

KEY SPECS

Lens Extended Range 360°
Enclosure Recessed Mount
Power Type Low Voltage
Detection Dual Technology (PDT)

TYPICAL APPLICATIONS

Classrooms
Partitioned Cubical Spaces
Library Study Carrels & Stacks

FEATURES

30 sec. to 20 min Time Delay
Sensor to Sensor Communication
Push-Button Programmable
100 hr. Lamp Burn-in Timer
Green LED Indicator

PHYSICAL SPECS

Size 4.40" (11.18 cm) square
Weight 6 oz.
Mounting Recessed into a 4" x 4" square junction box
Color White

ELECTRICAL SPECS

Operating Voltage 12-24 VAC/VDC
Current Draw
Standard, 4 mA
w/ -R option, 16 mA

ENVIRONMENTAL SPECS

Operating Temp
14° to 160° F (-10° to 71° C)
Storage Temp
-14° to 160° F (-26° to 71° C)
Relative Humidity
20 to 90% non-condensing
-LT Option
Circuit board is coated to be corrosion resistant to moisture and operate down to -4°F/20°C

OTHER

UL and CUL Listed
Title 24 Compliant
5 Year Warranty
Made in the U.S.A.

RM-PDT-10 SERIES

Classrooms and larger spaces are conveniently controlled by the *RM-PDT-10 Series* occupancy sensor. Even when classrooms are filled with shelving, hanging projects, or lab benches; the *RM-PDT-10* provides total coverage! This attractive sensor recess mounts into a 4" x 4" junction box. When mounted at 9 feet the *RM-PDT-10* provides line of sight PIR detection up to 28 feet in a circular pattern and combines overlapping Microphonics™ for detection around obstructions. When comparing small motion detection, the *RM-PDT-10* far out performs other "2,000 SF Dual Tech" sensors. Corner or wall mounting a *WV-PDT Series* sensor is also an effective solution for classrooms, however ceiling mounting is often the only option. The *RM-PDT-10* is also ideal in lower ceiling height applications. Multiple *RM-PDT-10s* may be used together or in combination with other low voltage sensors to customize coverage for large or irregularly shaped spaces.



SENSOR OPERATIONS

Sensors with Passive Dual Technology (PDT) first "See" motion using Passive Infrared (PIR) and then engage Microphonics™ to "Hear" sounds that indicate continued occupancy. This patented technology uses Automatic Gain Control (AGC) to dynamically self adapt a sensor to its environment by filtering out constant background noise and detecting only noises typical of human activity. When occupancy is detected, a DC output goes high and can drive up to 200 mA of connected load. The sensor is powered with 12 to 24 VAC/VDC and typically operates with a PP-20 or MP-20 Power Pack; enabling complete 20 Amp circuits to be controlled. An internal timer, factory set at 10 minutes, keeps the lights "On" during brief periods of no activity. This timer is push-button programmable from 30 seconds to 20 minutes, and is reset every time occupancy is re-detected.

DAYLIGHTING CONTROL OPTIONS (-P & -ADC)

For spaces with abundant natural light from windows or skylights, this series offers an On/Off Photocell (-P) option and an Automatic Dimming Control (-ADC) Photocell option. The -P option is ideal for public areas like vestibules, corridors, or restrooms; while the -ADC option is perfect for classrooms and private offices. As the daylight levels change in the room, both options insure that an adequate light level is maintained according to a programmable set-point value. The -P option provides two modes of operation; one simply inhibits the lights from turning on, while the other has full On/Off control of the lights. The -ADC option allows the sensor to control a dimmable ballast. It also provides a secondary dim time-out that enables the lights to go to a dim setting after one time-out and then turn fully off after a second time-out. **Note:** If both the -P and the -ADC options are selected the "Inhibit" mode of the -P option is not available.

ISOLATED LOW VOLTAGE RELAY OPTION (-R)

To enable a sensor to interface with a building management system, the -R option provides dry contact closure via a SPDT, 1 Amp, 40 Volt relay. The relay is energized when ALL connected sensors register "Unoccupied". When using multiple sensors, only one sensor per zone needs to have a relay. **Note:** Sensor must have power at all times for the relay to function.

ORDERING BLOCK

RM-PDT-10-[RELAY]-[DAYLIGHTING]-[TEMP/HUMIDITY]

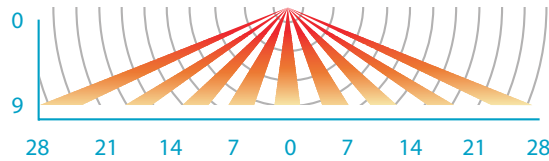
OPTIONS	RELAY*	DAYLIGHTING	TEMP/HUMIDITY
		Blank = None -R = Isolated Relay	Blank = None -P = On/Off Photocell -ADC = Auto Dimming Control Photocell -P-ADC = On/Off & Dimming Photocell
	*use -RP when ordering both -R & -P		T115-001-P

COVERAGE PATTERN

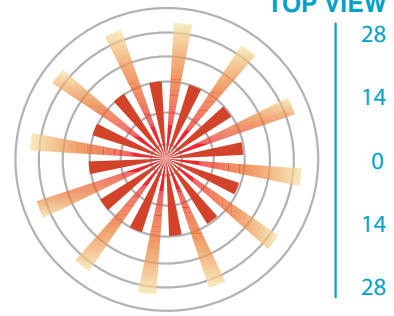
10 EXTENDED RANGE 360° LENS W/ MICROPHONICS™

- Best choice for large motion (e.g. walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft radial coverage when mounted to standard 9 ft ceiling
- 7 to 15 ft mounting heights provide 16 to 36 ft radial coverage
- Microphonics™ detects human activity up to 20 feet, but will detect farther in spaces with hard floors or areas with low background noise.

SIDE VIEW



TOP VIEW



Note: Heat producing sources controlled by the sensor must not be in the view pattern of the sensor. If sensor cycles or appears to continually stay "On", move sensor or mask lens segments that view the source.

* diagrams labeled in feet

WIRING (DO NOT WIRE HOT)

STANDARD WIRING

- RED - 12 to 24 VAC/VDC
- BLACK - Common
- WHITE - Output (High DC for Occupancy)

RELAY OPTION (-R)

- GRAY / BROWN - Connected during Occupied state
- VIOLET / BROWN - Connected during Unoccupied state

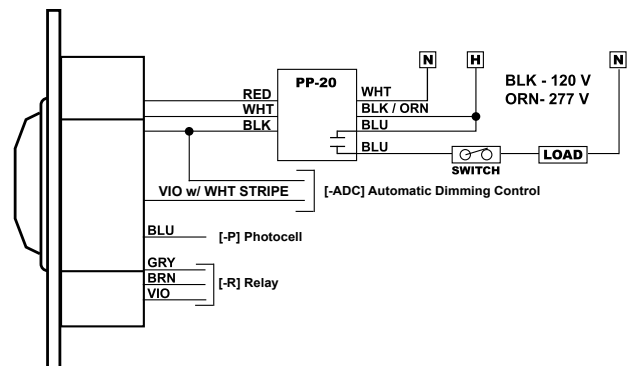
Note: Relay is energized during Unoccupied state

PHOTOCELL OPTION (-P)

- BLUE - Photocell output (High: Occupied & Low Light)
- Use Blue wire from sensor in place of White wire. For multi-level control, use 2 Power Packs and connect White to primary load and Blue to daylight load.

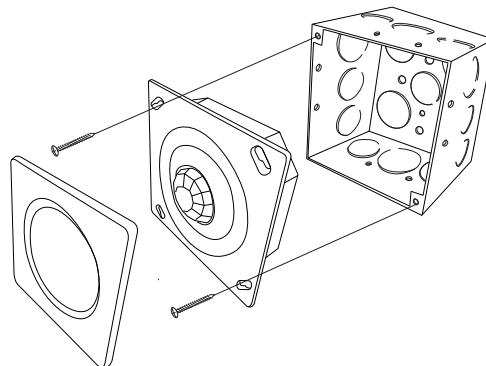
AUTOMATIC DIMMING CONTROL (-ADC)

- VIOLET/WHITE - Connect to Violet (Control) wire from 0-10 VDC Dimmable Ballast
- GRAY from Ballast - Connect to sensor Black wire



INSTALLATION

- The Recessed Mount enclosure is designed to fit inside a 4" square junction box (minimum box depth 2.125").
- Place the sensor along the entrance door wall to prevent it from viewing out into the hallway, ensuring the sensor can view the entire room from this position.
- Passive Infrared sensors detect motions crossing the beams much stronger than when entering the beams. The outer beams used for initial detection should be aligned for maximum coverage.
- Avoid locating sensor near HVAC air diffusers because the "noise" generated from air flow will decrease the sensitivity of the Microphonics™ sensor.



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WARRANTY: Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, Inc., upon prompt notice of such defect will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

LIMITATIONS AND EXCLUSIONS: This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.