolution                                              | 0.2°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

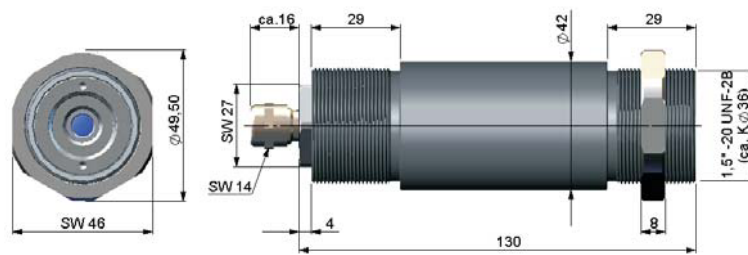
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Optical specifications

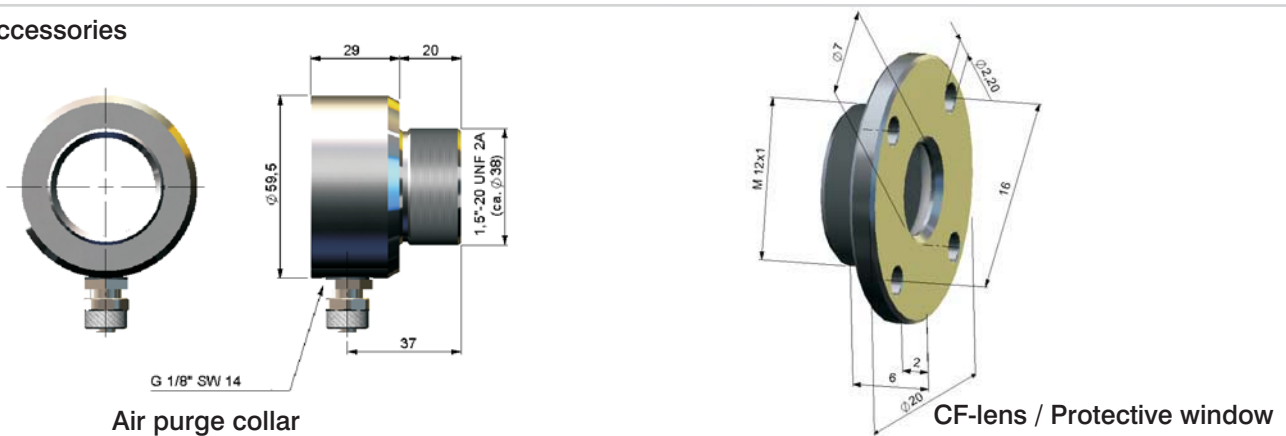


S=Spotsize  
D=Distance

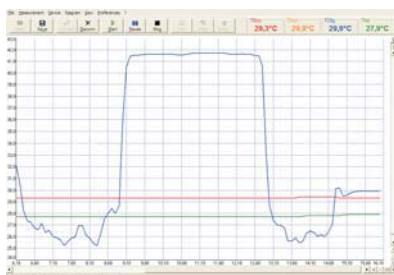
## Dimensions



## Accessories



## 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

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Development and sales of portable and stationary infrared measuring instruments.

Specifications are subject to change without notice.  
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