



A1-01a General Purpose Pod

Features

Internal Sensors

Ambient Temperature Sensor

- Temperature Range: -40°C to +70°C
- Typical Accuracy at 25°C: ±0.3°C
- Typical Accuracy over Full range: ±1.4% full Span
- Measurement Resolution: 0.01°C

Vibration (Relative figures, Uncalibrated)

- Number of Axis (averaged together): 3
- Maximum Acceleration, each axis: ±2G
- Offset and Sensitivity Error: ±10%
- Measurement Resolution: 0.006G

External Inputs

Analog Voltage Input with 5Vdc Output

- Voltage Range: 0 to 5Vdc
- Typical Accuracy: ±0.28% full scale
- Measurement Resolution: 4.883 mV
- Input Impedance >1 MΩ
- Source Accuracy: ±4%
- Settling Time: 64 mSec

Digital Input 1 (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
- Timer Resolution: 1mSec

Relative Humidity

- Humidity Range: 5% to 95%rh
- Humidity Accuracy at 25°C ±2%rh
- Humidity Accuracy over Full Range: ±3%rh
- Measurement Resolution: 0.03%rh

Acoustic Level (Relative figures, Uncalibrated)

- Range: 0% to 100%
- Resolution: 0.1%

Visible Light (Relative figures, Uncalibrated)

- Range (logarithmic): 0-64000 Lux
- Resolution: 200 pts/Decade

Analog Current Input

- Current Range: 0 to 20mA
- Resolution: 0.020345mA
- Typical Accuracy: ±0.29% full scale
- Loop Supply: +20Vdc, ±0.6Vdc
- Settling Time: 200mSec

Digital Input 2 (Pulse Counter/Contact Closure)

- Zero Input Voltage: 0 to 0.5Vdc (or Shorted Input)
- High Input Voltage: 2.4 to 10Vdc (or Open Circuit)
- Count Range: 2³²
- Maximum Frequency: 2500Hz
- Minimum Pulse Width: 200µSec

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)

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

Accessories

- E1-22 ISO 17025 NIST Traceable Calibration Certificate Available
- E1-16 External Battery Pack

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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