



# Specification Guide A1-01, A1-03, A1-05

	A1-01 General Purpose Pod	A1-03 Environmental Pod	A1-05 Atmospheric Pod
<b>Internal Sensors</b>			
Ambient Temperature	•	•	•
Vibration	•	•	
Humidity	•	•	•
Acoustic Level	•	•	
Ambient Light	•	•	
<b>External Sensors</b>			
4-20 mA Current Input w/ +20V Loop	•		
Digital Input (Contact Closure)	•		
Counter	•		
0-5V Analog Input w/ +5V Sensor Drive	•		

## INTERNAL SENSORS

### • Ambient Temperature

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

### • Vibration

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

### • 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

Range: 0% to 100%  
 Resolution: 0.1%

### • Visible Light

Range: 0% to 100%  
 Resolution: 0.1%

## EXTERNAL SENSOR INPUTS

### • 4 to 20 mA Current Input

Range: 0 to 20mA  
 Measurement Resolution: 0.02 mA  
 Accuracy: ±0.29%FS  
 Loop Impedance: 120 Ohms

### • Contact Closure (Digital Input 1)

High Level Input Level (absolute maximum): 10V  
 High Level Input Level (minimum): 2.4V  
 Low Level Input (maximum): 0.5V  
 Input Impedance (input voltage <3.3V, contact closure): 100 K $\Omega$   
 Input Impedance (input voltage >3.3V): 3.3K $\Omega$   
 Minimum Pulse Width/Contact Closure Time: 12.5ms

### • 0-5V Analog Input w/+5V Excitation Source

Voltage Accuracy: ±4%  
 Maximum current: 25 mA  
 Settling time before measurement: 64 ms

### • Counter/Totalizer (Digital Input 2)

High Level Input Level (absolute maximum): 10V  
 High Level Input Level (minimum): 2.4V  
 Low Level Input (maximum): 0.5V  
 Maximum Pulse Rate/Frequency: 2500 Hz  
 Minimum Pulse Width/Contact Closure Time: 200 $\mu$ s  
 Input Impedance (in. voltage <3.3V, contact closure): 20 K $\Omega$   
 Input Impedance (input voltage >3.3V): 3.3 K $\Omega$   
 Count Range: 2<sup>32</sup> counts (Event counter accumulates between server updates, then zeros.)

## GENERAL SPECS

### • Physical Size

3.5 in x 3.25 in x 2 in.  
 Weighs 8 oz.

### • Time Stamp

Resolution: 1 second  
 Accuracy: ±1 seconds

### • Power Options

5V DC input power supply (provided)  
*And/or*  
 (3) AA Batteries

### • Mounting Options

Wall, pole, or DIN rail (w/adapter)

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