ONW-D – NeoSwitch Dual Tech/Dual Relay Wall Switch Sensor (Ground Required)

Overview
The Dual Technology Dual Relay Occupancy Sensing Wall Switch is a motion sensing lighting control and conventional wall switch all-in-one that is used for energy savings and convenience. The unit contains two relays that allow the control of two separate loads. It does not require a neutral wire for installation making it ideal for retrofit applications.

Features
- Air-gap switch ensures no leakage current to load
- Selectable built-in light level sensor
- NEMA WD7 Guide robotic method utilized to verify coverage patterns
- Additional pushbutton with light/fan graphic included
ONW-D – NeoSwitch Dual Tech/Dual Relay Wall Switch Sensor (Ground Required)

Specifications

**Technology**
Passive Infrared (PIR) and Ultrasonic (US)

**Electrical Ratings (Per Relay)**

- **120 VAC:**
  - Incandescent/Tungsten – Max. load: 6.7 amps, 800W, 50/60 Hz
  - Fluorescent/Ballast – Max. load: 10 amps, 1200W, 50/60 Hz
  - Motor Load: ¼ HP @ 125 VAC

- **277 VAC:**
  - Fluorescent/Ballast – Max. load: 9.8 amps, 2700W, 50/60 Hz

**Ballast Compatibility**
Compatible with magnetic and electronic ballasts

**Time Delays**
Self-Adjusting, 15 seconds/test (10 min. Auto), Selectable 5, 15, 30 minutes

**Coverage**
Major motion - 36’ x 30’
Minor motion - 20’ x 16’

**Light Level Sensing**
0 to 200 foot-candles

**Operating Environment**
Temperature: 32°F - 104°F (0°C - 40°C)
Relative humidity: 20% to 90% non-condensing
For indoor use only

**Housing**
Durable, injection molded housing. ABS resin complies with UL 94V-0

**Size**
Mounting Plate/Strap Dimensions: 4.195”H x 1.732”W (106.55mm x 44mm)
Product Housing Dimensions: 2.618”H x 1.752”W x 1.9”D (66.5mm x 44.5mm x 48.26mm)

**LED Indicators**
Red LED for PIR detection; Green LED for Ultrasonic detection

**Standards**
FCC Compliant
cULus Listed
RoHS Compliant

Operation

The ONW-D-1001-DMV combines Ultrasonic (US) and Passive Infrared (PIR) sensor technologies to monitor a room for occupancy to deliver maximum energy savings and ensure the greatest sensitivity and coverage for tough applications without the threat of false triggers. PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON. In Automatic On Mode, the lights turn ON when a person enters the room. In Manual On Mode, the lights are turned ON by pressing the universally recognized light icon pushbutton. Each relay can be set independently to Automatic or Manual On Mode. The sensor includes self-adaptive technology that continuously self-adjust sensitivity and time delay in real-time, maximizing the potential energy savings that are available in the particular application.

Applications
- Private Offices
- Small Conference Rooms
- Lunch/Break Rooms
- Small Classrooms
- Small Restrooms (1-2 Stalls)
- Small Lounges
- Small Waiting Rooms
- Small Closets
- Small Storage Areas
Wiring Diagrams

120/277 VAC dual level single circuit wiring diagram

Three-way wiring diagram: Lights will turn OFF automatically when sensor that detected motion last, times out.

Coverage

Maximum coverage area may vary somewhat according to room shape and the presence of obstacles.
ONW-D – NeoSwitch Dual Tech/Dual Relay Wall Switch Sensor (Ground Required)

Controls

Bathroom Override

DIP Switch Legend

- ON/OFF Buttons 1 & 2
- PIR Lens
- Ultrasonic Detection
- Ultrasonic Sensitivity Adjustment
- PIR Relay

Default =

Ordering

*One single gang wallplate included.

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Ratings</th>
<th>Coverage</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONW-D-1001-DMV-*</td>
<td>Incandescent: 0-800W @ 120V</td>
<td>180°; 1000 sq. ft.</td>
<td>120/277 VAC, 50/60 Hz</td>
</tr>
<tr>
<td>(* - W, V, LA, G, B)</td>
<td>Fluorescent: 0-1200W @ 120V</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluorescent: 0-2700W @ 277V</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Max Load/Relay</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* White, Ivory, Light Almond, Gray, Black

Note: Not all colors are available in stock and some color options may have extended lead times.