

## 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

### Cryogenic LN<sub>2</sub> 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	2 <sup>16</sup>
Maximum Frequency	2500Hz counting; 40Hz Interval
Minimum Pulse Width	25mSec
Timer Range	24 Hrs

## A1-02b Temperature Pod



## General Specifications

### General

Sampling Rate	User Settable 30 sec – 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
Dimensions	3.5 in x 3.25 in x 2in. (89mm x 83mm x 51mm)
Weight	8 oz. (277g)
Power Options	100-240Vac 50-60Hz DC Input 4-7Vdc 3 X AA Batteries (6 month life at 5 minute sampling intervals)

### Wireless

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

### Accessories

E1-50	ISO 17025 NIST Traceable Calibration Certificate Available
E1-19	Standard Temperature Probes (RTD)
E1-21	Compact Temperature Probe (RTD)
E1-25	Cryogenic Temperature Probe (Thermocouple)
E1-34	Thermal Buffer for use with E1-19 standard temperature probe
E1-16	External Battery Pack
E1-37	Combined Probe E1-19 and Buffer E1-34

## Remotely Hosted Monitoring & Alarming

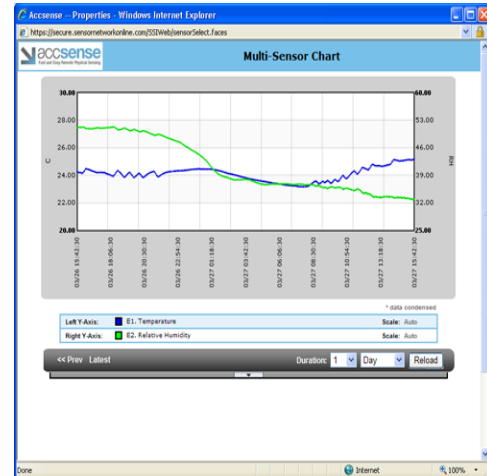
Alarming originates from a remote server system with redundant power, so if YOUR power or Internet service fails, you will receive an immediate alarm notification. Only the Accsense hosted alarming solution can offer this capability.

All of the measurements acquired using the Accsense solution are immediately available on your secure Accsense Account, online.

Updated in real-time, you can plot measurement history, analyse tabular data, and set alarms to watch your data and provide email, pager, or cell phone alerts.

### Features

- ✓ Simple to use, virtually no learning curve.
- ✓ View tabular measurement data online.
- ✓ Download measurement data for offline analysis.
- ✓ Completely secure off-site backup
- ✓ Allow password-protected, limited access to certain users.
- ✓ Web based, no software installation or firewall configuration hassles.
- ✓ Customizable interface with dashboard of most recent measurements from all sensor pods.
- ✓ Instant access to charts depicting measurement history, with ranges as narrow as 5 minutes or as wide as 90 days.
- ✓ Manual vertical scaling allows for consistency across multiple graphs and samples.
- ✓ Setup alarm states and receive alarms via email, cell phone, pager, or landline.
- ✓ Define customizable alarm callout lists for each monitoring point, and for each pod.
- ✓ FREE software/feature upgrades!



### Capabilities

#### Online Account

- Web Access From Any Browser
- Centralized Monitoring
- Centralized Account & System Mgmt & Control

#### Secured Data Logging

- Unalterable Measurements
- Data Automatically Recorded At User Selectable Intervals
- Data Stored In Time/Data Stamped Log
- "One-Click" Download Of Data

#### Secure Data Storage

- 100% Secure
- Zero Downtime
- Data Storage At Data Centre
- Data Written To Multiple Disks Simultaneously
- Daily Data Backup Stored
- Redundant Power
- Biometric Security Scanning
- 24/7/365 Onsite Staff
- 2 Full Years (minimum) Rolling Data Storage

#### Sequential Alarming

- Sequential Phone Alarms: Call In Order, 1 Number At A Time
- Alarm Acknowledgement From Phone To Silence Further Alarm Calls
- Corrective Action Reports
- Integrated Alarm/Event Log With Corrective Action Notifications
- User Selectable Data Range For Viewing

#### Graphing & Statistics

- User Selectable Time Range
- Graph One Or Multiple Sensors
- View Sensor Statistics

#### Group Alarming

- Broadcast "All-At-Once" Alarm
- Phone Alarms
- Email Alarms
- SMS Alarms
- Pager Alarms
- Alarm/Event Log