

Wireless 500 VAC/VDC Voltage Meter

General Description

The Wireless 500 VAC/VDC Voltage Meter is an analog measuring device that reports the measured voltage on user specified intervals. The sensor has three operating modes, in which you can obtain the voltage measurement in VACrms (root mean squared), the peak voltage, or the DC voltage. The modes can be set by the user; the default mode measures VACrms.

- Wireless interface for measuring voltage.
- Measures voltage up to 500 VAC/VDC



Free iSenseit basic online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

By connecting the leads on the Senseit Wireless 500 VAC/VDC Voltage Meter to the positive and ground terminals of another device, battery or sensor, it can measure the voltage and send data to the iSenseit Online Sensor Monitoring and Notification System. The data is stored in the online system and can be reviewed and exported as a data sheet or graph. Notifications can be set up through the online system to alert the user when certain thresh-olds have been met or exceeded.

Example Applications

- Power Lines
- Machinery
- Electrical Motors
- Generators

And many more...

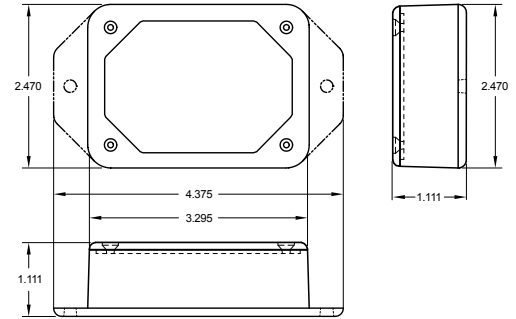
Senseit Sensor Core Specifications

- Wireless Range: 250 - 300 ft. (non-line-of-sight / indoors / through walls, ceilings & floors) *
- RF Communication: 900 MHz
- Power: Replaceable batteries (optimized for long battery life) Line-power options available
- Battery Life (at 1 hour heartbeat setting): **
AA battery > 4-8 years

* Actual range may vary depending on environment.

** Battery life is determined by sensor reporting frequency and other variables.

Wireless 500 VAC/VDC Voltage Meter (AA)



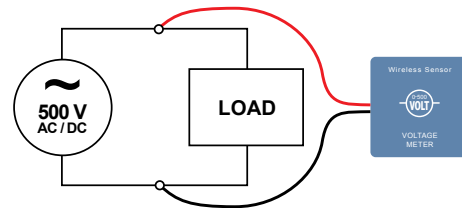
Technical Specifications	
Supply Voltage	2.0 - 3.6 VDC (3.0 - 3.6 VDC Using Power Supply) *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range (Board Circuitry and Batteries)	-18°C to 55°C (0°F to 130°F) using alkaline -40°C to 85°C (-40°F to 185°F) using lithium **
Optimal Battery Temperature Range (AA)	+10°C to +50°C (+50°F to +122°F)
Sensor Resolution	11 bit (single ended)
Conversion Time	228 μ s
Supported Operation Modes ***	VACrms (root mean squared) Peak Voltage DC Voltage
Full Scale Voltage	0 - 500 VAC/VDC ****
Maximum Input Voltage	600 VAC/VDC ****
Weight	4.0 oz.
Wireless Range	250 - 300 ft. (Indoors / Through walls, ceilings & floors) Range may vary according to environmental variables.
Certifications	900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1.



- * Hardware cannot 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.
- *** Operation mode must be specified at time of purchase.
- **** If application exceeds 500 VAC/VDC the sensor will return a maximum reading of 500 V.

Proper Installation

If the sensor is not connected to the power source properly, it will appear that the sensor is broken. Please follow this wiring diagram to ensure proper performance and detection.



Power Options

Two replaceable 1.5V AA sized batteries are included with the standard model. A line-power version with battery backup is also available - allowing it to be powered by a standard 3.0 - 3.6V power supply and use the internal batteries if there is a power interruption.

Power options must be selected at time of purchase as the internal hardware of the sensor must be changed to support the selected power requirements.