

DIGITAL TEMPERATURE PROBE

High-accuracy digital sensing for reliable cold chain monitoring

A rugged, reliable probe for accurate digital temperature measurement in refrigerated transport and telematics applications

The Myriad Digital Temperature Probe is a compact, high-accuracy sensor designed for refrigerated transport applications. With its stainless-steel housing, resin-filled core, and IP67 waterproof rating, it provides reliable performance in demanding conditions. Its DS18820 digital sensor chip ensures precision readings, fast response times, and easy integration with telematics and monitoring systems.

- Digital output for consistent, interference-free readings
- High accuracy of $\pm 0.5^{\circ}\text{C}$ in the critical -10°C to $+85^{\circ}\text{C}$ range
- Selectable resolution (9 to 12 bit) for flexible data requirements
- Fast response time (<750 ms) for real-time monitoring
- IP67 waterproof and resin-filled stainless-steel probe housing
- Available in multiple cable lengths to suit installation needs
- Designed for seamless integration into cold chain monitoring systems

Electrical

- Power Supply: 3.0 V to 5.5 V
- Sensor: DS18820 Digital Sensor
- Accuracy: $\pm 0.5^{\circ}\text{C}$ (from -10°C to $+85^{\circ}\text{C}$)
- Resolution: Selectable 9 to 12 bit
- Response Time: <750 ms
- Wire Connections:
 - Red: VCC
 - Black: GND
 - Yellow: DATA

Mechanical

- Housing: Stainless Steel, resin-filled with Stycast 2850
- Cable: CRM 0307-006, with tinned ends and adhesive black heat-shrink
- Cable Length Options: 5 m, 12 m, 15 m, 18 m, 22 m
- Probe Dimensions: $\varnothing 4.7$ mm $\times$ 35 mm housing length

Environmental

- Protection Rating: IP67 waterproof
- Operating Temperature: -10°C to $+85^{\circ}\text{C}$ (DS18820 capable of extended -55°C to $+125^{\circ}\text{C}^*$)

$\pm 0.5^{\circ}\text{C}$ ACCURACY

IP67 WATERPROOF

DS18820 SENSOR CHIP

MULTIPLE CABLE LENGTHS

FAST RESPONSE <750 MS

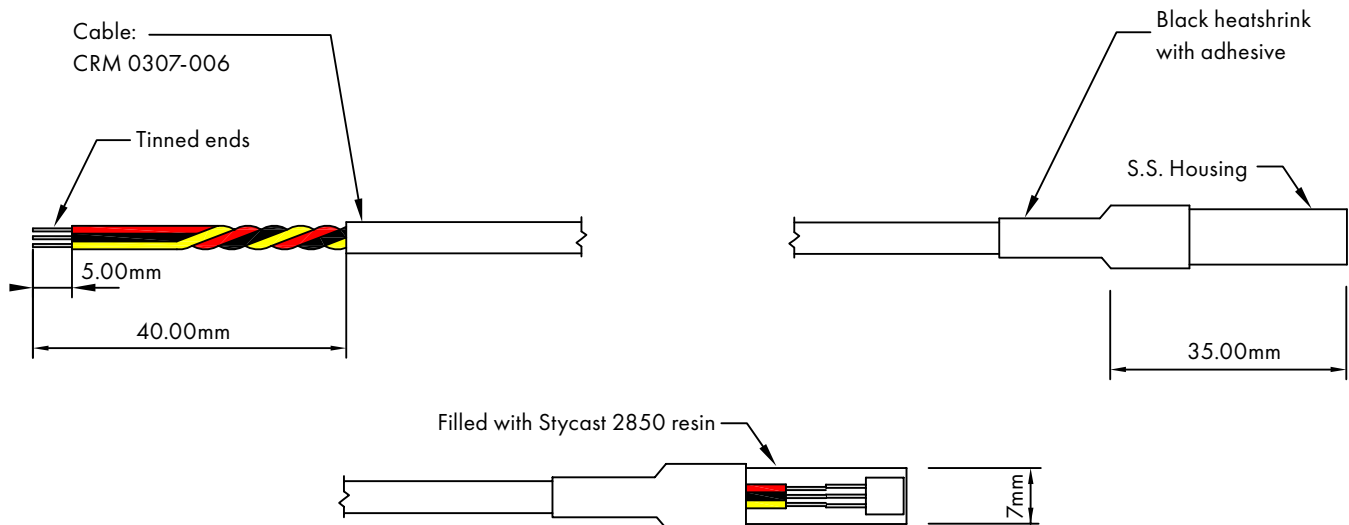
3.0V – 5.5V POWER

DATASHEET

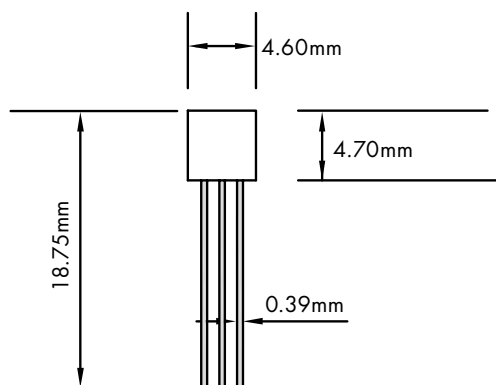
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DRAWING



THERMISTOR PROPERTIES



Part Number	DS18820
Power	3.0V to 5.5V
Accuracy	+/- 0.5°C from -10°C to +85°C
Query Time	< 750ms
Selectable Resolution	9 to 12 bit
Wire Interface	Red wire - VCC
Wire Interface	Black wire - GND
Wire Interface	Yellow wire - DATA

Although we strive to ensure accuracy in all of our published specifications, actual field performance can vary depending on environmental, installation and usage factors. The specifications listed are approximations and do not constitute binding statements or modify the terms and conditions of purchase. All specifications are subject to change without notice. Please check www.myriadparts.com to ensure you have the latest version.

Myriad Parts is a leading provider in the transport refrigeration parts industry, dedicated to offering high-quality products and exceptional customer service. We specialise in a wide range of parts and accessories designed to keep your refrigeration units running efficiently and reliably. Our comprehensive product offerings, combined with our commitment to customer satisfaction, make us a trusted partner for businesses in the transportation, supply chain, and logistics sectors.

For more information, please visit www.myriadparts.com.

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YOU GET IT.**

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