

Isolated DC Voltage Sensor - IDCv



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The Isolated DC Voltage Sensor allows the user to integrate a custom sensor to the sensorProbe or securityProbe while still retaining all of the features of the standard sensors. The Isolated DC Voltage Sensor has the full range of functionality including SNMP integration, email and trap generation upon settable limits and thresholds.

Customers have added pressure transducers, solar power monitors, battery monitors, have integrated the sensorProbe and securityProbe into laboratory test

equipment, and many other uses.

The Isolated DC Voltage Sensor can be used by OEMs and engineers to create their own custom data collection systems. The user can input a DC voltage range from -60 to 0 volts or 0 to 60 volts. The Isolated DC Voltage Sensor can provide real time data from the world around them.

The sensor now includes an isolated ground

for better safety and protection against over voltages and shorts. Readings are available in both an absolute value and a percentage of full scale. Full scale is user programmable with both the base and top voltage from -60 to 0 or 0 to 60 volts.

The web interface for the Isolated DC Voltage Sensor has been redesigned to simplify the settings when used with the external sensor. The unit of a measured entity can be customized to any text, e.g. Lbs for measuring the pressure. All numbers are now in a decimal point format; hence, it is possible to enter 12.8 Volts or 75.7 Lbs in threshold settings, for example. SNMP interface for alarm/normal status. SNMP traps sent when status changes. SNMP polling via get available. Web browser interface available. When an alarm condition is activated the description and location of the fault can be sent via email.

Isolated DC Voltage Sensor's Main Features

Isolation feature allows for the measurement at any point in a system with the possibility of sorting out problems such as the measurement of battery voltages in a string of batteries.

- Integrate third party sensors into the sensorProbe or securityProbe base units such as pressure transducers, solar power monitors, battery monitors and laboratory test equipment.
- Easy setup and installation.
- Create custom data collection systems.
- Powered by the securityProbe, no additional power required.
- The unit of a measured entity can be customized to any text, e.g. Lbs for measuring the pressure.
- Send SNMP traps and or email alerts from the sensorProbe units based upon set thresholds.
- Send advanced alerts from the securityProbe or AKCess Pro Server based upon set thresholds.

Technical Specifications

Isolation Voltage : 1600 VDC.

2 hardware setting modes:

Wide Range Mode is -60 to +60 VDC with 0.01 V resolution and 1% accuracy.

High Resolution Mode is -5 to +5 VDC with 0.001 V resolution and 1% accuracy.

Communications Cable : RJ-45 jack to sensor using UTP CAT5/6 cable.

Input Impedance : 1.6 MOhm when set at the high scale (60 Volt maximum) and 1.1 MOhm when set at the low scale (5 volt maximum).

Maximum Extension Cable : run length is 60 feet with approved low capacitance shielded cable or UTP.

Measurement Rate : Multiple readings every second.

Power Source : Powered by the sensorProbe or securityProbe. No additional power is needed.

Up to 2 iDCV sensors per sensorProbe2, up to 8 per sensorProbe8 and up to 8 per securityProbe and up to 600 per securityProbe 5E (8 per E-sensor8 expansion board).

Note: The iDCV is only compatible with the securityProbe, securityProbe 5E, securityProbe 5ES, newer sensorProbe2 shipped after October 2009, sensorProbe4, and sensorProbe8, sensorProbe8-X20/X60 units shipped after July 1st 2011.