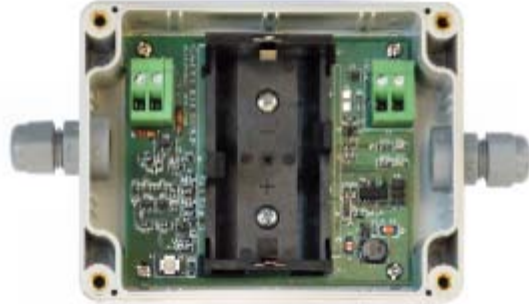


# PRODUCT DATA SHEET



## AC Monitor

The **AC Monitor** is typically used to detect hazardous AC voltages (exceeding 15 VAC) induced from high voltage electric transmission lines onto pipeline assets which might create a safety hazard for pipeline personnel. This modular device allows the monitoring of AC voltages in a range from 0 to 100 VAC. AC voltage data is converted into DC voltages compatible with Bullhorn monitors (APM4AM, APM4AMCP and ICP+) as well as the CP Logger.



Monitor can be connected to a test point, grounding mat, Kirk Cell<sup>®</sup> or similar device. The system can alarm and send notifications when threshold AC voltage levels are exceeded enhancing employee safety protection. The AC Monitor is a self-calibrating module that includes a non-rechargeable lithium battery for power, push button for choosing operational modes and two LEDs that indicate the module's present operational status. The module enclosure is water resistant and corrosion resistant and would typically be placed inside the rectifier enclosure.

The three operational modes for the AC Monitor are:

1. **Normal Mode:** AC Monitor takes one input measurement, adjusts DC output and sleeps one hour before taking next reading. Device continues to operate as above on hourly schedule.
2. **Continuous Mode:** AC Monitor takes continuous input readings and sets the output. Readings are taken in three second intervals. Battery life will be shorter than normal mode due to the increased reading frequency.
3. **Force Reading In Normal Mode:** When AC Monitor is "sleeping" during Normal Mode, the device can be forced to take a single reading.

**For More Information: American Innovations – [fddsales@aiworldwide.com](mailto:fddsales@aiworldwide.com)  
512-249-3400 or 800-229-3404**

## Technical Specifications

### Environmental

Operating Temperature . . . . . -40°C to +85°C  
Humidity . . . . . 0–95% non-condensing

### Physical

Plastic NEMA 4x Enclosure:

- Length: . . . . . 4.53 in.
- Width: . . . . . 3.54 in.
- Depth: . . . . . 2.17 in.

### Input/Output

**Input:** . . . . . 0 to 100 volts AC RMS

- Maximum input to cause 5 volts DC output: . . . . . 100 volts AC RMS
- Maximum input voltage: . . . . . 150 volts AC RMS
- Input Signal: . . . . . True RMS algorithm at 32x over-sample of 60 HZ

**Output:** . . . . . 0 to 5 volts DC

- Output voltage per input volt: . . . . . 0.05 volts DC
- Accuracy: . . . . . 2% nominal

### Power

D Size Lithium Battery (non-rechargeable)

- Nominal capacity @ 2 mA, to 2V . . . . . 16.5 Ah
- Rated voltage . . . . . 3.6 V
- Operating temperature range . . . . . -55°C to +85°C
- Power draw from battery in sleep mode: . . . . . 150 µA max.
- Power draw from battery when active: . . . . . 8 mA nominal (3 seconds per hour)
- Battery Life: . . . . . 7 years typical in Normal Mode  
85 days typical in Continuous Mode