



A1-02b Temperature Pod

Use this Pod to Monitor....

- LN₂ Cryogenic Freezer Temperature
- Freezer Temperature
- Refrigerator Temperature

Features

Ambient Temperature Sensor

- Temperature Range: -40°C to +70°C
- Typical Accuracy at 25°C: ±1.4°C
- Typical Accuracy over Full range: ±2.1% full Span
- Measurement Resolution: 0.21°C

Standard Temperature Probe

- Temperature Range: -200°C to +200°C
- Typical Accuracy ±1°C
- Measurement Resolution: 0.1°C
- Sensor Type: 1 x RTD

Thermistor

- Temperature Range: -40°C to +100°C
- Typical Accuracy over -10°C to +50°C: ±0.49°C
- Measurement Resolution: 0.1°C
- NTC Thermistor Resistance at 25°C: 10KΩ

General Specifications

Physical Size

- 3.5 in x 3.25 in x 2in. (89mm x 83mm x 51mm)
- Weight: 8 oz. (227g)

Power Options

- 100-240Vac 50-60Hz
- DC Input 4-7Vdc
- 3 x AA Batteries (6 month life at 5 minute sampling intervals)

Accessories

- E1-22 ISO 17025 NIST Traceable Calibration Certificate Available
- E1-19 Standard Temperature Probes (RTD)
- E1-25 Cryogenic Temperature Probe (Thermocouple)
- E1-35 Thermal Buffer for use with E1-19 standard temperature probe
- E1-16 External Battery Pack
- E1-37 Combined Probe E1-19 and Buffer E1-35

Cryogenic LN₂ Temperature Probe Input

- Temperature Range: -200°C to +400°C
- Typical Accuracy over -200°C to -120°C: ±1.2°C
- Measurement Resolution: 0.35°C
- Sensor Type: 1 x Type T Thermocouple

Analog Voltage Input

- Voltage Range: 0 to 5Vdc
- Typical Accuracy: ±15mV
- Measurement Resolution: 4.883 mV
- Input Impedance >1 MΩ

Digital Input (Pulse Counter/Contact Closure/Timer)

- Zero Input Voltage: 0 to 0.5Vdc (or Shorted Input)
- High Input Voltage: 2.4 to 10Vdc (or Open Circuit)
- Count Range: 2¹⁶
- Maximum Frequency: 2500Hz counting; 40Hz Interval
- Minimum Pulse Width: 25mSec
- Timer Range: 24 Hrs

Sampling Rate

- User Settable 30sec – 24hrs

Emergency Data Storage

- 250 Samples per Sensor

Operating Environment

- -40°C to 70°C, 5-95%rh
Non-Condensing
When using Lithium batteries
With Alkaline batteries -20°C to 50°C

Wireless

- Range: 250ft Outdoors, 90ft Indoors
- Topology: Mesh
- Standard: IEEE 802.15.4
- Frequency: 2.4GHz DSS
- Power Output: -0.79dBm



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