

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

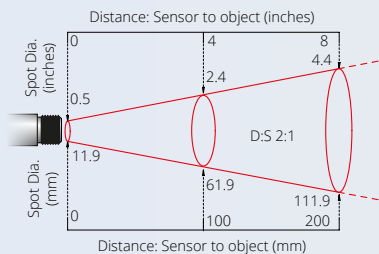
The PyroCouple is a simple, robust infrared temperature sensor with a choice of analogue outputs. No complicated setup is required - just connect a temperature indicator and power supply, and instantly start taking measurements.

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.

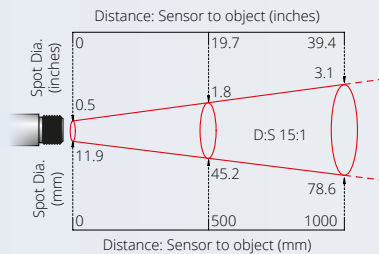
SPECIFICATIONS

| 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 |

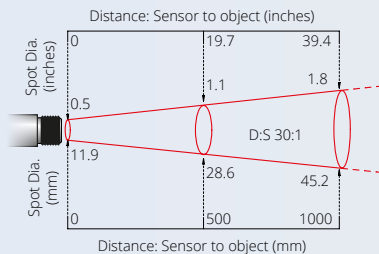
OPTICS



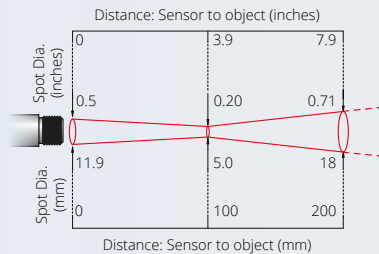
21 models



151 models



301 models



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).

| 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 |



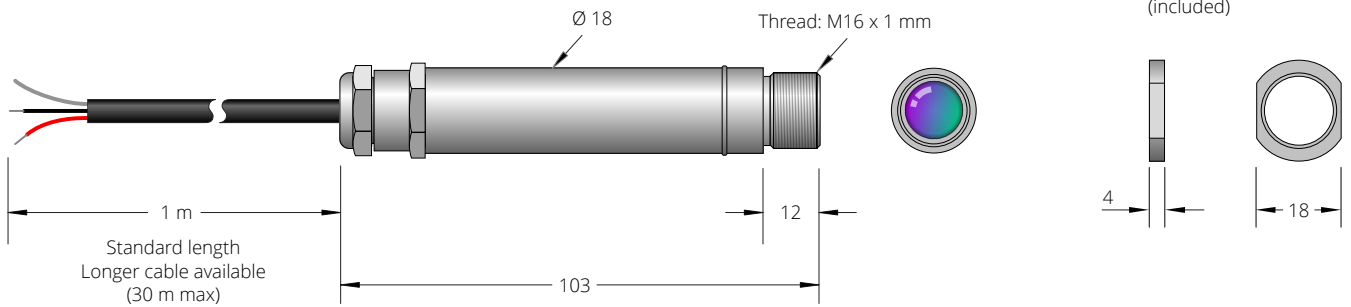
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temperature sensor solutions

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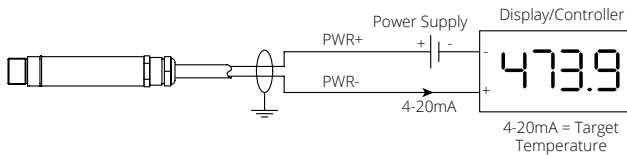


DIMENSIONS (mm)

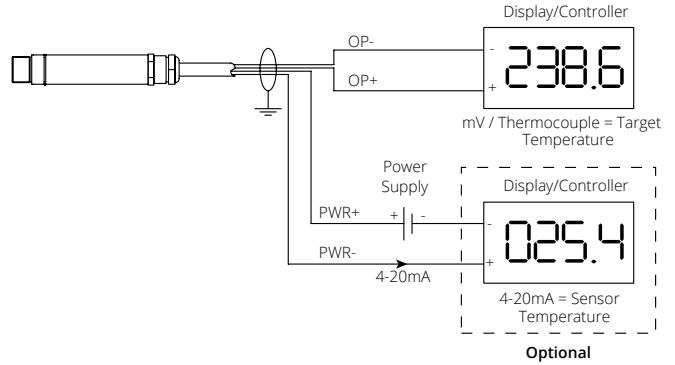


CONNECTIONS

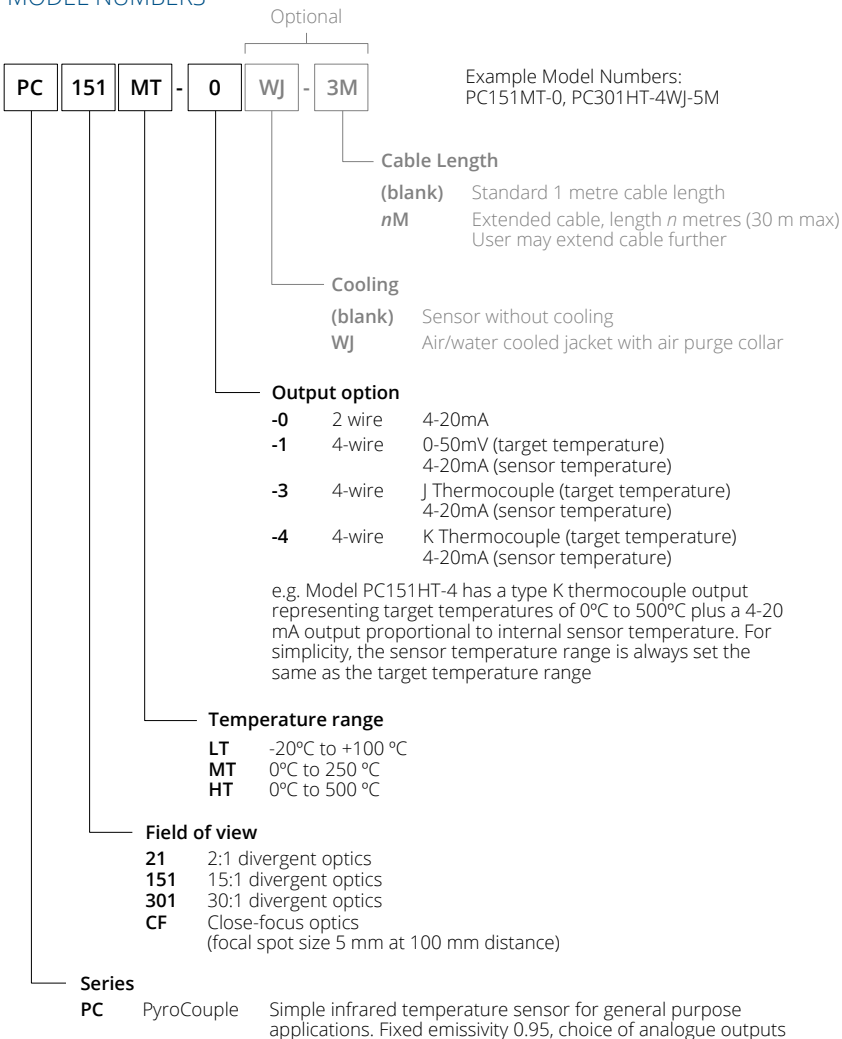
Two-wire (option 0)



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**



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