

## Sources

1. Energy Information Administration. 2003 Commercial Building Energy Consumption Survey, released September 2008.
2. Compared with manual (non-automated) controls, up to 60% lighting energy savings is possible on projects that utilize all of the lighting control strategies (occupancy sensing, high-end trim, personal control and daylight harvesting). Actual energy savings may vary, depending on prior occupant usage, among other factors.
3. VonNieda B, Maniccia D, & Tweed A. 2000. An analysis of the energy and cost savings potential of occupancy sensors for commercial lighting systems. Proceedings of the Illuminating Engineering Society. Paper #43.
4. Galasiu AD, et al. 2007. Energy saving lighting control systems for open-plan offices: A field study. Leukos. 4(1) pg 7-29.
5. Reinhart CF. 2002. Effects of interior design on the daylight availability in open plan offices. Study of the American Commission for an Energy Efficient Environment (ACE) Conference Proceedings. To achieve maximum lighting savings, automated shades are utilized.
6. Williams A, et al. 2012. Lighting Controls in Commercial Buildings. Leukos. 8(3) pg 161-180.
7. Ecos. 2011. Commercial office plug load savings assessment. California Energy Commission PIER Program.
8. Lutron study based on reduction in heating (base 60°F) and cooling (base 55°F) degree days with a 2°F thermostat setback and 60% space un-occupancy. EnergyPlus modeling simulations were conducted and predicted similar savings.
9. Lighting alterations and control requirements
  - ASHRAE 90.1-2010: Lighting alterations that involve more than 10% of the lighting load in a space must meet the Automatic Lighting Shutoff provision (9.4.1.1). A lighting alteration includes the addition or removal of luminaires, or the replacement of lamps plus ballasts in a space.
  - IECC 2012: Lighting alterations require compliance with all of the lighting control requirements. A lighting alteration is defined as a replacement of 50% or more of the luminaires in a space. The replacement of only the lamps plus ballasts within an existing luminaire is exempt from meeting the control requirements in the space as long as the alteration doesn't increase the lighting power density (W/ft<sup>2</sup>).
  - Title 24-2013: Replacement of more than 10% of the luminaires, or modifying 40 or more existing luminaires, requires compliance with all the control requirements for the altered space (daylight control and demand responsive control are not always required; see the Table 141.0E and 141.0F in the Standard for details).
10. Demand response is required in Title 24-2013 for buildings larger than 10,000 ft<sup>2</sup>.
11. Luminaire alteration requirements are defined in Tables 141.0-E and F of Title 24-2013
12. Occupancy sensing requires automatic shut-off after 30 minutes of vacancy.
13. Savings based on a comparison of installing a typical wired solution (including one wall switch, one wired sensor, and one power pack) at an estimated installation of 50 minutes, to a Lutron wireless solution (including one Maestro® wireless switch and one Radio Powr Savr™ occupancy sensor) at an estimated 15 minutes. Labor time may vary based on room size and conditions.

## Lutron energy-saving products



Healthcare



Office Spaces



Educational Facilities



Affordable Solutions



Wireless Products



Energy Savings



Government & Military

# Retrofit Solutions

Energy-saving products for single rooms

For more information contact your Grainger Representative or visit [Grainger.com](http://Grainger.com)

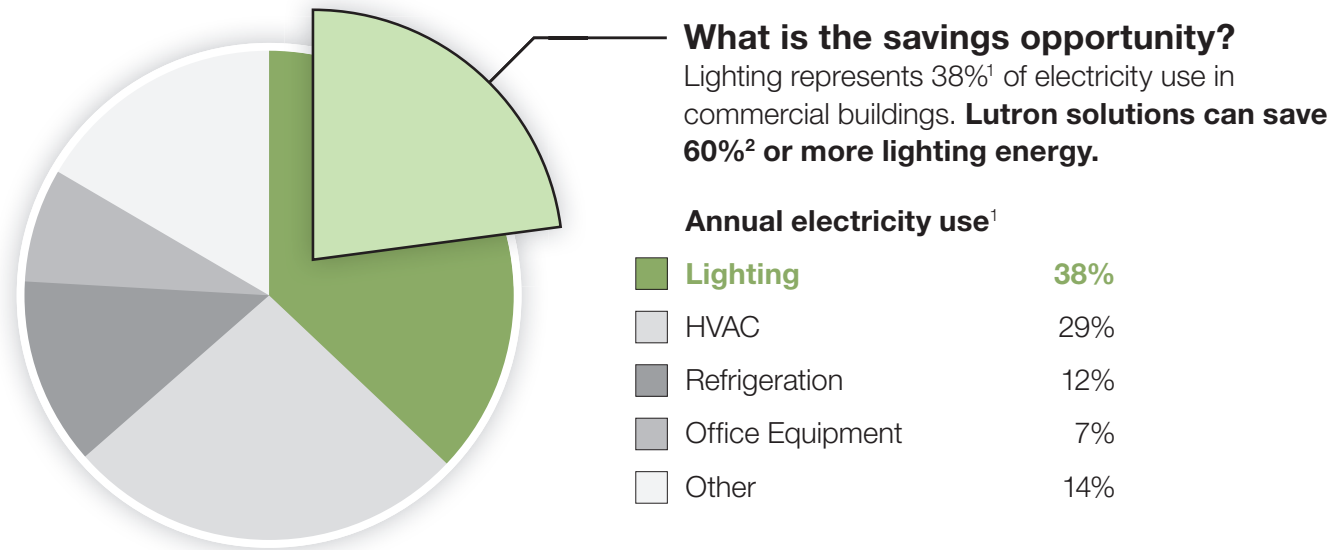
P/N 8SS5612 (06-2014)

AVAILABLE THROUGH  
**GRAINGER**  
FOR THE ONES WHO GET IT DONE

 **LUTRON**

save energy with Lutron™ 

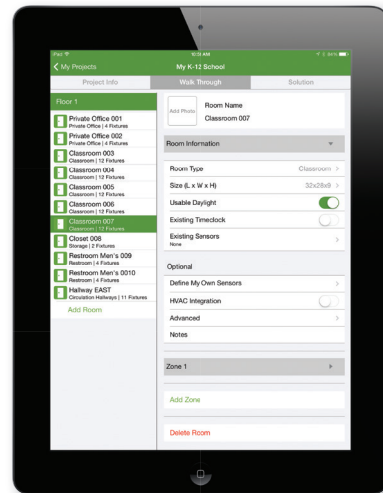
## Build an energy-saving solution for any budget or space



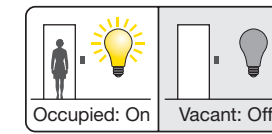
- Combine energy-saving control strategies like occupancy sensing, daylighting, and dimming to maximize the savings opportunity.
- Help your customers increase their ROI – your projects may qualify for a utility incentive. Visit [www.lutron.com/incentives](http://www.lutron.com/incentives) for details.

### Lutron makes it easy to build a control solution with its Energi Advisor™ app for the iPad®/iPhone®

- **Complete solution**—all-in-one app for lighting energy audit and proposal creation
- **Efficient workflow**—saves time on your audit and proposal process
- **Cloud-based analysis**—recommends retrofit solution based on audit
- **Accurate proposals**—ensures that you have the most up to date product information
- **Sells system value**—provides high-quality energy savings estimates

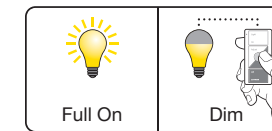


## Energy-saving control strategies



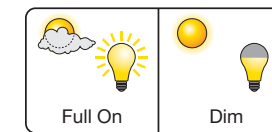
**Occupancy/vacancy sensing**  
Turns lights on when occupants are in a space and dims lights to a low level or turns lights off when they vacate the space.

Potential lighting energy savings: **20-60%**<sup>3</sup>



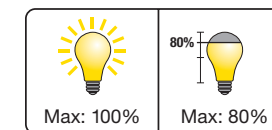
**Personal dimming control**  
Gives occupants the ability to set the light levels.

Potential lighting energy savings: **10-20%**<sup>4</sup>



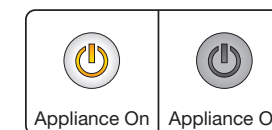
**Daylight harvesting**  
Dims electric light when daylight is available to light the space.

Potential lighting energy savings: **25-60%**<sup>5</sup>



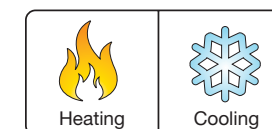
**High-end trim**  
Sets the maximum light level based on customer requirements in each space.

Potential lighting energy savings: **10-30%**<sup>6</sup>



**Plug load control**  
Automatically turns off loads after occupants leave a space.

Potential controlled loads savings: **15-50%**<sup>7</sup>



**HVAC integration**  
Controls heating, ventilation, and air conditioning systems through contact closure.

Potential HVAC savings: **5-15%**<sup>8</sup>

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Sources located on back cover.

## XCT™ technology with cross-correlation—won't leave you in the dark

### Lutron sensors detect fine motion better than other passive infrared (PIR) sensors

- Provides exceptional prevention of false-ons and false-offs
- Superior sensitivity—recognizes the difference between fine human motion and background noise

#### ✓ Major Motion



Person walking 3 feet

#### ✓ Minor Motion



Movements like extending your arms

#### ✓ Fine Motion



Small movements like flipping pages of a book

#### ✓ No False-on



Lights stay off when room is unoccupied

## Exclusive, reliable technologies—no callbacks

## Clear Connect® radio frequency technology—wireless that works!

### Proven technology

- Lutron invented its first wireless lighting control system in 1993
- **Highest quality**—best communications reliability of any system on the market

### Proven reliability

- **Case study:** Encana, Calgary Canada
- Over 30,000 Clear Connect devices performing reliably throughout the building

## Summary of code requirements for lighting control

Energi TriPak® ensures you can meet new construction and retrofit (lighting alterations<sup>9</sup>) code requirements for ASHRAE 90.1-2010, IECC 2012, and Title 24-2013<sup>10</sup>.

For specific commercial building code lighting requirements in your state, please visit

[www.lutron.com/energycodes](http://www.lutron.com/energycodes).

Control Method(s)	Code Requirements					Solution(s)		
	ASHRAE 90.1-2010: Lighting Alterations	ASHRAE 90.1-2010: New Construction	IECC 2012	Title 24-2013: Luminaire Alterations <sup>11</sup>	Title 24-2013: New Construction	OR	OR	
Local Switch	• ●	• ●	• ○	• ○	• ○	✓	✓	✓
Occupancy Sensing <sup>12</sup>	• ● ○	• ● ○	• ● ○	• ● ○	• ● ○	✓	✓	✓
Bi-level Control		• ●	• ●	• ● ○			✓	✓
Dimming Control		• ●	•		• ● ○	✓	✓	✓
Daylighting <sup>14</sup>		• ●	• ● ○		• ● ○	✓	✓	✓

### Key

- Primary spaces, large—lecture halls, open offices, conference rooms
- Primary spaces, small—private offices, storage
- Secondary spaces—corridors, stairwells, restrooms

Disclaimer: This table is a summary only; other exceptions or details may apply. Jurisdictions may have requirements that differ from these standards. See back cover for notes/references. For specific code requirements please visit [www.lutron.com/energycodes](http://www.lutron.com/energycodes).

## Occupancy/vacancy and daylight sensors



### Wireless ceiling-mount occupancy/vacancy sensor

Turns lights on when room is occupied and off when room is vacant



### Wireless wall-/corner-/hall-mount occupancy/vacancy sensor

Turns lights on when room is occupied and off when room is vacant



### Wireless ceiling-mount daylight sensor

Adjusts lights based on the amount of available daylight

## Remotes



### Wireless remotes

- Battery-powered remote wirelessly controls lights and appliances
- Pico® wireless remote can be used free standing, wall-mounted, or on a pedestal for convenient wireless dimming or switching control



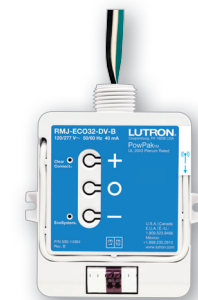
## Load controllers



### Wireless switch (pictured) and dimmer

Models available for:

- Incandescent/halogen
- Screw-base LED & CFL
- Magnetic low voltage
- 3-wire fluorescent
- Electronic low voltage
- Dual-voltage switches



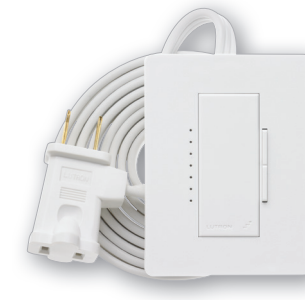
### J-box mounted modules

- Dimming
- Switching
- Contact closure output
- Receptacle control



### Stairwell fixture solution

Lighting fixture with integral lighting control device and programmed ballast



### Tabletop lamp dimmer

Integrates floor and table lamps into wireless lighting control system

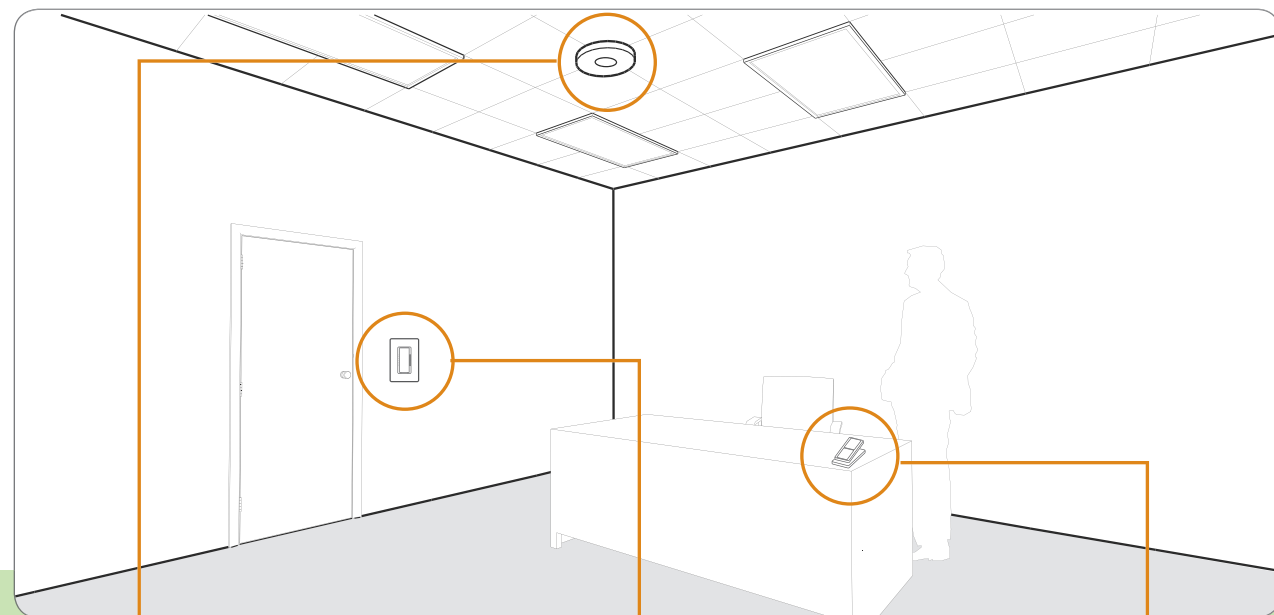


### Plug-in modules

- Dim/switch version for lighting loads
- General purpose switch for appliance loads

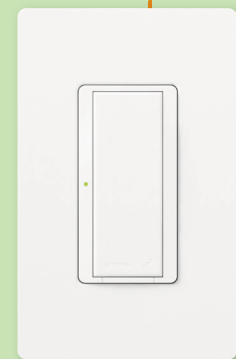
## Sensor, switch, and Pico® wireless remote cover most applications

Save up to 60%<sup>1</sup> lighting energy



**Wireless occupancy sensor**  
ceiling mount

- XCT™ Technology with cross-correlation—won't leave you in the dark
- No wires—easily mount it anywhere
- Vacancy-only models available
- Wall- and corner-mount models also available (see page 6)



**Wireless switch**  
wallbox mount

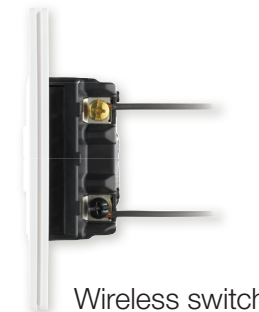
- Replaces existing switch
- Mistake-proof wiring
  - No neutral
  - Polarity-free
- Single model for 120-277 V
- 30-year switch life



**Pico wireless remote**  
tabletop

- No wires—put it where it's most accessible
- Pedestal-mount for tabletop use
- Surface-mount anywhere with Claro® wallplate
- 10-year battery life

## 1 Replace the existing switch in a few minutes or less—works with existing wires



Wireless switch

### Mistake-proof wiring

- No neutral required (neutral-based products also available)
- No polarity for line or load wiring

## 2 Add a sensor or wall control—no wiring



Wireless occupancy/vacancy sensor



Sensor profile view



Wireless remote



Remote profile

### Wireless

- No wires required
- Easy to mount and adjust location
- 10-year battery life

## 3 Simple button press set up—no commissioning

1. Press and hold 6 seconds

2. Press and hold 6 seconds

3. Press and hold 6 seconds



### It works!

Sensor and Pico® wireless remote now talk to the switch



Sensor switch



Dual-circuit sensor switch



Dual-technology sensor switch



Dual-technology, dual-circuit sensor switch



Sensor C•L dimmer

### Maestro® Occupancy/Vacancy Sensors

- XCT™ technology with cross-correlation
  - Lutron sensors won't leave you in the dark—no callbacks
  - Superior sensitivity recognizes the difference between fine human motion and background noise
  - Provides superior prevention of false-ons and false-offs
- Durable design with clean aesthetic
  - Tamper-resistant lens
  - 30+ year switch lifetime
- Models for any application and all lighting loads
  - Switches, dual-circuit switches, and dimmers
  - C•L dimmer for dimmable CFLs and LEDs
  - Passive infrared (PIR) and dual-technology sensing



Maestro®



Diva®



Skylark Contour®



Slylark®



Ariadni®



Credenza®

### C•L® Dimmer

- C•L technology provides superior dimming
  - Works with dimmable LED, compact fluorescent (CFL), and standard incandescent/halogen bulbs—even mixed on the same circuit
  - Highest-performance dimming minimizes problems like flicker, shimmer, and pop-on seen with other dimmers
- Works with largest selection of light bulbs
  - Tested and UL Listed to control over 250 LED and CFL bulbs
  - View the full list at [www.lutron.com/bulblist](http://www.lutron.com/bulblist)
- Available in 5 styles and 27 colors!

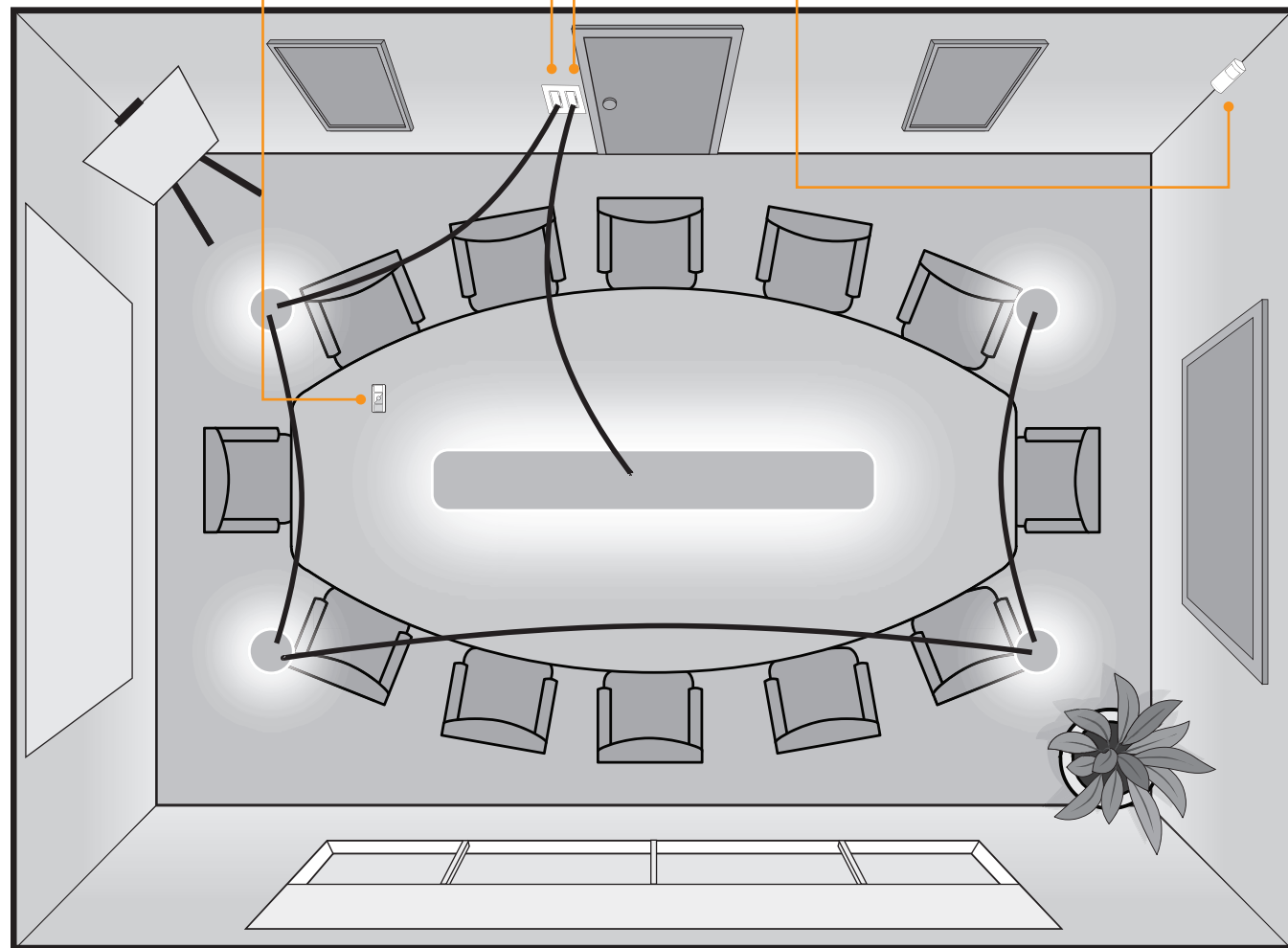
**Now Available  
250 W C•L Models**

# Corner-mount sensor

## Conference room, 16' x 12'

### Save energy by combining occupancy/vacancy sensing with personal dimming control

- Lighting represents the greatest opportunity for energy savings in office buildings
- Sensors turn lights off in unoccupied spaces
- Add a Pico® wireless control to adjust lights during presentations

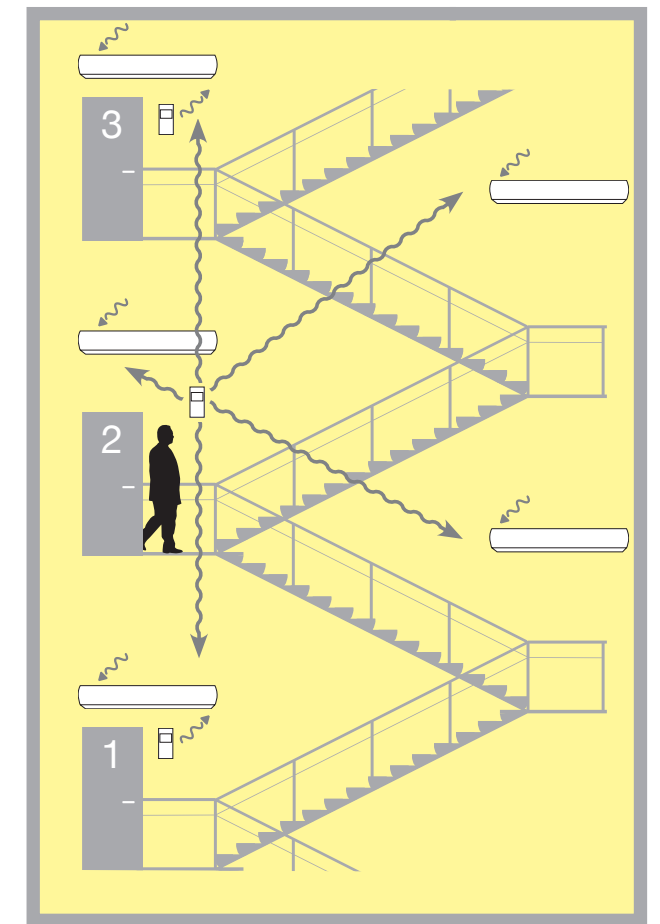
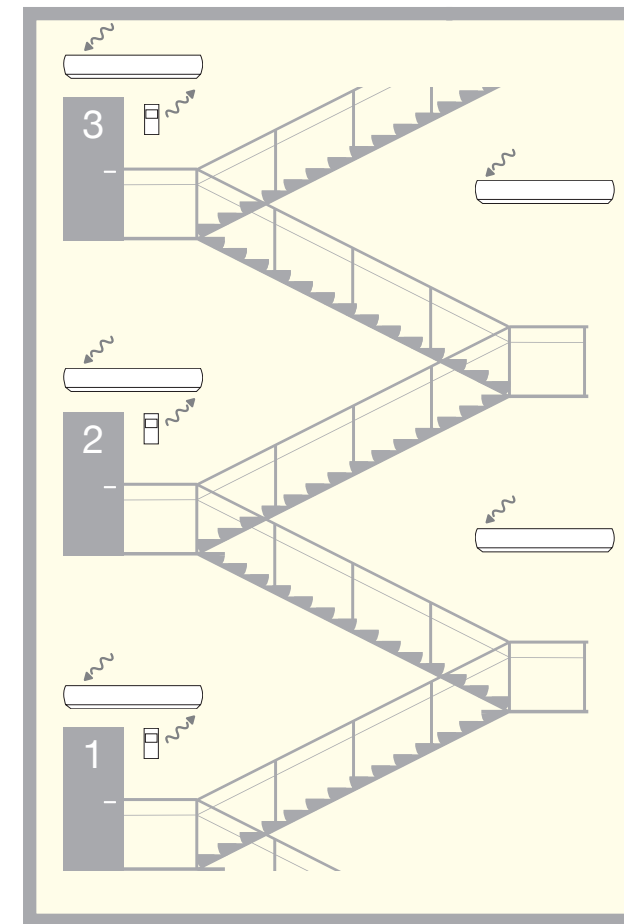


# Stairwell retrofit solution

## Stairwell

### Save energy by combining occupancy/vacancy sensing with high-end trim

- Occupancy sensor communicates to fixture which reduces the light level when the stairwell is unoccupied
- High-end trim reduces occupied light level



# Wall-mount sensor

## Classroom, 16' x 12'

### Save energy by combining occupancy and daylight sensing

- Energy expenses in schools are second to payroll and cost more than textbooks and computers combined; sensors turn lights off in unoccupied spaces
- Add a wireless daylight sensor, when appropriate, to increase savings



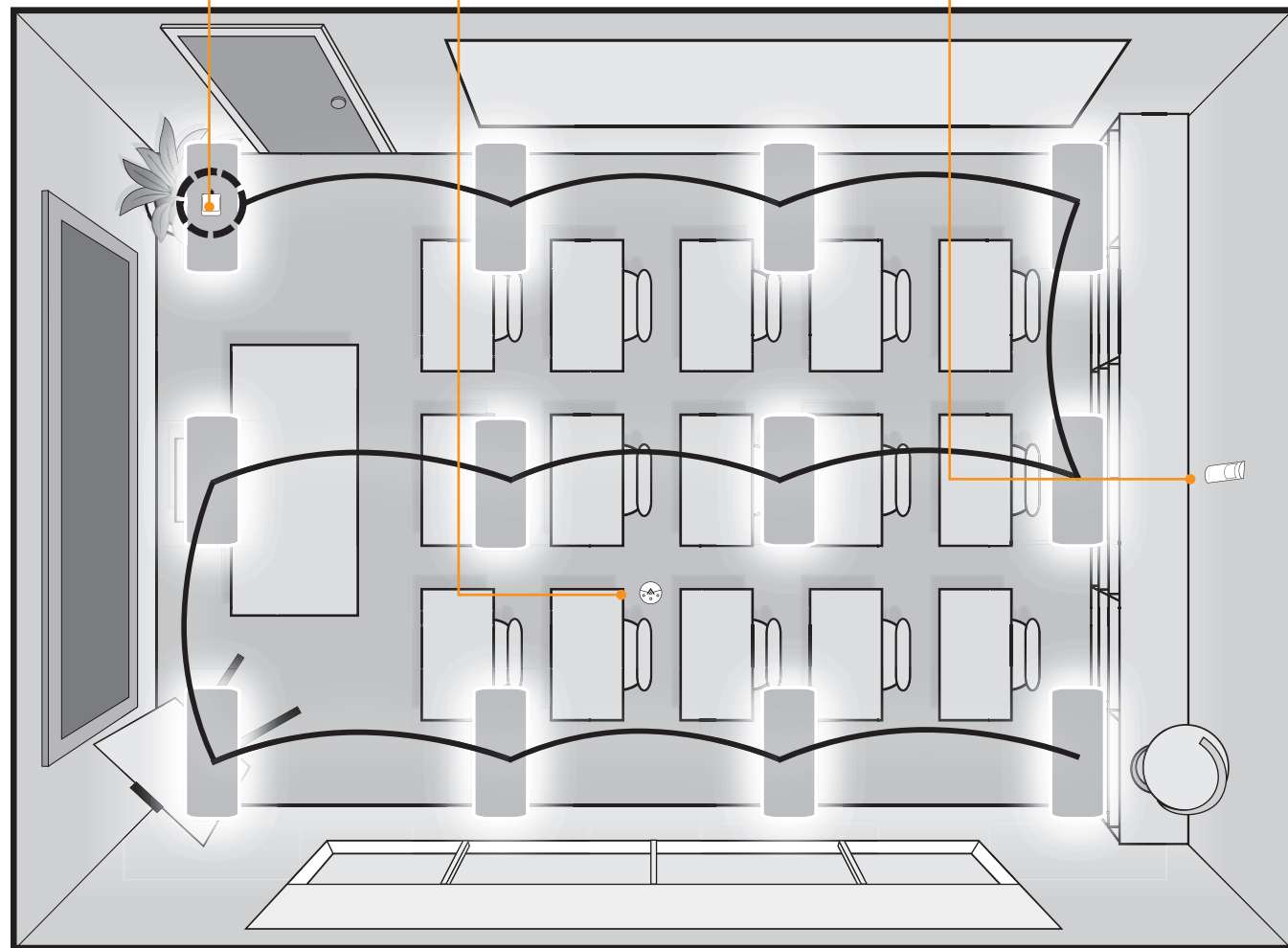
PowPak™ dimming module



Radio Powr Savr™ daylight sensor



Radio Powr Savr™ wireless wall-mount occupancy/vacancy sensor



# In-wall occupancy/vacancy sensors

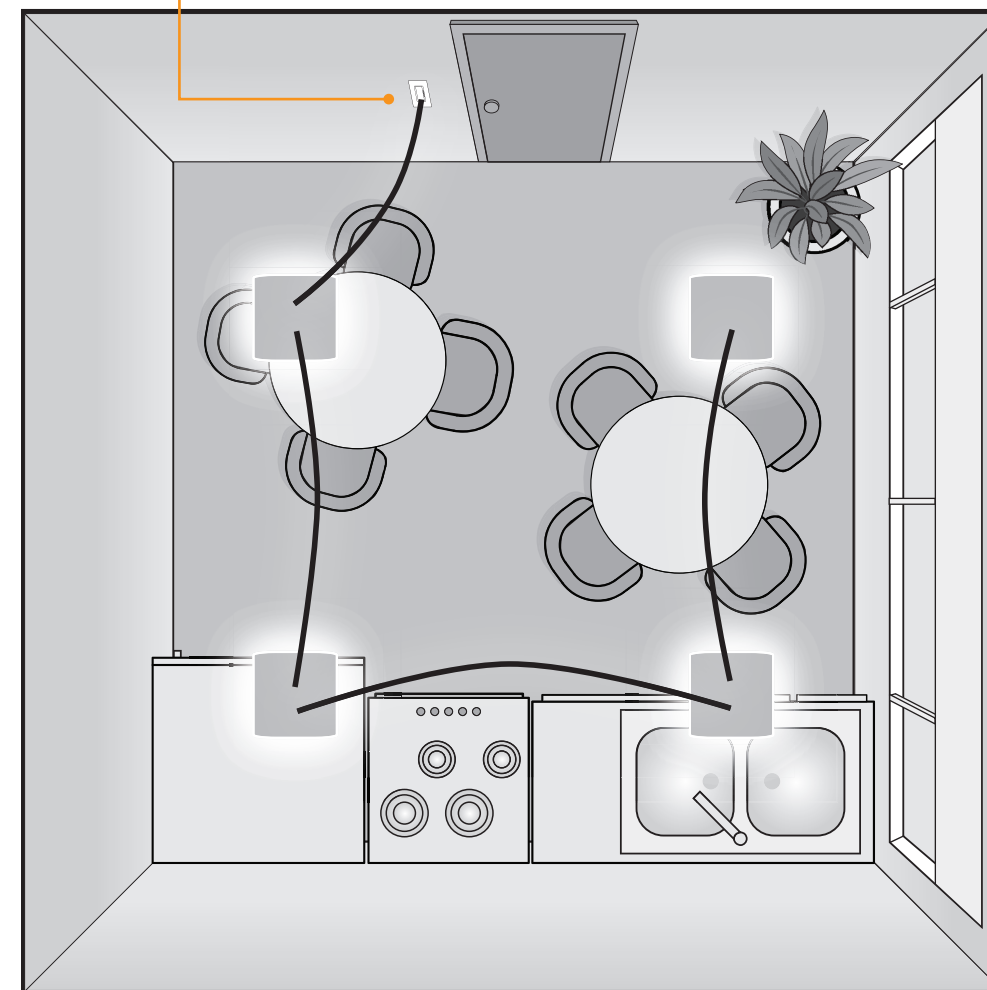
## Break room, 12' x 12'

### Break rooms can be unoccupied for hours at a time—save significant amounts of energy with an occupancy/vacancy sensor

- Turns lights off when the room is unoccupied
- Sensors available to work with a variety of load types



Maestro switch with occupancy/vacancy sensor

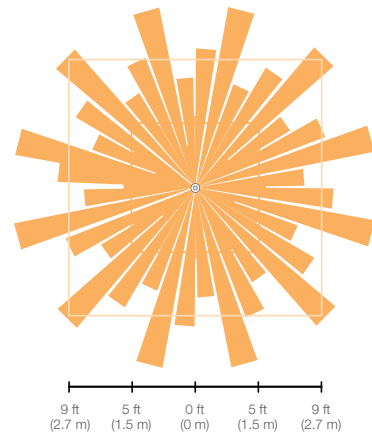




# Sensor coverage diagrams

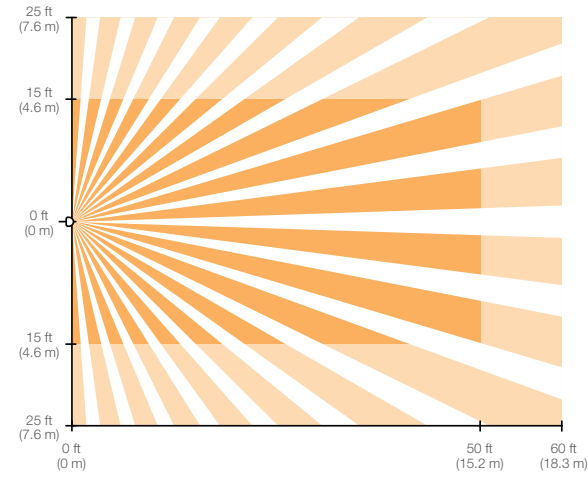
## Ceiling mount, 360°

Coverage varies by ceiling height



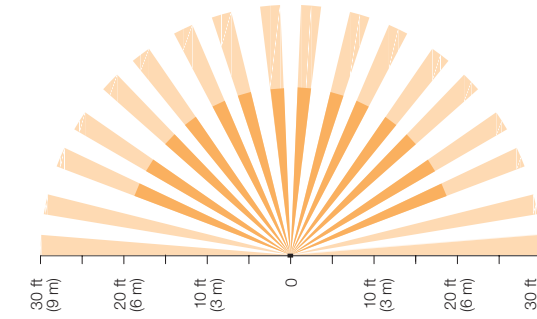
## Wall mount, 180°

1,500 ft<sup>2</sup>—minor motion; 3,000 ft<sup>2</sup>—major motion



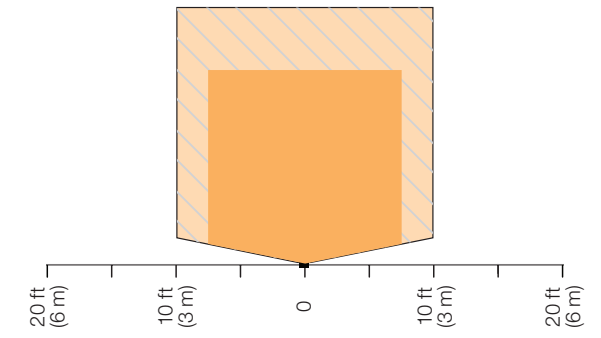
## In-wall PIR, 180°

400 ft<sup>2</sup>—minor motion; 900 ft<sup>2</sup>—major motion



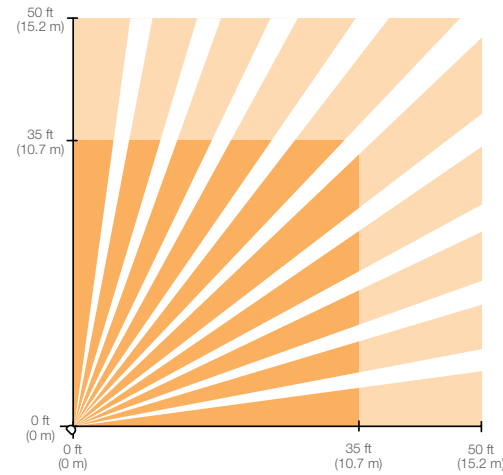
## In-wall ultrasonic, 180°

400 ft<sup>2</sup>—minor motion; 900 ft<sup>2</sup>—major motion



## Corner mount, 90°

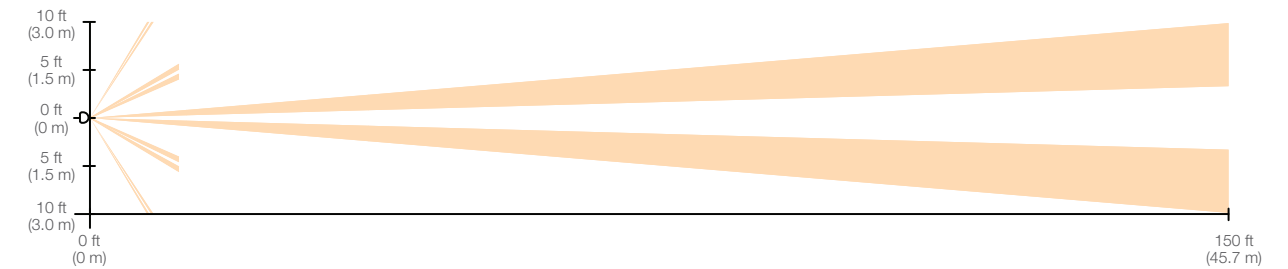
1,223 ft<sup>2</sup>—minor motion; 2,500 ft<sup>2</sup>—major motion



**Key:** ■ Minor motion ■ Major motion

## Hallway, long narrow field of view

Coverage varies by hallway's length width and length



**Key:** ■ Minor motion ■ Major motion






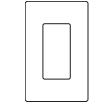
### Coverage chart for sensor mounted in center of room—includes major and minor motions

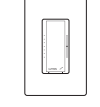
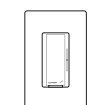
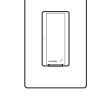
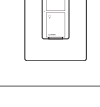
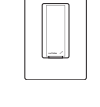
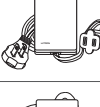
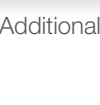

Ceiling height	Max. room dimensions for complete coverage	Radius of coverage at floor
8 ft (2.4 m)	18 x 18 ft (5.5 x 5.5 m)	13 ft (4.0 m)
9 ft (2.7 m)	20 x 20 ft (6.1 x 6.1 m)	14.5 ft (4.4 m)
10 ft (3.0 m)	22 x 22 ft (6.7 x 6.7 m)	16 ft (4.9 m)
12 ft (3.7 m)	26 x 26 ft (7.9 x 7.9 m)	19 ft (5.8 m)

### Maximum recommended hallway length

Width of hall	Length of hall
6 ft (1.6 m) or less	50 ft (15.2 m)
8 ft (2.4 m)	100 ft (30.5 m)
10 ft (3.0 m) or more	150 ft (45.7 m)

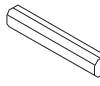







# Energi TriPak® part numbers








(Lutron P/N) Grainger P/N	Description	Features
 (MRF2-1S8A-1OC) 12H978	Simple Energy Retrofit Package	(1) Maestro Wireless® 8A no-neutral switch, 120V/277V; (1) Radio Powr Savr™ wireless ceiling-mount occupancy/vacancy sensor; (1) Claro® 1-gang wallplate
 (LRF2-OCR2B-P-WH)* 12H987	Radio Powr Savr wireless sensor	360° ceiling-mount occupancy/vacancy sensor, auto-on/auto-off or manual on/auto-off, 3.572" diameter
	(LRF2-OWLB-P-WH)* 5PWR0	180° wall-mount occupancy/vacancy sensor, auto-on/auto-off or manual on/auto-off
	(LRF2-OKLB-P-WH)* 5PWR4	90° corner-mount occupancy/vacancy sensor, auto-on/auto-off or manual on/auto-off
	(LRF2-OHLB-P-WH)* 5PWR2	Hallway occupancy/vacancy sensor, auto-on/auto-off or manual on/auto-off
 (LRF2-DCRB-WH) 5PWR6	Ceiling-mount daylight sensor	
	(PJ2-3BRL-GWH-L01) 32JA30	3-button with on/off, raise/lower and favorite
	(PJ2-3B-GWH-L01) 32JA34	3-button with on/off and favorite
	(PJ2-2B-GWH-L01) 32JA36	2-button with on/off
 (CW-1-WH) 6XR62	Claro® wallplate	1-gang opening

(Lutron P/N) Grainger P/N	Description	Features	
	(MRF2-6CL-WH) 32JA26	Maestro Wireless dimmer	Single-pole/multi-location dimmer 120V, 600W incandescent/halogen, 600VA MLV
	(MRF2-6CL-IV) 32JA27		
	(MRF2-10D-120-WH) 4YPE1		Single-pole/multi-location dimmer 120V, 1000W incandescent/halogen, MLV voltage
	(MRF2-10D-120-IV) 4YPD9		
	(MA-R-WH) 4LZ41	Maestro® companion dimmer	Multi-location companion dimmer 120V, provides multi-location dimming for up to 9 additional locations
	(MA-R-IV) 4LZ40		
	(MRF2-8ANS-120-WH) 12H982	Maestro Wireless switch	Single-pole/multi-location switch, 120V, 8A light or 5.8A fan, incandescent, halogen, MLV, ELV, non-dim fluorescent ballasts, and general purpose fans
	(MRF2-8ANS-120-IV) 12H983		
	(MRF2-8S-DV-WH) 4YPE6		Single-pole/multi-location dual volt no-neutral switch, 120V/277V, 8A light, inc./halogen, MLV, ELV, non-dim fluorescent ballasts
	(PD-5S-DV-WH) 32JA28		Single-pole/multi-location switch 120-277V, 4A light, 3A fan, no neutral, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
	(PD-5S-DV-IV) 32JA29		
	(MA-AS-WH) 5PWN5	Maestro companion switch	Multi-location companion switch 120V, provides multi-location switching for up to 9 additional locations
	(MA-AS-IV) 5PWN6		
	(MA-AS-277-WH) 5PWN7		Multi-location companion switch 277V, provides multi-location switching for up to 9 additional locations
	(MA-AS-277-IV) 5PWN8		
 (MRF2-3PD-3-WH) 5PWR7	Plug-in dimming module	Plug-in dimming/switching module; 300W, incandescent/halogen for table or floor lamps, 3 receptacles	
 (MRF2-15APS-3-WH) 5PWR9	Plug-in appliance module	Plug-in general purpose switch; 15A, 1 receptacle	

Additional Maestro Wireless switches, dimmers, and accessories are available through Grainger Sourcing.

\* Vacancy models available to meet residential California Title 24 section 119(j) requirements— all occupancy/vacancy sensors meet commercial requirements

(Lutron P/N) Grainger P/N	Description	Features	
 (FXSWXX14SL232 U82SMXXWH)† 15U823	Stairwell Fixture	4ft, 2 lamp, T8, field programmable high and low end, factory preset: 80% high end, 20% low end	
 (RMJ-ECO32-DV-B)**	PowPak® dimming module with EcoSystem®	Controls up to 32 EcoSystem®, EcoSystem H-Series, or Hi-lume® 3D ballasts or Hi-lume A-Series LED drivers, 120V/277V	
 (RMJ-5T-DV-B) 32JA25	PowPak dimming module with 0–10V control	Controls up to 5A of 0–10V controlled fixtures	
 (RMJ-16R-DV-B) 21C799	PowPak switching module with Softswitch®	16A general purpose switch, 120V/277V	
 (RMJ-16RCCO1-DV-B)**	—	16A general purpose switch with (1) contact closure output, 120V/277V	
 (RMJ-CCO1-24-B)**	PowPak CCO module	(1) contact closure output; low voltage 24V~ /24V DC input	
 (RMJ-H20R-DV-B)**	PowPak receptacle switching module	20A general purpose switch 0–10V PowPak	
	(EHDT528MU110) 18C863	EcoSystem H-Series Ballast 120 - 277V	T5 linear, 28W, 1-lamp, 1.0 ballast factor
	(EHDT528MU210) 18C864	—	T5 linear, 28W, 2-lamp, 1.0 ballast factor
	(EHDT554MU110) 18C859	—	T5-HO linear, 54W, 1-lamp, 1.0 ballast factor
	(EHDT832MU110) 18C849	—	T8, 32W, 1-lamp, 1.0 ballast factor
	(EHDT832MU117) 18C851	—	T8, 32W, 1-lamp, 1.17 ballast factor
	(EHDT832MU210) 18C850	—	T8, 32W, 2-lamp, 1.0 ballast factor
	(EHDT832MU217) 18C852	—	T8, 32W, 2-lamp, 1.17 ballast factor
	(EHDT832GU310) 18C853	—	T8, 32W, 3-lamp, 1.0 ballast factor
	(EHDT832GU317) 18C854	—	T8, 32W, 3-lamp, 1.17 ballast factor

(Lutron P/N) Grainger P/N	Description	Features	
 (MACL-153P-WH) 25L186	Maestro® C-L dimmer	Single-pole/3-way/multi-location dimmer, 150W dimmable CFL/LED, 600W incandescent/halogen	
	(DVCL-153P-WH) 10P916	Diva® C-L dimmer	Single-pole/3-way dimmer, 150W dimmable CFL/LED, 600W incandescent/halogen
	(DVCL-253P-WH)** —	250W Diva C-L dimmer	Single-pole/3-way dimmer, 250W dimmable CFL/LED, 600W incandescent/halogen, 350W Hi-Lume A-Series LED driver (max. 8 drivers†)
 (CTCL-153P-WH) 10P919	Skylark Contour® C-L dimmer	Single-pole/3-way dimmer, 150W dimmable CFL/LED, 600W incandescent/halogen	
 (SCL-153P-WH) 19YP98	Skylark® C-L dimmer	Single-pole/3-way dimmer, 150W dimmable CFL/LED, 600W incandescent/halogen	
	(AYCL-153P-WH) 10P922	Ariadni® C-L dimmer	Single-pole/3-way dimmer, 150W dimmable CFL/LED, 600W incandescent/halogen
	(AYCL-253P-WH)** —	250W Ariadni C-L dimmer	Single-pole/3-way dimmer, 250W dimmable CFL/LED, 600W incandescent/halogen, 350W Hi-Lume A-Series LED driver (max. 8 drivers†)
 (TTCL-100H-WH) 13M198	Credenza® C-L dimmer	Plug-in lamp dimmer, 100W dimmable CFL/LED, 250W incandescent/halogen	
	(MSCL-OP153M-WH) 22LU20	Maestro® C-L® dimmer with in-wall sensor	Single-pole/3-way/multi-location dimmer with occupancy/vacancy sensor, 120V, 150W dimmable CFL/LED, 600W incandescent/halogen
	(MSCL-VP153M-WH)** 22LU22	—	Single-pole/3-way/multi-location dimmer with vacancy sensor, 120V, 150W dimmable CFL/LED, 600W incandescent/halogen

\*\* Available through Grainger Sourcing only.

† Additional fixture lengths, lamp types, quantities, and light levels are available. Call Customer Service or visit [lutron.com.stairwellfixture](http://lutron.com.stairwellfixture) for a complete list.

\*\* Available through Grainger Sourcing only.

† Lutron 2-wire forward phase Hi-Lume A-Series LTE LED drivers only

# In-wall sensor part numbers

(Lutron P/N) Grainger P/N	Description	Features
(MS-OPS2-WH) 25L178	Maestro® in-wall sensor with switch	Single-pole switch with occupancy/vacancy sensor, 120V, 5A light, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
(MS-OPS2-IV) 25L179		
(MS-VPS2-WH)* 25L180		Single-pole switch with vacancy sensor, 120V, 5A light, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
(MS-VPS2-IV)* 25L181		
(MS-OPS5M-WH) 25L182		Single-pole/3-way/multi-location switch with occupancy/vacancy sensor, 120V, 5A light, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
(MS-OPS5M-IV) 25L183		
(MS-VPS5M-WH)* 25L184		Single-pole/3-way/multi-location switch with vacancy sensor, 120V, 5A light, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
(MS-VPS5M-IV)* 25L185		
(MS-OPS6M2-DV-WH) 36N228		Single-pole/multi-location switch with occupancy/vacancy sensor, 120V/277V, 6A light, incandescent/halogen, MLV, ELV, non-dim fluorescent ballasts
(MS-OPS6M2-DV-IV) 36N229		
(MS-VPS6M2-DV-WH)* 36N230		
(MS-VPS6M2-DV-IV)* 36N231		
(MS-OPS6-DDV-WH)* 19YH54	Maestro dual-circuit in-wall sensor switch	single pole, 2-circuit model, 6A lighting, 4.4A fan (120V only) per circuit, 120-277V
(MS-OPS6-DDV-IV)* 19YH55		
(MS-PPS6-DDV-WH)* 19YH56		single pole, 2-circuit model, 6A lighting, 4.4A fan (120V only) per circuit, 120-277V, partial-on model
(MS-PPS6-DDV-IV)* 19YH57		

(Lutron P/N) Grainger P/N	Description	Features
(MSCL-OP153M-WH) 22LU20	Maestro® C-L® dimmer with in-wall sensor	Single-pole/3-way/multi-location dimmer with occupancy/vacancy sensor, 120V, 150W dimmable CFL/LED, 600W incandescent/halogen
(MSCL-VP153M-WH)** 22LU22		Single-pole/3-way/multi-location dimmer with vacancy sensor, 120V, 150W dimmable CFL/LED, 600W incandescent/halogen
(MS-A102-WH)**	Dual-technology Maestro occupancy/ vacancy sensors	Single pole/multi-location, single-circuit model, 6A lighting 4.4A fan (120V only), 120–277V, no neutral required
(MS-B102-WH) 32JA42		Single pole/multi-location, single-circuit model, 6A lighting 4.4A fan (120V only), 120–277V, neutral required
(MS-B102-IV) 32JA43		
(MS-A202-WH)**		Single pole/3-way, dual-circuit model, 6A lighting 4.4A fan (120V only) per circuit, 120–277V, no neutral required
(MS-B202-WH)**	Single pole/3-way, dual-circuit model, 6A lighting 4.4A fan (120V only) per circuit, 120–277V, neutral required	

\* Vacancy models meet residential California Title 24 section 119(j) requirements—all occupancy/vacancy sensors meet commercial requirements

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