



Wireless Battery Health Sensor

Technical Overview

General Description

The OEM RF Wireless Battery Health Sensor is a DC analog voltage meter designed to measure battery voltage at specified intervals and wirelessly send the voltage readings to iMonnit, the online sensor monitoring system.

Features

- Wireless interface for measuring battery voltage.
- Measures voltage up to 48 VDC.

Principle of Operation

By connecting the leads on the OEM Wireless Battery Health Sensor to the positive and ground terminals of a battery, users can measure battery voltage through the Online Sensor Monitoring and Notification System. Notifications can be set up through the online system to alert the user when battery levels reach a certain point. The data is also stored in the online system and can be reviewed and exported as a data sheet or graph.

OEM Sensor Core Specifications




- Power: 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Antenna: 4" wire antenna
- Operating Temperature: -20° to 60°C (-4° to 140°F)
- Device Range: 250 - 300 ft. non-line-of-sight*
- Only 1 inch by 1 inch

* Actual range may vary depending on environment.

Applications

- Car Battery Monitoring
- Boat and Marine Battery Monitoring
- RV Battery Monitoring
- ATV / Motorcycle Battery Monitoring
- Lawn Mowers and Utility Vehicle Battery Monitoring
- And many more...

Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Electronics Operating Temperature Range	-40°C to +85°C (-40°F to +185°F) **
Available Operating Frequencies	900 MHz (25 Channels), 868 MHz (5 Channels) and 433 MHz (15 Channels)
Conversion Time	228 μ s
Sensor Resolution	0.025 VDC
Full Scale Voltage	0 - 48 VDC ***
Absolute Maximum Voltage	75 VDC ***
Certifications	   900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

* Hardware can not withstand negative voltage. Please take care when connecting a power device.

** At temperatures above 100°C, it is possible for the board circuitry to lose programmed memory.

*** If application exceeds 48 VDC the sensor will return a maximum reading of 48 Volts. Voltage over the absolute maximum may damage sensor hardware.

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555. Visit us on the web at www.oemsensors.com.

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