

Non-contact temperature measurement of plastic film thermoMETER CTP-3

Exact temperature measurement of thin plastic film made from PE, PP, PS

- Robust design, applicable in ambient temperatures up to 75°C without cooling
- Elimination of transmissivity using a polymer-specific absorption band
- Separate controller with easy accessible programming keys and multi colour LCD
- Selectable analogue outputs 0/4-20mA, 0-5V, 0-10V, thermocouple type K or J
- Optional USB, RS485, RS232 interface, relay outputs (2x optically isolated), CAN Bus, Profibus DP, Ethernet



Model	CTP-3SF15-C3	
Optical resolution	15:1	
Temperature range ¹⁾	50 to 400°C	
Spectral range	3.43µm	
System accuracy ²⁾	±1% or ±3°C	
Repeatability ²⁾	±1.5°C	
Temperature resolution	0.1°C	
Response time	100ms	
Emissivity/gain ¹⁾	0.100 to 1.100	
Transmissivity/gain ¹⁾	0.100 to 1.100	
Signal processing ¹⁾	peak hold, valley hold, average; extended hold function with threshold and hysteresis	
Outputs/analogue	channel 1	0/4 to 20mA, 0 to 5/10V, thermocouple J, K
	channel 2	sensor temperature (0 to 75°C as 0 to 5V or 0 to 10V), alarm
	optional	relay: 2 x 60VDC / 42VAC _{eff} ; 0.4A; optically isolated
Outputs/digital	optional	USB, RS232, RS485, CAN, Profibus DP, Ethernet
Output impedances	current output	mA max. 500Ω (8 to 36VDC)
	voltage output	mV min. 100kΩ load impedance thermocouple 20Ω
Inputs	programmable functional inputs for external emissivity adjustment, ambient temperature compensation, trigger (reset of hold functions)	
Cable length	3m (standard), 8m	
Power supply	8 to 36VDC; max. 100mA	
Protection class	IP65 (NEMA-4)	
Ambient temperature	sensor: 0°C to 75°C controller: 0°C to 75°C	
Storage temperature	sensor: -40°C to 85°C controller: -40°C to 85°C	
Relative humidity	10 to 95%, non-condensing	
Vibration	sensor	IEC 68-2-6: 3G, 11 to 200Hz, any axis
Shock	sensor	IEC 68-2-27: 50G, 11ms, any axis
Weight	sensor with massive housing: 200g; controller: 420g	

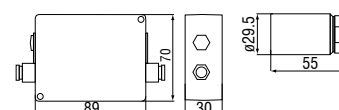
¹⁾ adjustable via programming keys or software; ²⁾ ± ambient temperature: 23±5°C; whichever is greater

Optical specifications thermoMETER CTP-3

□ = smallest spot size (mm)

Standard Focus optics											
SF15	15:1	7	8	13	20	27	33	40	47	53	
distance in mm		0	100	200	300	400	500	600	700	800	

Dimensions



Micro-Epsilon