AC Voltage Detector

Introduction

The voltage detector is used to indicate the presence or absence of line voltage. This is useful, for example to tell when the UPS is running on battery power.

If you wish to measure variables such as the magnitude of and AC voltage, ripple, power factor, frequency, etc, you can connect a suitable, third party, AC Voltage Transducer to the unit as a custom sensor. The best way to do this is to choose a transducer with a 4-20mA output range and use our 4-20mA converter to connect it to one RJ45 port of the unit. Most AC Voltage transducers on the market use analogue 4-20mA output signals.

AKCP’s AC Voltage Detector indicates an ALARM/NORMAL condition in software and also via an LED mounted on the sensor. Voltage detectors can detect the presence or the absence of line voltage. It is designed for use worldwide. There is an SNMP interface for getting the alarm/normal status. SNMP traps are sent when critical conditions occur. SNMP polling via get is available to retrieve existing status and configuration parameters. The Web browser interface is also available to display the status and configuration parameters.

When an alarm condition is activated the description and location of the fault can be sent via email, page or traps.

The value of the Status for the OID for switch sensors can be Normal, No Status, Critical, or sensorError.

For a switch type sensor on RJ45#1 the OID for the status is .1.3.6.1.4.1.3854.1.2.2.1.18.1.3.0

Specifications & Features:

- Measurement range - Detects voltage at 50V AC to 250V AC
- LED indicator on sensor shows if voltage present
- Measurement Indication - Alarm or Normal
- Communications cable - RJ-45 jack to sensor using UTP Cat 5 wire.
- Sensor type - open / closed contact switch
- Power source: powered by the unit. No additional power needed.
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- The unit auto detects the presence of the Voltage Sensor
- Measurement rate - multiple readings every second
- Full Autosense including disconnect alarm

Configuring the AC voltage Detector

a) Plug the sensor into one of the RJ45 ports on the rear panel of the unit.

b) Now point your browser to the IP address of the unit (default, 192.168.0.100). Next you need to login as the administrator using your administrator password (default is “public”). You will then be taken to the summary page.

c) From the summary page you need to select the sensors tab. The layout of the next page will vary depending on your unit so please refer to your units manual.

d) You should now be able to setup the thresholds for your sensor. The low critical, low warnings, normal, high warnings, high critical values can be set from this page.

Now we will cover the settings that are specific to your sensor.

Status: If the sensor is offline, the status is No Status. If the sensor is online and there is no AC voltage detected, the status is Critical. If AC voltage is detected, then the status is Normal. If at any time communications with the AC voltage detector are lost, the status of the AC voltage detector is changed to sensorError