



Technical Overview

General Description

OEM Sensors wireless control allows a user to control either two separate 10-amp or two separate 30-amp relays, all through the online sensors monitoring portal. Pair the control unit with up to two wireless sensors, and automatically control motors or electrical devices when a specified condition is detected by the sensor.

Principle of Operation

The OEM Sensors control unit has two separate 10-amp or 30-amp relays that can be toggled on/off at will by either: (a) the online sensor software OR (b) a paired sensor that is in the aware state.

Four LED indicators let the user know if the device is powered on, communicating with the online system and the status of each relay.

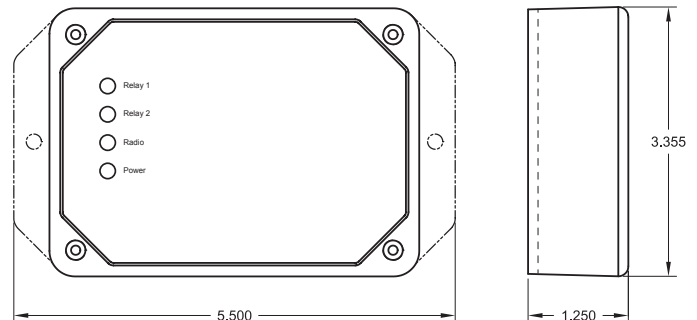
Each of the units two relays can be paired with an OEM / Monnit wireless sensor that can automatically activate the relay when the sensor detects a condition that causes it to enter its aware state. The user can set the default state of each relay to “on” or “off” and messages from a sensor that are flagged as “Aware” will cause the relay unit to switch to the non-default state. When a message is received, that the sensor is no longer “Aware”, the relay switches back to it’s default state. The control unit listens for a message directly from the paired sensor (if in range) and does not have to wait for the gateway or the online software to receive the same data.

The user can also manually turn a relay on or off through the online sensor software. Manual changes can also be defined as temporary based on a set duration (ex. activate the relay for 10 minutes then return to the default state).

Example Use: If a water sensor detects water at a certain level in a sump pit, the relay will switch ON, activating the pump. When water is no longer detected, the relay will switch OFF, deactivating the pump motor.


OEMSensors.com Wireless Control Product Features

- Allows for automated control.
- 10-amp or 30-amp units available.
- Two separate relays per unit.
- Can pair with two Monnit wireless sensors to activate upon detection of set conditions.
- Listens for radio messages direct from paired sensors, allowing for immediate response.
- Can be triggered manually through online monitoring interface.
- AC powered, always on for immediate response from paired sensors.



Applications

- Facilities / Building Operations
- Automated Systems
- Smart Buildings
- Manufacturing Processes
- Machine Control
- Lighting Control
- Sump and Water Evacuation
- Agriculture and Greenhouses

OEM Wireless Control Unit Specifications		
Control Unit Relays	10-Amp Units	30-Amp Units
Initial Contact Resistance	Max. 100 mΩ	Max. 50 mΩ
Max Switching Power (resistive load)	2500VA 150W (NO) 1662VA 150W (NC)	8310VA (30A 277VAC)
Max Switching Voltage	250 VAC, 100 VDC (0.5A)	277 VAC
Max Switching Current	10A (AC), 5A (DC)	30A
Nominal Operating Power	360 mW	Approx 800 mW
Operate Time (at nominal voltage / 20°C)	Max 10 ms	Max 20 ms
Release Time (at nominal voltage / 20°C)	Max 10 ms	Max 10 ms
Max Operating Speed	20 times/min (at nominal switching capacity)	20 times/min (at nominal switching capacity)
Number of Relays	2 (individually controlled)	
Control Activation	- Automatic based on paired sensor - Manual through online software	
Paired Sensor Relationship	1 sensor per relay (total 2 sensors per device)	
Power		
Input Power	5.5 VDC @ 900 mA	
Mechanical		
Antenna	Connector: SMA Gain (dBi): 5.0	
Indicator Lights	Four LED indicators - Power - Radio (RF) communication - Relay 1 status (On/Off) - Relay 2 status (On/Off)	
Enclosure	ABS Plastic UL94V-0 flame rating	
Dimensions	5.5 x 3.355 x 1.25 in. (139.7 x 85.217 x 31.75 mm)	
Weight	8 ounces	
Environmental		
Operating Temperature	-40° to +85° C (-40° to +185° F)	
Certifications:	 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).	

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555 or visit us on the web at www.oemsensors.com.



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