

PyroCouple

General Purpose Infrared Temperature Sensor with Analogue Output



- Temperature ranges from -20°C to 500°C
- Durable, robust stainless steel 316 housing, sealed to IP65
- Quick and easy installation
- 2-wire 4-20 mA output or 4-wire voltage/thermocouple output
- Choice of precision optics for large or small targets
- Fast response with high stability
- Wide range of accessories
- Fixed emissivity 0.95 for measuring non-reflective non-metals, and painted surfaces (including painted or coated metals)
- Conforms to industrial EMC standards

The PyroCouple is a simple, robust infrared temperature sensor with a choice of analogue outputs. No complicated setup is required - just connect a temperature indicator and power supply, and instantly start taking measurements.

It is suitable for non-contact temperature measurement on most non-reflective non-metal surfaces, such as paper, thick plastics, asphalt, painted surfaces, food, rubber and organic materials, among many others.

OPTICS

Distance: Sensor to object (inches)

Spot Dia. (inches)

Spot Dia. (mm)

Distance: Sensor to object (mm)

21 models

Distance: Sensor to object (inches)

Spot Dia. (inches)

Spot Dia. (mm)

Distance: Sensor to object (mm)

151 models

Distance: Sensor to object (inches)

Spot Dia. (inches)

Spot Dia. (mm)

Distance: Sensor to object (mm)

301 models

Distance: Sensor to object (inches)

Spot Dia. (inches)

Spot Dia. (mm)

Distance: Sensor to object (mm)

CF models

All models can measure at longer distances than shown, with a larger measured spot size.

Diagrams show the diameter of the measured target spot versus the distance from the sensing head (90% energy).

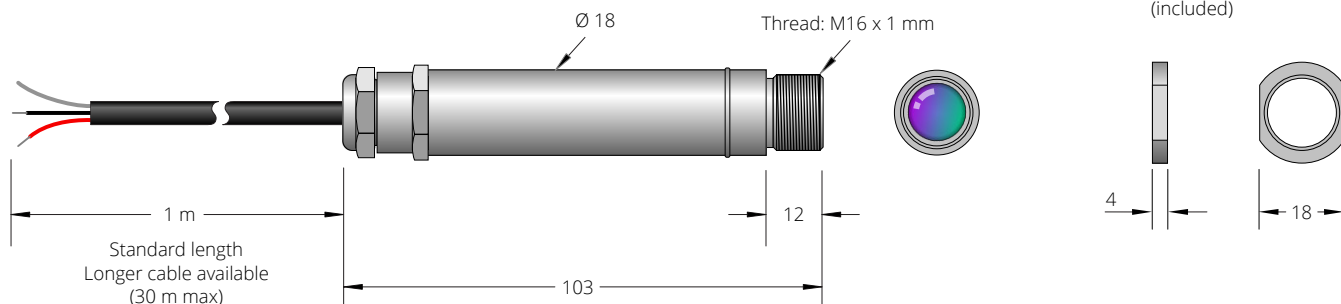
SPECIFICATIONS

General	
Output	Choice of 4-20 mA, J or K Thermocouple, mV (See "Model Numbers")
Temperature Range	LT = -20 to +100 °C MT = 0 to 250 °C HT = 0 to 500 °C
Accuracy	±1% of reading or ±1°C, whichever is greater
Repeatability	± 0.5% of reading or ± 0.5°C, whichever is greater
Emissivity Setting	Fixed at 0.95
Response Time	240 ms (90% response)
Spectral Range	8 to 14 µm
Supply Voltage (at Sensor)	6 V DC to 28 V DC
Max. Loop Impedance	900 Ω (4-20 mA output)
Output Impedance	56 Ω (voltage/thermocouple output)
Max. Current Draw	20 mA

Mechanical	
Construction	Stainless Steel
Dimensions	18 mm diameter x 103 mm long
Thread Mounting	M16 x 1 mm pitch
Cable Length	1m (longer lengths available to order)
Weight with Cable	95 g

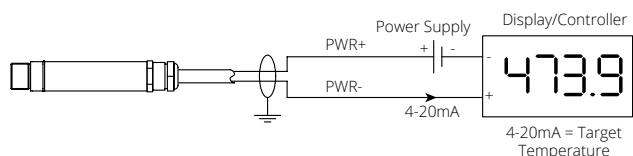
Environmental	
Environmental (IP) Rating	IP65
Ambient (Operating) Temperature Range	0°C to 70°C
Ambient (Operating) Humidity	95% max. non-condensing

DIMENSIONS (mm)

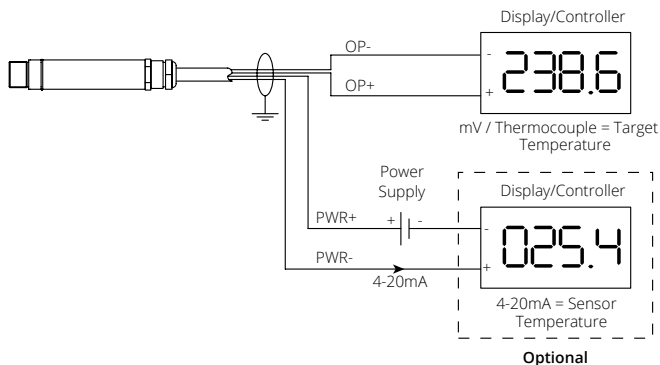


CONNECTIONS

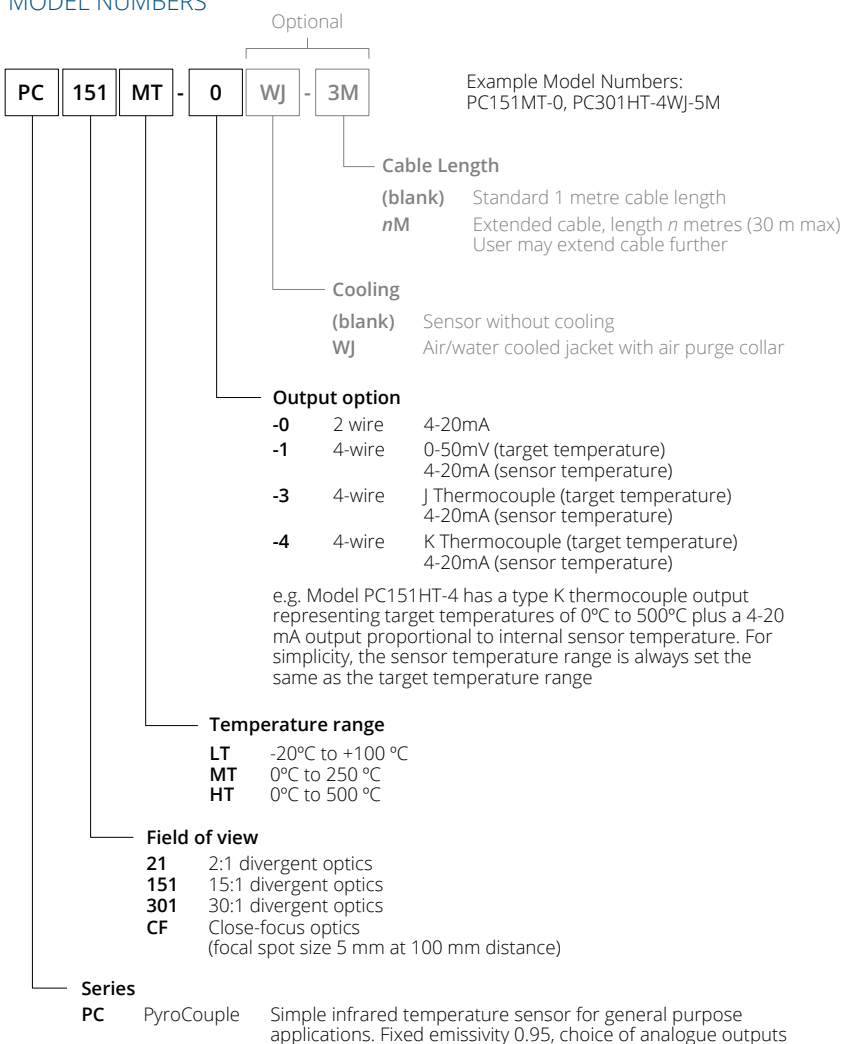
Two-wire (option 0)



Four-wire (options 1 to 4)



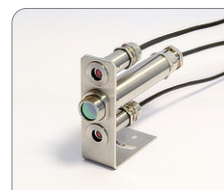
MODEL NUMBERS



ACCESSORIES



Laser sighting tool **LSTS**



Dual laser sighting bracket, adjustable **DLSBAS** or fixed **DLSBFS**



Fixed mounting bracket **FBS**



Adjustable mounting bracket **ABS**



Air or water cooled jacket with air purge collar **WJ** (factory-fitted - see Model Numbers)



Air purge collar for 2:1 optics **APSW** or for all other optics (shown above) **APSN**