H-MOSS® Occupancy Sensors
Dual Technology Single or Dual Circuit Wall Switches

Hubbell's Adaptive Technology Occupancy Sensors
You Don't Adapt to Them... They Adapt to You!

The H-MOSS® Dual Technology single and dual circuit wall switch, represent the state-of-the-art in sensor technology utilizing both ultrasonic and passive infrared motion sensing technology. They also have Adaptive Technology that continuously analyzes its environment and auto adjusts the sensitivity and timer based on environmental history, eliminating the need for manual adjustment. This helps provide true maintenance free “Install and Forget” operation. The AD1277 Series also feature selectable operating modes - automatic ON/OFF or manual ON/automatic OFF, and a built-in photocell for automatic daylight harvesting.

Key Features
- All-Digital, Dual Technology Sensor
- Adaptive Technology – No Manual Adjustment Required
- Built-In Photocell with SuperSaver Mode
- Two Relays for Two Level Switching or Dual Load Control (AD1277x2 and AD1277x2N)
- Zero Arc Point Switching
- Auto On or Manual On Operating Modes
- Dual 120/277V AC Operation
- Hard Lens
- No Minimum Load Requirement
- 1000 Sq. Ft., 180° Area of Coverage

Features and Benefits

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<tr>
<th>Features</th>
<th>Benefits</th>
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<tr>
<td>All-Digital, Dual Technology sensor</td>
<td>Combines excellent ultrasonic minor motion detection with outstanding passive infrared long-range motion detection.</td>
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<tr>
<td>Auto ON or Manual ON operating modes</td>
<td>Provides Auto ON / Auto OFF or Manual ON / Automatic OFF operation.</td>
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<td>Two relays for two level switching or dual load control</td>
<td>Controls two circuits independently (120V AC or 277V AC) — AD1277x2 and AD1277x2N.</td>
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<td>No minimum load requirement</td>
<td>Allows for connection of loads from 0 to full load capacity.</td>
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<td>Hard lens</td>
<td>Impact resistant IR lens.</td>
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<td>Built-in photocell with manual SuperSaver mode for daylight harvesting.</td>
<td>Increases energy savings by preventing the lights from turning on when there is sufficient natural light. Manual SuperSaver mode – in addition to above, turns lights off during periods of occupancy if ambient light levels increase sufficiently to illuminate the area.</td>
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<td>Tamper-proof automatic only version available</td>
<td>Automatically turns lighting loads on and off. Manual override button is not provided — AD1277x1N and AD1277x2N.</td>
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**Adaptive Technology, Dual Technology**

50/60Hz, 1000 sq. ft. coverage with photocell, 800W IN., 1000W FL at 120V AC, 1800W FL at 277V AC

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<th>Circuit</th>
<th>Button</th>
<th>Catalog Numbers</th>
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<tr>
<td>Single</td>
<td>1 Button for manual/auto control</td>
<td>AD1277x1</td>
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<tr>
<td>Single</td>
<td>Auto control with no button</td>
<td>AD1277x1N</td>
</tr>
<tr>
<td>Dual</td>
<td>2 Buttons for manual/auto control</td>
<td>AD1277x2</td>
</tr>
<tr>
<td>Dual</td>
<td>Auto control with no button</td>
<td>AD1277x2N</td>
</tr>
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Sensors are available in two standard and three special order colors. To order, replace "x" with I (Ivory) or W (White). Special order colors, LA (Light Almond), GY (Gray) or BK (Black), have minimum ordering requirements and minimum lead times. Please call customer service for further information. Wallplates are sold separately.

### Specifications

- **Timer Timeout**
  - Automatic mode: 4-30 minutes, self adjusts based on occupancy;
  - Fixed mode: 4, 8, 15 and 30 minutes; Test mode: 5 seconds

- **Coverage**
  - 1000 sq. ft., 180°

- **Power Requirements**
  - 120/277V AC, 50/60Hz

- **Electrical Ratings**
  - 120V AC: 800W Incandescent, 1000W Fluorescent, 1/6 HP
  - 277V AC: 1800W Fluorescent, 1/6 HP

- **Load Requirements**
  - No minimum load

- **Operating Environment**
  - Indoor use only; Operating temperature: 32° – 104°F (0° – 40°C)
  - 0% to 95% relative humidity, non-condensing

- **Ultrasonic Output**
  - 40kHz output

- **Passive Infrared**
  - Dual element pyrometer and 12 element cylindrical hard lens

- **Photocell**
  - Adjustable ambient light override ranges from 10 foot-candles to 500 foot-candles

- **Construction**
  - Housing – high impact, injection-molded plastic (UL-94-5V); Impact resistant lens;
  - Color-coded leads are 6" long

- **Size & Weight**
  - Size: 4.2" x 1.8" x 2.1", extends out .37"; Weight: 2.9 oz

- **Mounting**
  - Single gang NEMA style switch box (Decorator style wall plate not included)

- **Certifications**
  - C-UL US

- **Color**
  - White and Ivory (Light Almond, Gray and Black - special order, minimum requirements)

- **Warranty**
  - 5 years

### Range Diagram

- Ultrasonic Major Motion
- Ultrasonic Minor Motion
- Passive Infrared

### Wiring Diagram for Single and Dual Circuits

- **Single Circuit**
- **Dual Circuit Sensors**
- Wired for Dual Circuits
- Wired for Single Circuit

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