

More Precision.



optris® CSmicro 2W 2M

Low cost micro size two-wire infrared thermometers for 385 - 1600°C



FEATURES

- Temperature ranges: 385 to 1600°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 125°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 - 30 V DC

General Specifications	
Environmental rating	IP65 (NEMA-4)
Ambient temperature	-20 - 125°C (sensing head) -20 - 75°C (electronics)
Storage temperature	-40 - 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
Loop resistance	max. 1000 ¹
Output/alarm	0 - 30 V / 500 mA (open collector)
Output/digital	uni / bidirectional, 9,6 kBaud, 0/3 V digital level, USB optional
Cable length	1 m 0.5 m between sensing head and electronics 0.4 m between electronics and terminal
Power supply	5 - 30 V DC

¹) in dependence on supply voltage

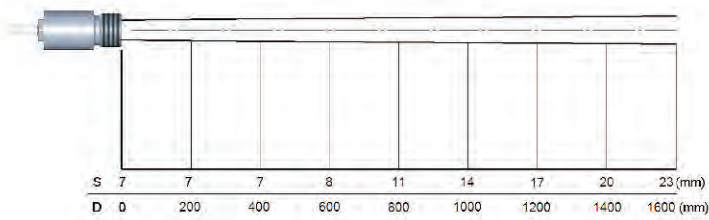
Measurement Specifications	
Temperature ranges (scalable via software)	385 - 1600°C
Spectral range	1.6 μm
Optical resolution (90% energy)	75:1
System accuracy	±(0.3% of reading + 2°C) ^{1,2}
Repeatability	±(0.1% of reading + 1°C) ^{1,2}
Temperature resolution	0.1°C
Response time (90%)	10 ms
Emissivity/Gain (adjustable via software)	0.100 - 1.100
Transmissivity (adjustable via software)	0.100 - 1.000
Signal processing (parameter adjustable via software)	peak hold, valley hold, average
Dimensions of electronics	
length	45 mm
diameter	12 mm

¹ at ambient temperature 23 ± 5°C, ε = 1, response time 1s

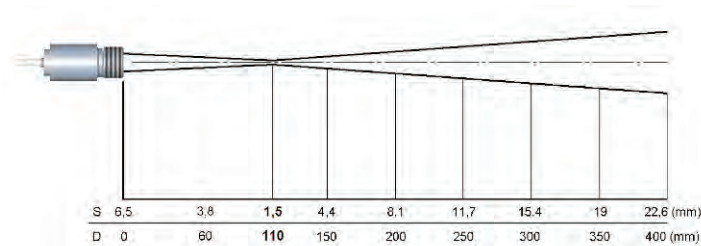
² object temperature > 450°C

optris® CSmicro 2W 2M

Optical Specifications

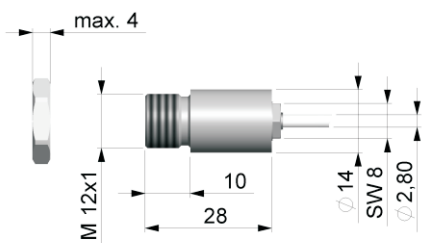


CSmicro 2W 2M SF
D:S = 75:1

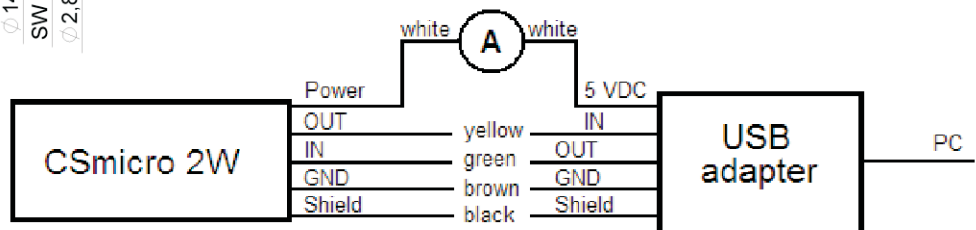
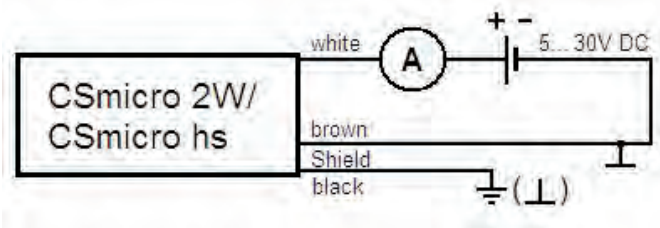


CSmicro 2W 2M CF
D:S = 75:1 (far field 14:1)

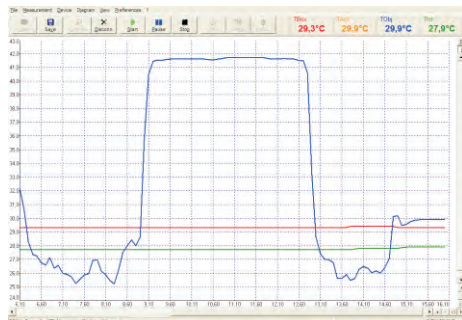
Dimensions / Connections



Dimensions CSmicro 2W



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