-48 Volt DC Voltage Monitor

Monitor telephone batteries or cell phone system power with this low-cost sensor

- Input voltage range: -15 to -60 Vdc
- Get graphs, see trends of the batteries
- Receive e-mail, pages on alarms

Designed for telephony battery voltage monitoring and other applications requiring monitoring a negative DC voltage, this sensor monitors voltage via the I/O inputs (3) on a WeatherGoose or SuperGoose.

The output is proportional to the input voltage across its normal operating range of -15 to -60Vdc (see graph); by setting appropriate trip points on the Goose's alarm page, the user can receive an automatic alert to a potentially dead, discharged, or overcharged battery bank based on the battery voltage.

The unit also has built-in protection against accidental short circuits and reversed input voltage via internal shunt diodes and a self-resetting polyfuse.

Specifications

Input Range: -15 to -60 Vdc
Output: 0 to 5 Vdc, linear
Accuracy: +/- 5%
Current draw: <20 ma.
Cable to battery: 36", 22 AWG solid
Cable to monitor: 36", 22 AWG solid
Attach: I/O port (C123C)
Enclosure: black plastic box
Dimensions: 3" L x 1.25" H x 0.5" W
Mounting: tie-wrap or Velcro (tm)
WHITE — ground or 0V (positive battery)
YELLOW — -Vin (negative voltage rail, battery)
GREEN — WeatherGoose analog I/O terminal block, "C" terminal (ground)
RED — WeatherGoose analog I/O terminal block, analog input "1", "2", or "3"

Conversion Formula:

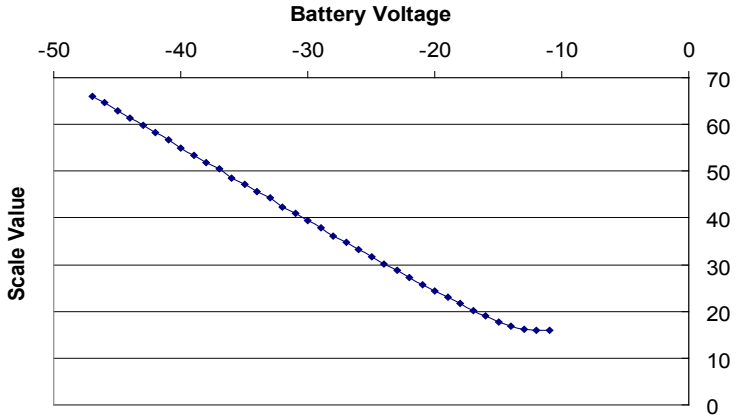
(-0.72 x Scale Value) = Battery Voltage. Use this formula to convert the sensor output (0 to 100) to actual voltage. For example, a reading of 60 would correspond to approximately 43.2 VDC.

ITWatchDogs.com

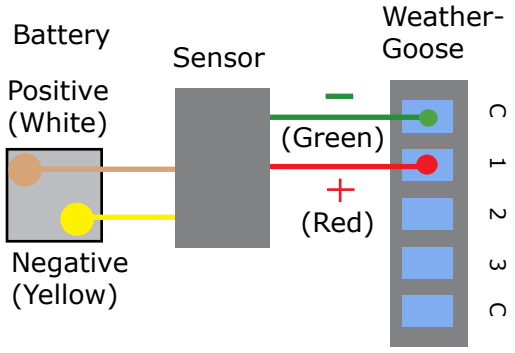
12885 Research Blvd. Suite 210B
Austin, Texas 78750
512-257-1462
http://itwatchdogs.com

(Specifications are preliminary and subject to change.)

About the size of two dominos, this sensor converts a -48 DC voltage into +5 Vdc signal suitable for the "C123C" I/O ports on a variety of ITW products. Up to three can be attached. If the CCAT interface is used, up to 16 can be attached.



Graphs are shown in a 0 to 100 range. Use this table to translate the output. For example, a -48 volt input to the sensor would be displayed as 66 on the graph. The output is almost linear between 40 and 50 VDC.



Wiring is simple: ring terminals can be used to attach to the battery. Wiring lengths over 100' can be used.