

More Precision.



thermoMETER CS

OEM Infrared Sensor with Integrated Controller



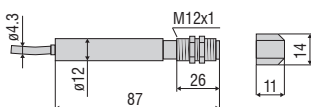
Model	CS-SF15-C1	CSTK-SF15-C1
Optical resolution	15:1	
Measuring range ¹⁾	-50 ... +400 °C	
Spectral range	8 to 14 μm	
System accuracy ²⁾	±1.5 °C or ±1.5 %	
Repeatability ²⁾	±0.75 °C or ±0.75 %	
Temperature coefficient ³⁾	±0.05 °C/K or ±0.05 %/K	
Temperature resolution ⁴⁾	0.05 °C	
Response time	14 ms to 999 s (90 %), adjustable	
Emissivity	0.100 to 1.100 (adjustable via 0 ... 10 VDC input or software)	
Transmissivity ¹⁾	0.100 to 1.100 (adjustable via software)	
Signal processing ¹⁾	Peak hold, valley hold, average; extended hold function with threshold and hysteresis	
Supply voltage	5 ... 30 VDC	
Max. current consumption	10 mA; 4 mA (without LED)	
Signal input	programmable functional inputs for external emissivity adjustment, ambient temperature compensation (0 ... 10 VDC), hold function, triggered signal output	
Digital interface	mono-/bidirectional, 9.6 / 115.2 kBaud (adjustable via software), 0/3V level/USB optional	
Analog output	0 ... 5 V or 0 ... 10 V, freely scalable via software	0 ... 5 V or 0 ... 10 V, freely scalable via software additional thermocouple type K
Switching output	Alarm output: 0 ... 30 V / 50 mA (open collector) 3-state alarm output: adjustable threshold values and voltage levels for: no alarm, pre-alarm, alarm	
Connection	integrated cable, standard length 1 m, optional 3 m, 8 m or 15 m possible	
Control and display elements	Alarm display, automatic aiming aid, self-diagnostics, temperature display (via temp. code)	
Temperature range	Storage	-40 ... +85 °C
	Operation	-20 ... +80 °C
Humidity	10 ... 95 % r.H., non-condensing	
Shock (DIN EN 60068-2-27)	50 g / 11 ms, each axis	
Vibration (DIN EN 60068-2-6)	3 g / 11 ... 200 Hz, each axis	
Protection class (DIN EN 60529)	IP63 (NEMA-4)	
Weight	approx. 58 g	

¹⁾ Adjustable via software

²⁾ Ambient temperature: 23 ±5 °C; whichever is greater; object temperature ≥ 0 °C

³⁾ For ambient temperatures < 18 °C and > 28 °C whichever is greater

⁴⁾ With object temperature < 100 °C and time constant of > 0.2 s



Dimensions in mm, not to scale.

Optical specifications thermoMETER CS

■ = smallest spot size / focal point (mm)

Standard Focus										
SF15	15:1	6.5	11.6	16.6	21.7	26.7	35	43.3	51.6	9.9
distance in mm		0	100	200	300	400	500	600	700	800
Close Focus (with optionally available CF lens)										
CF15	15:1	7	3.9	0.8	4.7	8.6	12.5	16.4	20.3	24.2
distance in mm		0	5	10	15	20	25	30	35	40