Date Project Catalog Number

#### **OVERVIEW**

RMR series sensor offers the reliable functionality of the standard ceiling mount with an architectural aesthetic. Recessed mount sensors are designed to fit inside a standard junction box, making installation quick and easy. Lens options include large motion extended range and small motion standard range.

These sensors are capable of covering an entire private office or small room by themselves. Multiple low voltage sensors can also work together to supply the ideal solution for oddly shaped rooms or large open office areas. A line voltage sensor provides one relay for a single-level control while the 2-pole version provides a second relay for an additional level of control. For rooms with obstructions, these sensors are also offered with Dual Technology, which adds Microphonics™ detection to the passive infrared (PIR) detection.

#### **FEATURES**

- 360° coverage pattern
- Push- button programmable, adjustable time delays, and multiple operating modes
- 100 hr lamp burn-in timer
- No field calibration or sensitivity adjustments required
- Convenient test mode
- Green LED indicator
- Minimum on-timer (LampMaximizer®)



# RMR Family

Line Voltage Recessed Mount Occupancy Sensor







# Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

#### ORDERING INFORMATION

	Example: RMR PDT 9 Li									
Series		Detection Technology		Coverage Type		Relay		Dimming		
RMR	Recessed Mount Sensor	[blank] PDT <sup>1,3</sup>	PIR Dual Technology (PIR/Microphonics)	6 9 10 50	High Bay 360° Small Motion 360° Large Motion 360° High Bay Aisleway	[blank] 2P	None Dual relay	[blank] D <sup>3,5</sup> P ADC <sup>2,3,5</sup> DZ <sup>4</sup>	None Occupancy Controlled Dimming Photocell Photocell w/ dimming Dual Zone Photocell	

Voltage		Temp/Humidity			
[blank] 208 <sup>3</sup> 347 480 <sup>3</sup>	120/230/277 VAC 208 VAC 347 VAC 480 VAC	[blank] LT	Standard Low Temp/High humidity		

- 1. PDT option not available on RMR 6 models.
- 2. ADC option not available on RMR 6 models.
- 3. Not available with 2P option.
- 4. Not available with single relay option.

# **SPECIFICATIONS**

**Electrical** Input Ratings 120/220/230/277, 80 mA, 50/60 Hz

347V, 80 mA, 50/60 Hz 480V, 80 mA, 50/60Hz

Output Ratings 120V, 800W/6.67A - Tungsten, Ballast

120/220/230/277V, 4.3A, 1200W, Ballast.

120V, 5A, General Purpose

220/230/277V, 4.3A, General Purpose.

Relay Type Latching

Low Voltage Output Ratings 0-10VDC, Sinks < 20mA

Class Rating 0-10V Dimming can be wired Class 1 or 2; Do not include if only Class 1

Standards/ Ratings Energy Management Equipment, UL916 (E167435)

Mechanical Dimensions 4.55"W x 1.55"D (116mm x 40mm)

Mounting Single-Gang or Octagonal Box, Surface Mount

Color White Finish Matte

Connection Type Line-Voltage Leads

**Environmental** Warrantied Operating Temperature Standard: 14°F to 185°F (-10°C to 85°C)

PDT option: 14°F to 140°F (-10°C to 60°C) LT option: -4°F to 185°F (-20°C to 85°C) PDT LT options: -4°F to 140°F (-20°C to 60°C)

Relative Humidity Up to 90%, Non-Condensing

**Environment** Indoor **Standards/ Ratings** RoHS

#### TYPICAL WIRING SINGLE RELAY

#### **STANDARD WIRING**

BLACK\* - Line Input
BLACK\* - Load Output
WHITE - Neutral

\*BLACK wires can be reversed

\*BLACK wires can be reversed

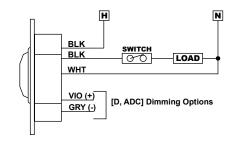
# **DIMMING OPTIONS (D, ADC)**

**VIOLET** - Connect to Violet control wire from 0-10 VDC dimmable ballast **GRAY** - Connect to Gray common wire from ballast

#### **INITIAL POWER UP**

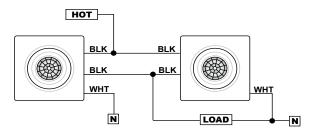
The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power-up. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close within 30 secs.

**Note:** If the sensor loses power, the internal relay will latch to on.



#### **SENSORS IN PARALLEL**

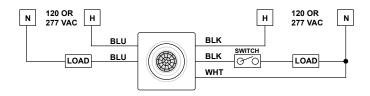
Standard sensors (without P or ADC option) may be wired in parallel.



#### TYPICAL WIRING DUAL RELAY

# STANDARD WIRING





### **347 VAC OPTION (347)**

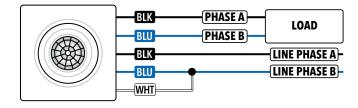
Black wires are replaced w/ Red wires

#### **208, 480 VAC WIRING**

For 480 VAC version the white wire connects to either the phase 1 or phase 2 line input.

BLACK Line Phase A
BLACK Phase A Load
BLUE Line Phase B
BLUE Phase B Load

WHITE Connect to either Line Phase

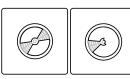


- \*Black wires can be reversed
- \*\*Blue wires can be reversed

# **MASKING KIT**

 A label kit is included to mask off half of the sensor's coverage pattern for end of aisle, or trim the side viewing to create a rectangular pattern for center of aisle.

# CENTER OF AISLE

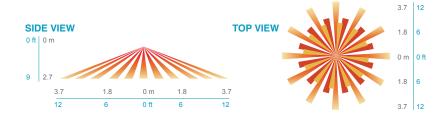


**END OF AISLE** 

#### **COVERAGE PATTERN**

#### Small Motion 360° (Model # RMR 9 / RMR PDT 91)

- Best choice for small motion (e.g. hand movements) detection
- 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage (~500 ft2) when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Lens assembly is marked with a gray ring around lens to differentiate versus the #10 lens
- Tested to NEMA WD 7-2011



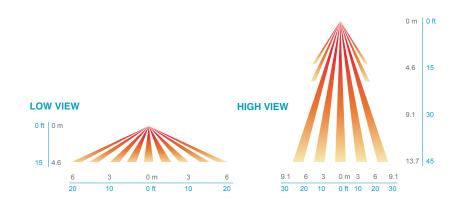
# Large Motion 360° (Model # RMR 10 / RMR PDT 101)

- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft2) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams
- Tested to NEMA WD 7-2011



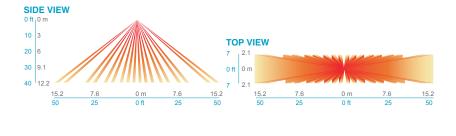
# High Mount 360° (Model # RMR 6)

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to 35 ft (10.76 m)
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m)
- Tested to NEMA WD 7-2011



### HIGH BAY AISLEWAY LENS (Model # RMR 50)

- Provides 50° bi-directional and 10° wide coverage pattern
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting detects 50 ft (15.24 m) in either direction





The sensors lens turret rotates 90° in order to easily adjust the direction of the view pattern