

# More Precision.



## optris® CSmicro 2W

low cost micro size two-wire infrared thermometer for -30 - 900°C



### FEATURES

- Temperature range: -30 to 900°C
- Size: M12x1, 28 mm long, stainless steel housing
- Scalable 4-20 mA analog output / additional simultaneous alarm output
- Rugged coated silicon optics
- Usable up to 120°C ambient temperature without cooling (sensing head)
- Cable built in electronics
- Short circuit and polarity reversal protection
- Adjustable signal processing
- Optional USB programming interface and software
- Wide power range: 5 - 28 V DC

#### General Specifications

Environmental rating	IP65 (NEMA-4)
Ambient temperature	-20 - 120°C (sensing head)
Storage temperature	-20 - 85°C (sensing head and electronics)
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	42 g

#### Electrical Specifications

Output/analog	4-20 mA
Max. loop resistance	1000 Ω
Output/alarm	0-30 V / 500 mA (open collector)
Output/digital	USB (optional)
Cable length	1 m
	0.5 m between sensing head and electronics
	0.4 m between electronics and terminal
Power supply	5 - 28 V DC

#### Measurement Specifications

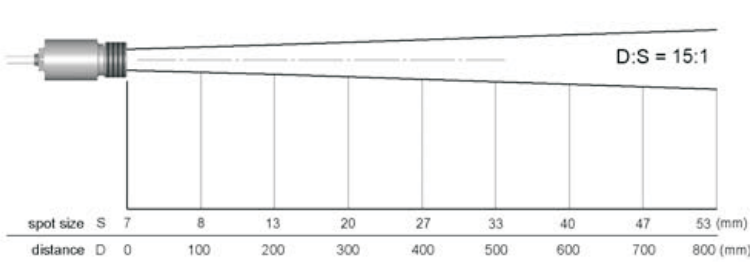
Temperature range (scalable via software)	- 30 - 900°C
Spectral range	8 - 14 μm
Optical resolution	15:1
CF-lens (optional)	0.8 mm @ 10 mm
System accuracy	±1.0% or ±1.5°C <sup>1, 2</sup>
Repeatability	±0.75% or ±0.75°C <sup>1, 2</sup>
Temperature resolution (at object temperature > 20°C and time constant >0.2 s)	0.2°C
Response time (90%)	150 ms
Emissivity/Gain (adjustable via software)	0.100 - 1.100
Transmissivity (adjustable via software)	0.100 - 1.100
Signal processing (parameter adjustable via software)	peak hold, valley hold, average
Dimensions of electronics	
	length
diameter	12 mm

<sup>1</sup> object temperature > 0°C; whichever is greater

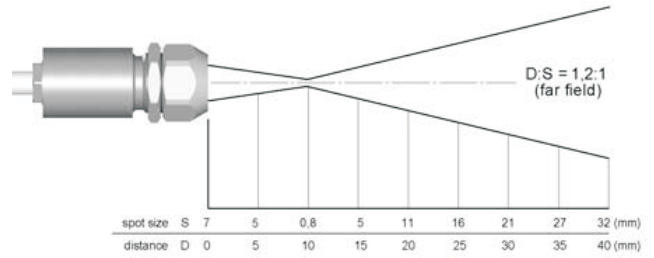
<sup>2</sup> at ambient temperature 23 ±5°C

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## Optical Specifications

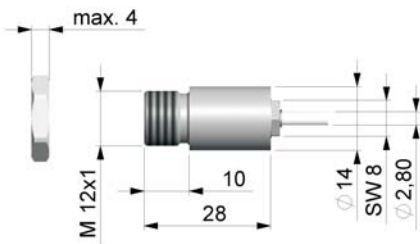


15:1 optics

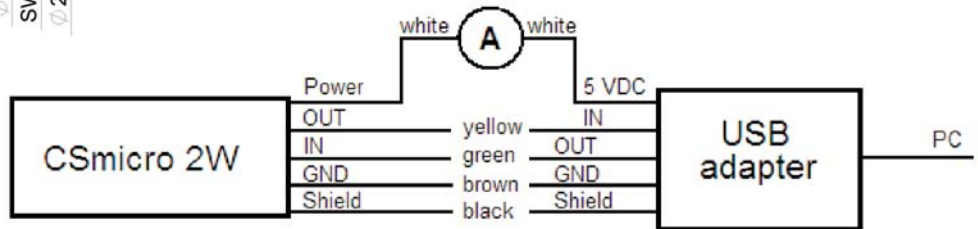
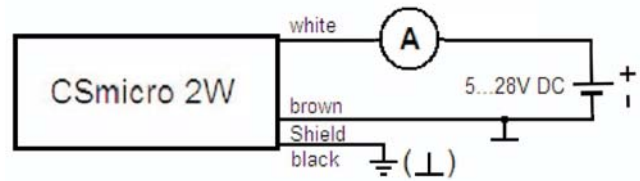


15:1 optics with CF-lens

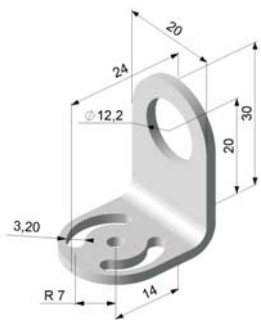
## Dimensions / Connections



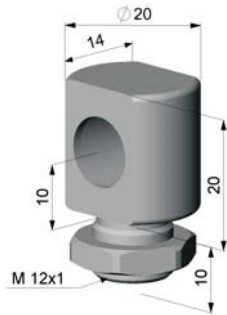
Dimensions CSmicro 2W



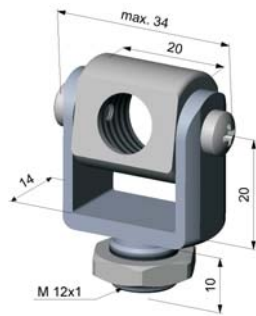
## Accessories



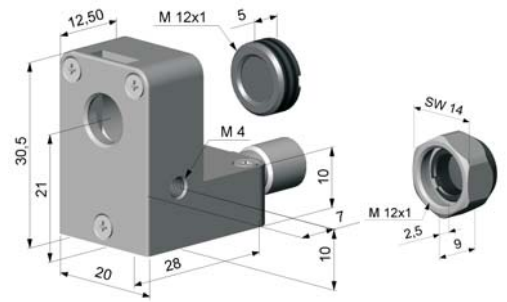
Mounting bracket, fixed



Mounting bolt with M12x1-thread



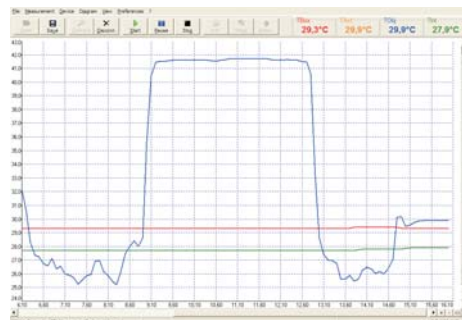
Mounting fork, adjustable in 2 axis, with M12x1-thread



Air purge collar, optional with integrated CF-lens

CF-lens

## 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 the sensor outputs
- The software Compact Connect allows to customize the sensor to application needs of the user