

H-MOSS® Occupancy Sensors
Occupancy Sensors that
Are Light Years Ahead
with Advanced Adaptive Technology Sensors



Ceiling & Wall Switch Sensors

- **ATD - Dual Ultrasonic and Passive Infrared**
- **ATU - Ultrasonic**
- **ATP - Passive Infrared**

Outdoor Sensors

Control Units

Add-A-Relay

Digital Timer Wall Switch



Wiring Device-Kellems

www.hubbell-wiring.com

H-MOSS® Occupancy Sensors

Wall Switches and Outdoor Sensor

Dual Technology, Ultrasonic and Passive Infrared Wall Switches



Adaptive Technology Dual (Ultrasonic and Passive Infrared) Wall Switches

The ATD series wall switch sensors incorporate both ultrasonic and passive infrared detection technologies. These dual technology sensors provide the most reliable means of automatic lighting control. The product offering includes standard and hard lens versions for high abuse applications. Hubbell dual technology wall switch sensors are the best choice for enclosed office applications.

Adaptive Technology Ultrasonic Wall Switches

Hubbell ATU series wall switch sensors detect occupancy based on an ultrasonic signal. Since these sensors do not require line of sight to detect occupancy, they work particularly well in areas with obstructions such as storage areas and restrooms. The manual override switch is eliminated on the restroom model to prevent the light from being turned off.

Adaptive Technology Passive Infrared Wall Switches

Hubbell AT1277 and ATP1277 series wall switch occupancy sensors utilize passive infrared technology to determine occupancy. These sensors require line of sight to detect body heat in motion. Wall switch occupancy sensors are best suited for small enclosed spaces such as offices, conference rooms, storage closets, small lunch rooms and copy rooms.

Hubbell AT1277 series wall switches feature a heavy duty relay and zero crossing circuitry to provide the ability to switch up to 15A lighting loads. In addition, they incorporate Adaptive Technology for performance critical applications such as enclosed offices and conference rooms. Adaptive Technology sensors automatically adjust the time delay setting to fit the application. This prevents false-offs that result when a sensor's time delay is set too short for the activity level of the occupant.

Hubbell ATP series Adaptive Technology wall switch sensors are dual voltage rated for use on 120V or 277V AC applications. These sensors feature a pushbutton ambient light level control that allows for quick, accurate setting of the ambient light level threshold.

Passive Infrared Wall Switches

Hubbell WS1277 series wall switch sensors include a manual adjustment that allows the time delay to be set from 20 seconds to 30 minutes. This adjustment is concealed behind a front cover to prevent tampering. These sensors also feature a pushbutton ambient light level control that allows for quick, accurate setting of the ambient light level threshold.

Hubbell WS series wall switch sensors include a manual adjustment that allows the time delay to be set from 30 seconds to 30 minutes. These sensors provide the most economical means of automatic lighting control.

Hubbell WS1277W2 passive infrared wall switch sensor is a double pole, single throw wall switch with two separate relays. This wall switch can be used for dual level switching from one or two circuits.

Outdoor Sensor

Hubbell OS270BZ is a passive infrared sensor specifically designed for outdoor applications. The OS270BZ features a rugged metallic housing with an integral lens guard for abuse resistance, a conformal coated printed circuit board to prevent premature failure caused by moisture ingress and a durable multi-segmented lens for improved coverage and reliability. The OS270BZ provides a 270 degree coverage pattern with a range of up to 100 feet. Hubbell OS270BZ offers energy savings, convenience and security in outdoor applications.

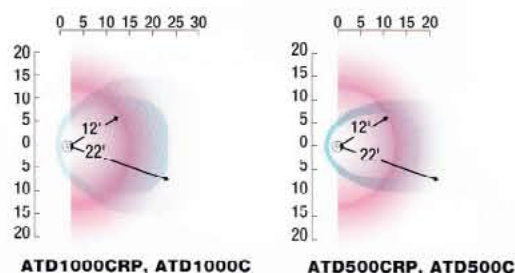
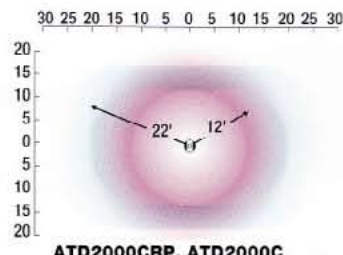


H-MOSS® Occupancy Sensors

Ceiling Sensors

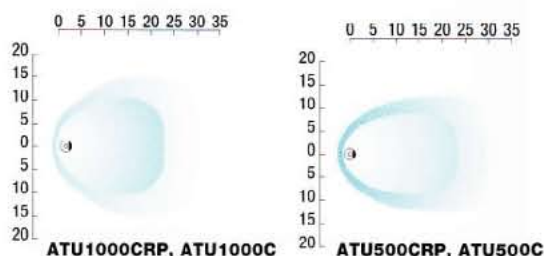
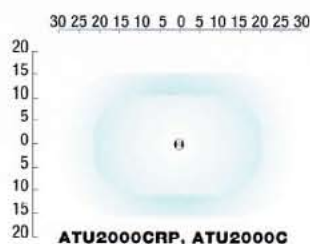
Adaptive Technology, Dual (Ultrasonic and Passive Infrared).

Description	Catalog Numbers
32kHz, 2000 sq. ft. coverage, with isolated relay and photocell.	ATD2000CRP
32kHz, 2000 sq. ft. coverage.	ATD2000C
32kHz, 1000 sq. ft. coverage, with isolated relay and photocell.	ATD1000CRP
32kHz, 1000 sq. ft. coverage.	ATD1000C
40kHz, 500 sq. ft. coverage, with isolated relay and photocell.	ATD500CRP
40kHz, 500 sq. ft. coverage.	ATD500C



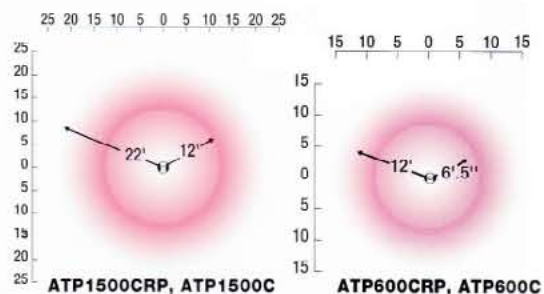
Adaptive Technology, Ultrasonic.

Description	Catalog Numbers
32kHz, 2000 sq. ft. coverage, with isolated relay and photocell.	ATU2000CRP
32kHz, 2000 sq. ft. coverage.	ATU2000C
32kHz, 1000 sq. ft. coverage, with isolated relay and photocell.	ATU1000CRP
32kHz, 1000 sq. ft. coverage.	ATU1000C
40kHz, 500 sq. ft. coverage, with isolated relay and photocell.	ATU500CRP
40kHz, 500 sq. ft. coverage.	ATU500C



Adaptive Technology, Passive Infrared.

Description	Catalog Numbers
1500 sq. ft. coverage, wide view lens, with isolated relay and photocell.	ATP1500CRP
1500 sq. ft. coverage, wide view lens.	ATP1500C
600 sq. ft. coverage, high density lens, with isolated relay and photocell.	ATP600CRP
600 sq. ft. coverage, high density lens.	ATP600C



Wiring Device-Kellems

Coverage Patterns



Passive Infrared



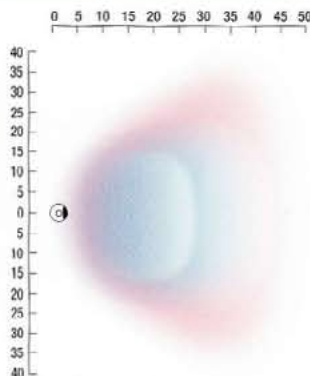
Ultrasonic

H-MOSS® Occupancy Sensors

Wall Mount Sensors, Control Units, Add-A-Relay

Adaptive Technology, Dual (Ultrasonic and Passive Infrared).

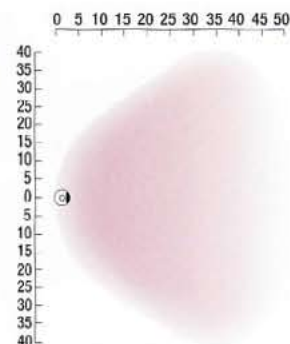
Description	Catalog Numbers
32kHz, 1600 sq. ft. coverage, with isolated relay and photocell.	ATD1600WRP
32kHz, 1600 sq. ft. coverage.	ATD1600W



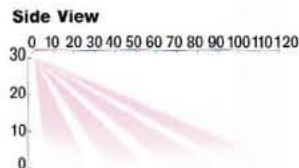
ATD1600WRP, ATD1600W

Adaptive Technology, Passive Infrared.

Description	Catalog Numbers
1600 sq. ft. coverage, with isolated relay and photocell.	ATP1600WRP
1600 sq. ft. coverage.	ATP1600W
120 linear ft. coverage for aisle ways in high bay applications, with isolated relay and photocell.	ATP120HBRP
120 linear ft. coverage for aisle ways in high bay applications.	ATP120HB



ATP1600WRP, ATP1600W



ATP120HBRP, ATP120HB

Control Unit.

Description	Catalog Numbers
120V AC, 60 Hz, for use with ATD, ATU and ATP series ceiling and wall mount sensors.	CU120A
230V AC, 50/60 Hz, for use with ATD, ATU and ATP series ceiling and wall mount sensors.	CU230A
277V AC, 60 Hz, for use with ATD, ATU and ATP series ceiling and wall mount sensors.	CU277A
347V AC, 60 Hz, for use with ATD, ATU and ATP series ceiling and wall mount sensors.	CU347A



CU120A, CU230A, CU277A, CU347A

Add-A-Relay.

Description	Catalog Number
For use with CU series control units.	AAR



AAR

H-MOSS® Occupancy Sensors

Wall Switches

Adaptive Technology, Dual (Ultrasonic and Passive Infrared).

Description	Catalog Numbers
40kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, with photocell, ivory.	ATD1277I
40kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, with photocell, white.	ATD1277W
40kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 300 sq. ft. coverage, with photocell, hard lens, ivory.	ATD1277HI
40kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 300 sq. ft. coverage, with photocell, hard lens, white.	ATD1277HW

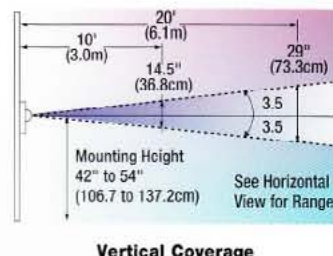
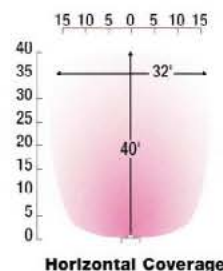
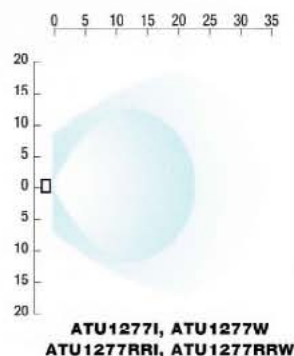
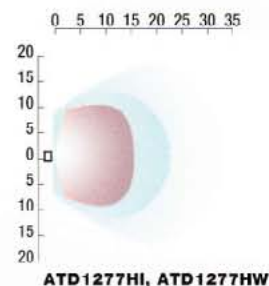
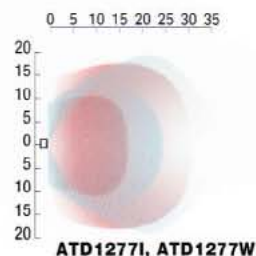
Adaptive Technology, Ultrasonic.

Description	Catalog Numbers
40 kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, ivory.	ATU1277I
40 kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, white.	ATU1277W
Restroom Wall Switch*	Catalog Numbers
40 kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, ivory.	ATU1277RRI
40 kHz, 120/277V AC, 25 to 600 watts at 120V AC, 60 to 1200 watts at 277V AC, 1000 sq. ft. coverage, white.	ATU1277RRW

*Restroom wall switches do not have an on/off override switch.

Adaptive Technology, Passive Infrared.

Description	Catalog Numbers
120/277V AC, 1800 watts at 120V AC, 4155 watts at 277V AC, 1200 sq. ft. coverage, with photocell, ivory.	AT1277I
120/277V AC, 1800 watts at 120V AC, 4155 watts at 277V AC, 1200 sq. ft. coverage, with photocell, white.	AT1277W
120/277V AC, 800 watts at 120V AC, 1200 watts at 277V AC, 1200 sq. ft. coverage, with photocell, ivory.	ATP1277I
120/277V AC, 800 watts at 120V AC, 1200 watts at 277V AC, 1200 sq. ft. coverage, with photocell, white.	ATP1277W
120/277V AC, 800 watts at 120V AC, 1200 watts at 277V AC, 1200 sq. ft. coverage, with photocell, gray.	ATP1277GY

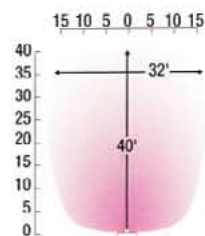


H-MOSS® Occupancy Sensors

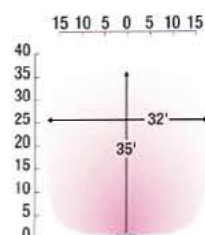
Wall Switches and Outdoor Sensor

Passive Infrared.

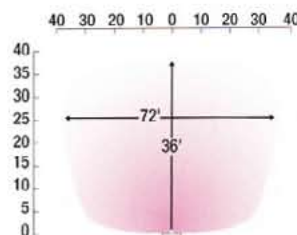
Description	Catalog Numbers
120/277V AC, 800 watts at 120V AC, 1200 watts at 277V AC, 1200 sq. ft. coverage, with photocell, ivory.	WS1277I
120/277V AC, 800 watts at 120V AC, 1200 watts at 277V AC, 1200 sq. ft. coverage, with photocell, white.	WS1277W
120V AC, 800 watts incandescent, 1000 watts fluorescent, 900 sq. ft. coverage, ivory.	WS120I
120V AC, 800 watts incandescent, 1000 watts fluorescent, 900 sq. ft. coverage, white.	WS120W
277V AC, 1800 watts fluorescent, 900 sq. ft. coverage, ivory.	WS277I
277V AC, 1800 watts fluorescent, 900 sq. ft. coverage, white.	WS277W
Double pole, white, 120/277V AC, 600 watts per circuit at 120V AC incandescent, 1000 watts per circuit at 120V AC fluorescent, 1800 watts at 277V AC fluorescent, 1000 sq. ft. coverage, ivory.	WS1277W2
Wall switch adapter plate for Hubbell WS1277W2. Two-gang wall plate allows one WS1277W2 to mount to a two gang box.	WSAP



WS1277I, WS277W



WS120, WS277 Series



WS1277W2

Outdoor Sensor.

Description	Catalog Number
Outdoor sensor, passive infrared, bronze, 120V AC, 1000 watts, incandescent, with photocell.	OS270BZ

Operating Characteristics

Time Out - Test (5 seconds), 1, 5 or 20 minutes.
 Horizontal field of view - 270 degrees.
 Vertical field of view - 3 levels of vertical fields.
 Recommended mounting height - 6-12 feet above ground.

Control Adjustments

The Hubbell OS270BZ motion detector has adjustments for time, sensitivity and range. The controls are located in a concealed control compartment on the bottom of the motion detector.



OS270BZ

Digital Timer Wall Switch.

Description	Catalog Number
120/277V AC, 800 Watts at 120V AC, 1200 Watts at 277V AC, white.	DT1277W

Operating Characteristics

Dipswitch enabled preset intervals. - 5, 15 or 30 minutes.
 - 1, 3, 6, 9 or 12 hours.

Includes an on/off momentary pushbutton switch feature.



DT1277W



H-MOSS® Occupancy Sensors

Ceiling and Wall Mount Sensors

Dual Technology,
Ultrasonic and Passive Infrared
Ceiling and Wall Mount Sensors



Adaptive Technology Dual (Ultrasonic and Passive Infrared) Ceiling Sensors

ATD series sensors incorporate both ultrasonic and passive infrared detection technologies. These dual technology sensors provide the most reliable means of automatic lighting control. Common applications include open office spaces, conference rooms, classrooms and executive offices where flawless performance is necessary. An isolated relay and photocell are included on models with "RP" suffix. A CU series control unit is required for use with ATD series ceiling sensors.

Adaptive Technology Ultrasonic Ceiling Sensors

ATU series sensors detect occupancy based on an ultrasonic signal. Since these sensors do not require line of sight to detect occupancy, they work particularly well in areas with obstructions such as restrooms and storage rooms. Another common application is hallways. An isolated relay and photocell are included on models with "RP" suffix. A CU series control unit is required for use with ATU series ceiling sensors.

Adaptive Technology Passive Infrared Ceiling Sensors

ATP series ceiling sensors detect occupancy based on a passive infrared signal. They are available with a wide view lens (ATP1500C series) for large areas with multiple occupants and a high density lens (ATP600C series) for areas with a single occupant where small motion detection is desired. Each sensor includes an infrared masking kit which can be used to reduce the coverage area. Models with an "RP" suffix include an isolated relay and photocell. A CU series control unit is required for use with ATP series ceiling sensors.

Adaptive Technology Dual and Passive Infrared Wall Mount Sensors

The Adaptive Technology wall mount sensor offering includes dual technology and passive infrared sensors with a 1600 square foot coverage pattern as well as passive infrared sensors for high bay applications in warehouse aisle ways. The wall mount sensors include a swivel mounting bracket that allows the sensor to be ceiling or wall mounted. This makes them suitable for applications with ceiling heights over 12 ft. The ceiling bracket is also designed to accept surface raceway for hard ceiling applications. Models with "RP" suffix include an isolated relay and photocell. A CU series control unit is required for use with ATD and ATP series wall mount sensors.

Control Units

CU series control units are required for use with Hubbell ATD, ATU and ATP series ceiling and wall mount sensors. The control units provide a 24V DC power supply for 1 to 3 sensors or sensor/Add-A-Relay combinations and contain an internal relay for the control of an external lighting load.

Add-A-Relay

Add-A-Relay is designed for use with CU series control units and ATD, ATU and ATP series ceiling and wall mount sensors. The AAR contains an internal relay for control of an external lighting load. The AAR requires a 24V DC power supply from the Hubbell CU series control unit. The AAR is typically used when:

1. It is desired to switch more than one circuit when occupancy is sensed.
2. The lighting load exceeds the maximum rating of the control unit.

H-MOSS®

Adaptive Technology

You don't adapt to it...
... It adapts to you

What is Adaptive Technology?

Adaptive Technology is a Hubbell breakthrough that not only delivers benefits for those who occupy offices, conference rooms and other interior spaces, but significant advantages for architects, specifiers, contractors and building owners as well. That's because Adaptive Technology sensors use microprocessor-based technology to solve the three major problems of conventional occupancy sensors—false-ons, false-offs and the need for continuous manual adjustment.

Switching lights off accidentally, even when a space is occupied, is no longer a nuisance with Hubbell Adaptive Technology sensors. Likewise, the false-ons caused by HVAC systems and other factors are a thing of the past.

Adaptive Technology Sensors Head a Complete Family of Hubbell Occupancy Sensors.

Hubbell offers a full line of occupancy sensors that incorporates all three sensing technologies: Dual Technology, Passive Infrared (PIR) and Ultrasonic. Adaptive Technology is offered on Dual Technology, PIR and Ultrasonic models. For non-critical areas and seldom used spaces such as storage closets, Hubbell also offers PIR wall switches without Adaptive Technology.

Automatically Adjust Time Delays

Adaptive Technology sensors automatically adjust the time delay setting found in all occupancy sensors based on the activity level of the area's occupant or occupants. It literally "fingerprints" movements, motion patterns and occupancy habits by recording them in the microprocessor's memory. This prevents "false-offs" that result when a sensor's time delay is too short for the occupant's activity level.

Automatically Adjust Sensitivity

Not only can seasonal temperature changes cause false-offs, changes in office layout, including arrangement and density of furniture and the number of occupants, can cause them as well. Conversely false-ons are caused by air currents created by HVAC systems and hallway traffic outside an area controlled by a non-adaptive sensor. Adaptive Technology sensors prevent these problems by automatically adjusting their sensitivity.

Put an End to False-Offs

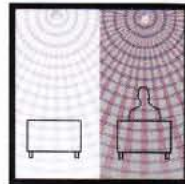
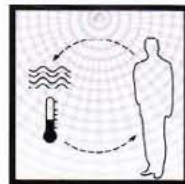
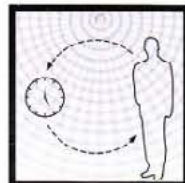
Many people have had the experience: They're sitting in an office, not moving much and, suddenly, the lights go off. They wave their arms to get them back on. The same problem may occur when a large room is occupied in off-peak hours. With an Adaptive Technology sensor, if motion is detected within 15 seconds of a lights-off command, it is logged as a major error by the microprocessor. A number of corrections are initiated automatically by the sensor to adapt to the areas usage pattern.

Passive Infrared, Ultrasonic or Dual Technology?

Passive Infrared (PIR) Technology detects body heat in motion — the same natural body heat we all generate. PIR sensors require line of sight to detect occupancy. These sensors are best when people are moving across the pattern.

Ultrasonic Technology detects moving objects because they produce a change in the frequency of the sensor's sound waves. These sensors are best used in enclosed spaces or areas where obstacles prohibit the line of sight.

Dual Technology combines the individual advantages of PIR and Ultrasonic. These sensors do not require a "line of sight" to keep the lights on.



Wiring Device-Kellems