8 Port Sensor Controlled Relay

Table of contents

Introduction

8 Port Sensor Controlled Relay

The 8 Port Sensor Controlled Relay allows the user Remote actuation of electrical devices over Internet. It provides 8 high-power SPDT 5V relays in one array. It includes Metal Oxide Varistors (MOVs) and Snubber circuits to protect the open contact of the relays from the high voltage spikes or noise transients. It monitors the power load and accepts a control signal which is sent from the unit.

Applications:

- Power Switching
- On/Off Control
- Activate Alarms
- Process Control
- Energy Management Systems

Installing and configuring the 8 Port Sensor Controlled Relay

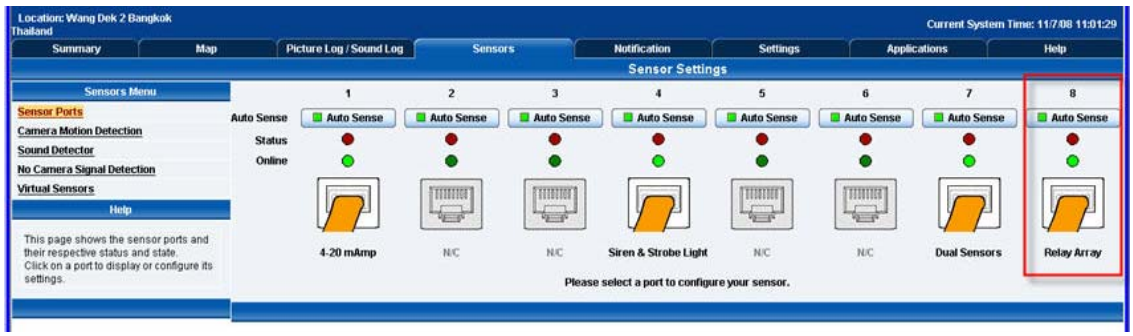
a) Plug the sensor into one of the RJ45 ports on the rear panel of the unit. If you are going to utilizing more than 1 relay then the 6.0 Volt, 1A external power supply is required.

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.

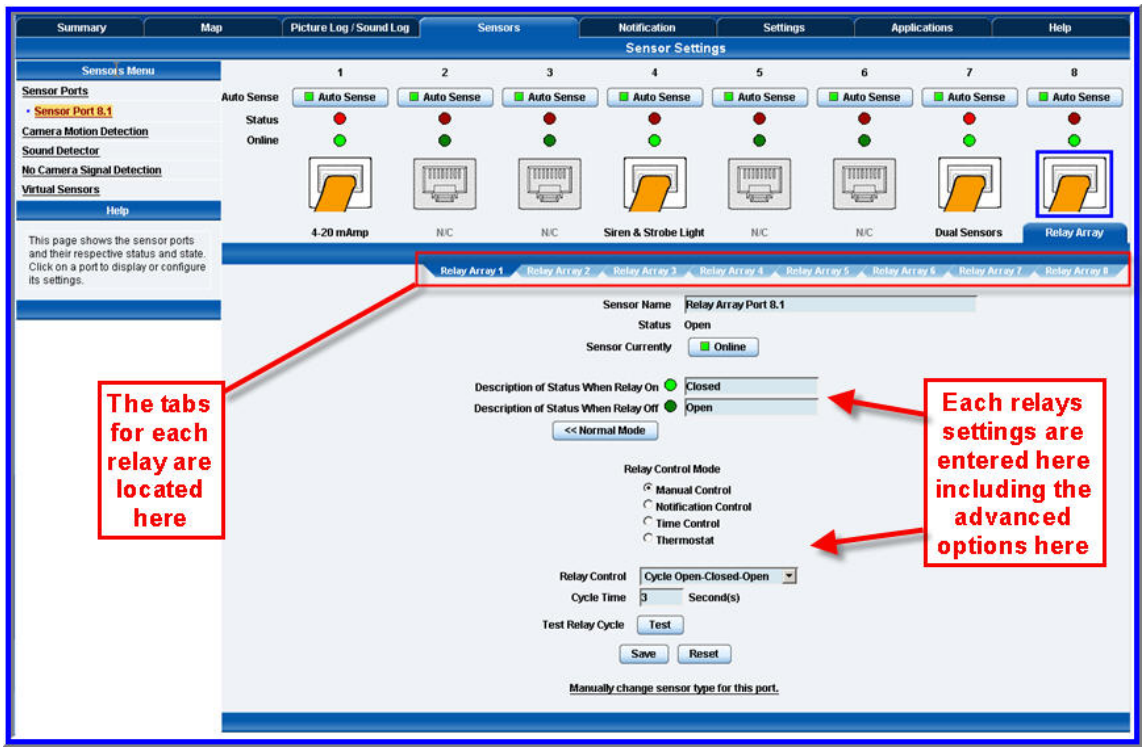
c) From the summary, or main page you need to select the sensors tab. The layout of the next page will vary depending on your unit so please refer to your unit’s manual.

d) You should now be able to configure the settings of your relay box. The sensor name, the descriptions of the relays status, the relay control mode etc.

The first screen shot below shows our 8 Port Sensor Control Relay on port 8 of our unit



After clicking on the Relay Array we can see all our relay tabs and setting for each relay in the array, including our advanced settings.



Sensor Name: Here you can enter a new name for the relay output. This name will be displayed on the Summary page.

Status: Shows the current state of the output. When the relay board is offline, the relay status is No Status. When the relay is online and its Normal State field is ON, then the status is Normal. When the relay is online and its Normal State Field is OFF, then the status is Critical. If at any time, communications with the Sensor Controlled Relay are lost, the status is changed to sensor error.

Sensor currently: Click to toggle the relay output between “online” (activate the relay output) and “offline” (deactivate the relay output). Note: if you change the relay output to “offline” it will no longer be displayed on the web interface. In order to reactivate it, you have to toggle the relay back to “online”.

Description of Status When Relay On**:** This field is the custom description, which will be displayed in the Relay Status field when the relay state is on. The same text is listed as one of the relay actions used to turn on the relay. Examples for this field are Open Door, Turn Pump On, Turn Light On, etc. This applies to all 8 relays in the 8 Port Sensor Controlled Relay

Description of Status When Relay Off: This field is the custom description, which will be displayed in the Relay Status field when the relay state is off. The same text is listed as one of the relay actions used to turn off the relay. Examples for this field are Close Door, Turn Pump Off, Turn Light Off, etc. This applies to all 8 relays in the 8 Port Sensor Controlled Relay

Relay Control Mode:

Configuration examples include:

1. Manual Control allows you to manually control each of the 8 relays using the “Relay Control” option. Controlling the cycle of the relay in an on-off-on or an off-on-off cycle. You can also set the “Cycle Time” here in seconds and manually test each relay using the “Test Relay Cycle” button.

2. Notification Control allows you to link any of the relays to an action. The actions can be selected from the “Action” drop down menu after clicking on the “To set notification controlled relay click here”. The following actions can be chosen: Turn on until sensor normal, turn off until sensor normal, cycle the relay, turn on until acknowledged, turn off until acknowledged. You can also turn the “Sensor Normal Relay State” to on or off and test each relay using the “Test Relay Cycle” button.

3. Time Control: Displays a calendar to setup what days and times you want or do not want each relay to be active

4. Thermostat: Allows to select a thermostat on ports 1 through 8 that would control the relay.

Specifications & Features:

- Relay contacts rated at 15 A @ 220 VAC, 25VDC with Resistive Load 8 A @ 220 VAC, 25VDC with Inductive Load (P.F=0.4, L/R=7 mS)
- Contact Material AgCdO
- Max. Operating Voltage 380 VAC, 125 VDC
- Max. Switching Capacity 4,000 VA, 480W with Resistive Load 2,000 VA, 240W with Inductive Load (P.F=0.4)
- Min. Permissible Load 100 mA, 5 VDC
- Power Consumption 5V @ 200mA
- 15Amp Fuse 380 VAC, 125 VDC
- Communications cable - RJ-45 jack to sensor using UTP Cat 5 wire.
- Sensor type - open/closed contact switches (8)
- Power source: an additional 6 Volt 1 Amp external power is required when using more than one relay.

- The unit auto detects the presence of the 8 Port Sensor Controlled Relay
- Full autosense including disconnect alarm
- Metal Oxide Varistors (MOVs) and snubber circuit protect the open contacts of the relays from high voltage spike.
- LEDs across the front panel indicate the status of each Relay and the Power Supply.
- Dimensions 65(W) x 62(H) x 15(D) mm
- Operating Temperature -40°C to 85°C