NEW

PowPak™ dimming module (actual size)

Radio Powr Savr™ occupancy/vacancy sensor (actual size)

Pico® wireless control (actual size)

Quick Install Energy Solutions
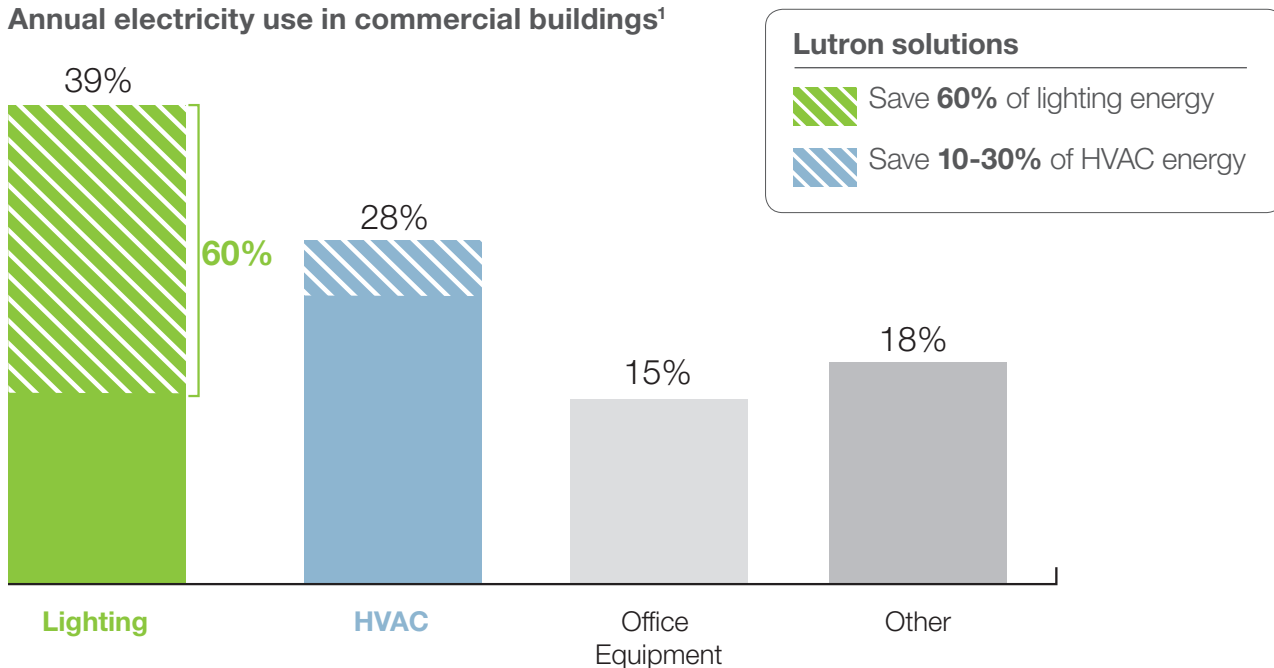## Featuring Energi TriPak™

LUTRON®

save energy with Lutron™

Energi TriPak™

Energi TriPak is a family of wireless energy-saving products featuring sensors and controls, wallbox dimmers/switches, plug-in modules, junction box mounted devices and fixtures. These components, when combined:

- save up to 60% of lighting electricity usage
- increase occupant comfort and productivity
- control virtually all loads
- reduce installation and programming costs

Annual electricity use in commercial buildings[1]

Lutron solutions

Save **60%** of lighting energy

Save **10-30%** of HVAC energy

39%

60%

28%

15%

18%

Lighting   **HVAC**   Office Equipment   Other

Energi TriPak is designed for new construction and retrofit commercial applications, where lighting accounts for 39% of electricity usage. These spaces, such as K-12/university classrooms and offices, benefit from Energi TriPak's energy savings through strategies like automatic occupancy/vacancy sensing and daylight harvesting.

Studies show that proper lighting is beneficial to a space's occupants. By providing task-appropriate lighting and individual lighting control Energi TriPak improves comfort and occupant satisfaction, resulting in increased productivity.[2,3,4]

Energi TriPak requires no additional wiring. The components communicate wirelessly via Lutron's reliable Clear Connect™ Radio Frequency (RF) technology. In addition, simple button press programming eliminates the need for factory commissioning.

Energi TriPak design and application guide

What is Energi TriPak?

Energi TriPak consists of transmitting devices that send out radio frequency (RF) commands to the load controllers. The load controllers receive the RF command and perform the appropriate action based on the information received.

Transmitting devices 〰▶   **Load controllers**

Sense

Radio Powr Savr™ wireless sensors

Occupancy/vacancy

Daylight

Conserve

NEW PowPak™ load controllers

Dimming module with EcoSystem®   Relay module   Contact closure output module

Plug-in dimming module   Plug-in appliance module

Stairwell fixture

Adjust

Pico® wireless control

Wall-mount

Tabletop   Hand-held
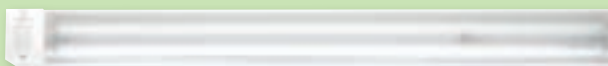
Maestro Wireless®

Dimmer   Switch   Tabletop lamp dimmer

Benefits

Easy to install and program

- All points of control are wireless for simple installation with no new wiring
- Simple button programming for all devices

Saves energy and money

Simply incorporate the following energy-saving control strategies:

- Personal control
- Occupancy/vacancy sensing
- Daylight harvesting
- High-end trim
- Appliance control
- HVAC integration

Cost-effective

- No commissioning required
- Overall labor costs reduced due to wireless communication – no additional wiring

Meets codes and standards
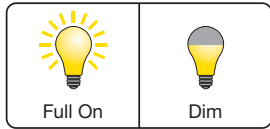
Provides the opportunity to meet the following codes and standards:

- LEED 2009
- ASHRAE Energy Code 90.1-2010
- IECC (International Energy Conservation)
- ASHRAE Green Standard 189.1-2011
- IgCC (International Green Construction Code)
- CEC Title 24 (California Energy Commission)

Lutron® Clear Connect™
Wireless Signal **Sent**

Lutron® Clear Connect™
Wireless Signal **Received**

Single space energy-saving control strategies[1]

Full On | Dim

Personal control

Provide personal choice and control of light levels to accommodate different tasks and activities. Permit control from multiple locations.
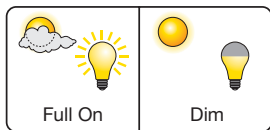
Typical lighting energy savings: **10-20%** [2]

Occupied: On | Vacant: Off
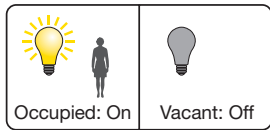
Occupancy/vacancy sensing

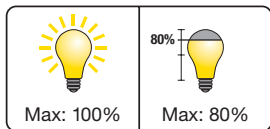Gradually dim lights to a low level or turn lights off when space is unoccupied; turn lights on when someone enters.

Typical lighting energy savings: **20-60%** [3]

Full On | Dim

Daylight harvesting

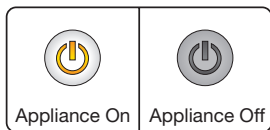Dim electric light or switch it off during the day to take advantage of available daylight.

Typical lighting energy savings: **20-60%** [4]

Max: 100% | Max: 80%

High-end trim

Set the maximum light level in space based on customer preference or design requirements.

Typical lighting energy savings: **10-20%** [5]

Appliance On | Appliance Off

Appliance control

Automatically switch plug loads off when space is unoccupied.

Typical energy savings: **Variable**

Heating | Cooling
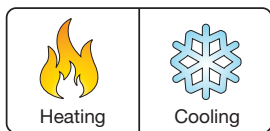
HVAC integration

Control heating, ventilation and air conditioning systems through contact closure.

Typical energy savings: **Variable**

1. Although combined savings for a building from individual room strategies is not additive, solutions that utilize all strategies typically save 60% or more. Glenn Hughes, director of construction for The New York Times Company building in New York City reports 75% lighting energy savings using Lutron systems. Jeff Choma, manager of mechanical and electrical systems at Georgian College in Ontario, Canada reports 70% lighting energy savings using Lutron systems. Lighting energy savings exceeding 60% is frequently reported by customers using Lutron solutions as part of an overall energy-savings design program.
2. Personal control source: Galasiu AD, et al. 2007. Energy saving lighting control systems for open-plan offices: A field study. Leukos. 4(1) pg. 7-29.
3. Occupancy/vacancy sensing source: 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. Daylight harvesting source: Brambley MR, et al. 2005. Advanced sensors and controls for building applications: Market assessment and potential R&D pathways. Pacific Northwest National Laboratory: prepared for U.S. Department of Energy.
5. Existing buildings were often designed to much higher light levels than currently recommended. Even in new and newly renovated spaces, unknown room conditions, architectural layout constraints, and design safety factors often create lighted environments that are considerably brighter than needed. High-end trim source: Pacific Gas & Electric Company. 1997. Dimming Controls for Lighting.

Meets codes and standards

LEED NC 2009

Can contribute to:
- SS Credit 8 Light Pollution Reduction (1 point)
- EA Prerequisite 2 Minimum Energy Performance
- EA Credit 1 Optimize Energy Performance (up to 19 points)
- IEQ Controllability of Systems: Lighting (1 point)
- IEQ Daylight and Views: Daylight (1 point)
- Innovation in Design (up to 5 points)
- RP Credit 1 Regional Priority (up to 4 points)

ASHRAE Energy Code 90.1-2010
- Automatic Receptacle Control (8.4.2)
- Automatic Lighting Shut-off (9.4.1.1)
- Space Control (9.4.1.2)
- Automatic Daylight Controls (9.4.1.4 and 9.4.1.5)
- Additional Controls, Stairwell Lighting (9.4.1.6 g)

IECC 2012 (International Energy Conservation Code)
- Interior Lighting Controls (C405.2.1.1)
- Light Reduction Controls (C405.2.1.2)
- Occupancy Sensors (C405.2.2.2)
- Automatic Daylighting (C405.2.2.3.2)
- Multi-level Lighting Controls (C405.2.2.3.3)

ASHRAE Green Standard 189.1-2011
- Occupancy Sensor Controls with Multi-level Switching or Dimming (7.4.6.2)
- Occupancy Sensors (7.4.6.4)

IgCC Public Version 2 (International Energy Conservation Code)
- Interior Light Reduction Controls (609.3)
- Automatic Daylight Controls (609.5)
- Plug-load Controls (609.6)

CEC Title 24 2008 (California Energy Commission)
- Area Controls (131 a)
- Multi-level Lighting Controls (131 b)
- Daylight Areas (131 c)
- Shut-off Controls (131 d)

In public spaces, such as restrooms, lights often remain on even when the space is unoccupied.

Automatic lighting control with occupancy sensing is an ideal energy-saving lighting solution.

Radio Powr Savr™ ceiling-mount occupancy/vacancy sensor communicates with load controllers to turn lights on or off

Energy-saving strategy

Occupancy/vacancy sensing

Potential lighting energy savings:

15%

	Lutron® Clear Connect™
⁓	Wireless Signal **Sent**

	Lutron® Clear Connect™
⁓	Wireless Signal **Received**

PowPak™ relay module with Softswitch® switches loads in response to wireless sensors and controls (mounted in ceiling)

For a private office application, personal control of light levels is of utmost importance. Independent research indicates that occupants are up to 15% more productive when they can tailor the lighting to their needs.*

* Light Consortium. Research Study on the Effects of Lighting on Office Workers. http://www.lightright.org.research/index.htm

Energy-saving strategies

Personal control
Occupancy/vacancy sensing
Daylight harvesting
Appliance control

Potential lighting energy savings:

40%+

	Lutron® Clear Connect™
	Wireless Signal **Sent**

	Lutron® Clear Connect™
	Wireless Signal **Received**

Radio Powr Savr™ daylight sensor communicates with load controllers to turn lights on or off based on amount of daylight available

PowPak™ plug-in appliance module turns phantom loads on or off in response to wireless sensors and controls (located under desk)

Radio Powr Savr ceiling-mount occupancy/vacancy sensor
communicates with load controllers to turn lights on or off based on occupancy

Maestro Wireless® switch
provides manual control and switches lighting loads in response to wireless sensors and controls

Pico® wireless control
allows manual control of loads; place on tabletop or mount to wall

Maestro Wireless tabletop lamp dimmer
provides manual control and dims table lamps in response to wireless sensors and controls

A best-practice classroom combines energy efficiency with a high quality learning environment. Classroom lighting plays a particularly critical role because of the direct relationship between good lighting and student performance.*

* Phillips, R. W. (1997). Educational Facility Age and the Academic Achievement of Upper Elementary School Students. Unpublished Doctoral Dissertation. University of Georgia.

Energy-saving strategies

Personal control
Occupancy/vacancy sensing
Daylight harvesting
High-end trim

Potential lighting energy savings:

60%

Lutron® Clear Connect™ Wireless Signal **Sent**	
Lutron® Clear Connect™ Wireless Signal **Received**	

PowPak™ dimming module with EcoSystem® dims lighting loads in response to wireless sensors and controls (mounted in ceiling)

Pico® wireless controls allows manual control of loads; place on tabletop or mount to wall

EcoSystem H-Series digital ballast
combines superior 1% dimming performance
and Lutron reliability

**Radio Powr Savr™
daylight sensor**
communicates with load
controllers to dim lights
based on amount
of daylight available

**PowPak contact closure
output module**
integrates with HVAC system
or other 3rd party equipment
through contact closures,
allowing the equipment to
respond to wireless commands
(mounted in ceiling)

**Radio Powr Savr
corner-mount occupancy/
vacancy sensor**
communicates with load
controllers to turn lights on
or off based on occupancy

Define your space

Use the following steps to plan and design an ideal energy-saving solution based on the use of the space and the needs of its occupants.

Step **1** Is occupancy/vacancy sensing required?

Select the style of the Radio Powr Savr™ occupancy/vacancy

sensor based on mounting and coverage requirements .... **pg. 14**

Step **2** Is daylight harvesting required?

Select the Radio Powr Savr daylight sensor... **pg. 15**

Step **3** Is control of overhead lighting required?

a. Select the control(s) required based on style and load capacity ......**pgs. 16-19**
b. Select the PowPak™ stairwell fixture for stairwell applications................**pg. 20**

Step **4** Is control of task lighting required?

Select the style of plug-in device required ....**pg. 21**

Step 5 Is control of plug loads required?

Select the style of plug load controller required ....**pg. 22**

Step 6 Is 3rd party equipment integration required?

Select the PowPak contact closure output module ....**pg. 24**

Step 7 Are personal or additional points of control required?

a. Select the style of the Pico® wireless control required...........................**pg. 25**
b. Select accessories for Pico wireless control ....**pg. 26**

Lutron® Clear Connect™
Wireless Signal **Sent**

Lutron® Clear Connect™
Wireless Signal **Received**

Step ① Occupancy/vacancy sensor selection

Radio Powr Savr™ wireless occupancy/vacancy sensors

Design statement: Specify a wireless occupancy/vacancy or vacancy-only sensor to turn lights on and/or off based on the space occupancy.

Radio Powr Savr wireless ceiling-mount occupancy/ vacancy sensor dimensions
W: 3.57" (89 mm)
H: 3.57" (89 mm)
D: 1.3" (33 mm)

Radio Powr Savr wireless wall/hall/corner-mount occupancy/vacancy sensor dimensions
W: 1.8" (46 mm)
H: 4.35" (110 mm)
D: 1.35" (34 mm)

Features
- New ceiling-mount sensor is 20% smaller than the original version and has the ability to be recess mounted
- Lutron XCT™ signal processing technology greatly enhances the performance of PIR sensors, enabling them to "see" fine motions that other sensors could not previously detect
- Utilizes Lutron reliable Clear Connect™ RF technology to communicate wirelessly with wireless load controllers (wallbox controls, remote-mount modules, fixtures and/or plug-in devices)
- RF range: 60 ft (18 m) line of sight, or 30 ft (9 m) through walls
- Vacancy model available to meet CA Title 24 requirements
- 10-year battery life

Benefits
- Front-accessible buttons make set up easy
- Sensors have simple test modes to verify ideal locations during installation

Models
Sensors*
LRF2-OCR2B-P-WH—ceiling-mount occupancy/vacancy sensor
LRF2-OWLB-P-WH—wall-mount occupancy/vacancy sensor
LRF2-OKLB-P-WH—corner-mount occupancy/vacancy sensor
LRF2-OHLB-P-WH—hallway occupancy/vacancy sensor
Accessories
L-CMDPIRKIT—ceiling-mount sensor lens masking kit
L-CRMK-WH—ceiling-mount sensor recess-mounting bracket
WGOMNI-CPN3688—wire guard for ceiling-mount sensor
WGWS-CPN3688—wire guard for wall-mount and hallway sensors
STI-9618-CPN3688—wire guard for corner-mount sensor

Lutron® Clear Connect™
Wireless Signal **Sent**

Step ② Daylight sensor selection

Radio Powr Savr wireless daylight sensor

Design statement: Specify a wireless daylight sensor to dim or switch zones of light in response to available daylight.

Radio Powr Savr wireless daylight sensor dimensions
W: 1.60" (41 mm)
H: 1.60" (41 mm)
D: 0.7" (17 mm)

Features
• Utilizes Lutron reliable Clear Connect RF technology to communicate wirelessly with wireless load controllers (wallbox controls, remote-mount modules, and/or plug-in devices); a load controller can communicate with only one daylight sensor
• RF range: 60 ft (18 m) line of sight, or 30 ft (9 m) through walls
• Features Lutron reliable proportional daylight open loop control
• Has a light range 0-107,000 Lux (0–10,000 fc) and a photopic response that matches the human eye
• Designed to give a linear response to changes in viewed light level
• One sensor is capable of switching and continuous dimming of multiple zones
• 10-year battery life

Benefits
• Simple calibration
• Multiple ceiling-mount methods available for different ceiling materials
• Front accessible test buttons make set up easy

Models
LRF2-DCRB-WH—daylight sensor

Lutron ® Clear Connect ™
Wireless Signal **Sent**

Step ③ Overhead light control selection

PowPak™ relay module

Design statement: The PowPak relay module is designed for spaces where local control is not currently available, but is required.

PowPak relay module dimensions
W: 2.89" (48 mm)
H: 3.44" (87 mm)
D: 1.25" (32 mm)

Features
- General purpose switch (all lighting loads; motor loads; receptacles)
- Receives input from up to 9 Pico® wireless controls, 6 Radio Powr Savr™ occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor via Lutron reliable Clear Connect™ RF technology
- Model available with a dry contact closure output for integration with 3rd party equipment; contact closure output provides occupancy status
- 16 A model features patented Softswitch™ technology that extends relay life to 1,000,000 cycles
- 120 V/277 V input

Benefits
- Save energy with the addition of occupancy sensing, daylight harvesting and personal control without the need for additional wires
- Button press programming to associate the module with the Radio Powr Savr sensors and Pico wireless controls

Mounting
- Mounts through a 1/2" NPT trade-size knock-out to a junction box or to a fixture. Can also be mounted inside of a standard 4" x 4" junction box

Models
RMJ-5R-DV-B—5 A lighting loads (1/6 HP @ 120 V or 1/3 HP @ 277 V motor loads)
RMJ-5RCCO1-DV-B—5 A lighting loads (1/6 HP @ 120 V or 1/3 HP @ 277 V motor loads) with (1) contact closure output
RMJ-16R-DV-B—16 A lighting loads (1/2 HP @ 120 V or 1 1/2 HP @ 277 V motor loads, 15 A 120 V receptacles)
RMJ-16RCCO1-DV-B—16 A lighting loads (1/2 HP @ 120 V or 1 1/2 HP @ 277 V motor loads, 15 A 120 V receptacles) with (1) contact closure output

Lutron® Clear Connect™
Wireless Signal **Received**

PowPak dimming module with EcoSystem®

Design statement: Specify the PowPak dimming module with EcoSystem for the application that requires dimming of fluorescent and LED fixtures and simple reconfiguration of lighting zones.

**PowPak dimming module
with EcoSystem dimensions**
W: 2.89" (48 mm)
H: 3.44" (87 mm)
D: 1.25" (32 mm)

Features
- Controls up to 32 EcoSystem, EcoSystem H-Series or Hi-lume® 3D ballasts, or Hi-lume A-Series LED drivers*
- Receives input from up to 9 Pico wireless controls, 6 Radio Powr Savr occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor via Lutron reliable Clear Connect RF technology
- Lutron EcoSystem technology facilitates individual ballast addressing, connection of multiple control devices, and control of ballasts individually or in groups
- 120 V/277 V input

Benefits
- Enables simple reconfiguration of the space, without having to move a single wire
- Dimming saves money and energy—for every percentage reduction in lighting levels, there is nearly equal reduction in the energy usage of the dimmed light source
- Additional savings can be achieved through high-end trim, occupancy sensing, daylight harvesting and personal control without the need for additional wires
- Button press programming means no commissioning required

Mounting
- Mounts through a 1/2" NPT trade-size knock-out to a junction box or to a fixture. Can also be mounted inside of a standard 4" x 4" junction box

Models
RMJ-ECO32-DV-B—controls up to 32 EcoSystem, EcoSystem H-Series or Hi-lume 3D ballasts, or Hi-lume A-Series LED drivers

* For more information on EcoSystem, EcoSystem H-Series and Hi-lume 3D ballasts, and Hi-lume A-Series LED drivers, please visit www.lutron.com.

Dimming ballasts require rapid start sockets. For more information, see Lutron App Note #122.

Lamp Socket Wiring Tester available to easily troubleshoot ballast wiring issues; see page 37 for ordering information and pricing.

Lutron® Clear Connect™
Wireless Signal **Received**

Maestro Wireless® switch

Design statement: Specify a Maestro Wireless switch for applications in which a local switch already exists.

Maestro Wireless switch dimensions
W: 2.94" (75 mm)
H: 4.69" (119 mm)
D: 1.44" (38 mm)

Features
- Digital on/off tap switch
- Utilizes Lutron reliable Clear Connect™ RF technology to communicate wirelessly with up to 9 transmitting devices (Radio Powr Savr™ sensors and/or Pico® wireless controls)
- Models available to control up to 8 A of lighting load
- Controls always operate locally, do not require system control
- Available in 27 finishes to complement any décor

Benefits
- Save energy with the addition of occupancy sensing and daylight harvesting without the need for additional wires
- Button press programming to associate the control with Radio Powr Savr sensors and Pico wireless controls

Mounting
- Requires a 1-gang U.S. wallbox. 3 1⁄2 in (89 mm) deep recommended, 2 1⁄4 in (57 mm) deep minimum

Models
MRF2-8S-DV-XX—8 A lighting, 3 A fan (1/10 HP motor, 120 V only), spec grade, 120–277 V~, no neutral
MRF2-6ANS-XX—6 A lighting, 3 A fan (1/10 HP motor), 120 V~
MRF2-8ANS-120-XX—8 A lighting, 5.8 A fan (1/4 HP motor), spec grade, 120 V~
MRF2-6ANS-277-XX—6 A lighting, spec grade, 277 V~

(XX in the model number represents color/finish code; please visit www.lutron.com for color choices.)

Lutron® Clear Connect™
Wireless Signal **Received**

Maestro Wireless dimmer

Design statement: Select a Maestro Wireless dimmer for applications in which a local switch already exists and dimming is required.

Maestro Wireless dimmer dimensions
W: 2.94" (75 mm)
H: 4.69" (119 mm)
D: 1.44" (38 mm)

Features
- Digital dimmer with LEDs that indicate light level
- Incorporates advanced features such as fade on/fade off, long fade off, and rapid full on
- Utilizes Lutron reliable Clear Connect RF technology to communicate wirelessly with up to 9 transmitting devices (Radio Powr Savr sensors and/or Pico wireless controls)

Benefits
- Dimming saves money and energy—for every percentage reduction in lighting levels, there is nearly equal reduction in the energy usage of the dimmed light source
- Ability to set high-end trim based on customer requirements
- Button press programming to associate the control with Radio Powr Savr sensors and Pico wireless controls

Mounting
- Requires a 1-gang U.S. wallbox. 3 1⁄2 in (89 mm) deep recommended, 2 1⁄4 in (57 mm) deep minimum

Models
MRF2-600M-XX—600 W incandescent/halogen, 120 V~
MRF2-6MLV-XX—600 W/600 VA incandescent/halogen/MLV, 120 V~
MRF2-6ND-120-XX—600 W/600 VA incandescent/halogen/MLV, spec grade, neutral wire, 120 V~
MRF2-10D-120-XX—1000 W/1000 VA incandescent/halogen/MLV, spec grade, 120 V~
MRF2-F6AN-DV-XX— 6 A, 3-wire fluorescent, spec grade, 120–277 V~
MRF2-6ELV-120-XX—600 W ELV, 120 V~

(XX in the model number represents color/finish code; please visit www.lutron.com for color choices.)

Lutron ® Clear Connect ™
Wireless Signal **Received**

Step ③ Stairwell fixture selection

PowPak™ stairwell fixture

Design statement: The PowPak stairwell fixture saves energy by reducing light levels when the stairwell is occupied and lowering light levels when it is unoccupied.

NEW PowPak stairwell fixture
W: 51.125" (1299 mm)*
H: 4.375" (111 mm)
D: 3.875" (98 mm)

Features
- Incorporates an integral lighting control device and a Lutron digital dimming ballast that is programmed to occupied and unoccupied light levels specific to the project
- Occupied and unoccupied light levels are field adjustable
- Utilizes Lutron reliable Clear Connect™ RF technology to communicate wirelessly with up to 9 Radio Powr Savr™ occupancy/vacancy sensors
- Available in 2, 3, or 4 ft**, 1 or 2 lamp, and T8, T8 reduced wattage, T5HE, or T5HO lamp options
- Universal input voltage 120/277 V~
- Ceiling or wall surface mount

Benefits
- Sensor is not integral to the fixture, providing the flexibility to group multiple fixtures to a single occupancy/vacancy sensor and/or multiple occupancy/vacancy sensors to a single fixture
- Easy to install, wireless communication between devices means no additional wiring required
- Button press programming to associate fixture with Radio Powr Savr occupancy/vacancy sensors

Models***
FXSW23214HDU51—4 ft, 2 lamp, T8, field adjustable high and low end, factory preset: 50% high-end, 10% low-end, 120/277 V~
FXSW23214HDU82—4 ft, 2 lamp, T8, field adjustable high and low end, factory preset: 80% high-end, 20% low-end, 120/277 V~

* Width provided for 4 ft fixture; consult the product specification submittal for width measurements for 2 and 3 ft fixtures.
** 8 ft fixture available upon request.
*** Partial list only, for complete list of available fixtures, visit www.lutron.com/stairwellfixture.

Lutron® Clear Connect™
Wireless Signal **Received**

Step ④ Task lighting control selection

Maestro Wireless® tabletop lamp dimmer and PowPak plug-in dimming module

Design statement: Both the tabletop lamp dimmer and the plug-in dimming module provide control of task lighting and the ability for remote control. Use the tabletop dimmer to provide personal lamp control. Select the plug-in module if you wish to conceal the controller.

Maestro Wireless tabletop lamp dimmer dimensions
W: 2.44" (62 mm)
H: 3.25" (83 mm)
D: 0.94" (24 mm)

PowPak plug-in dimming module dimensions
W: 2.3" (58 mm)
H: 3.3" (84 mm)
D: 1.2" (30 mm)

Features
- Digital dimmer for use with incandescent/halogen table and floor lamps up to 300 W
- Configure dimming module to switch non-dimmable lighting loads
- Light levels can be fine-tuned to the desired light level
- Incorporates advanced features such as fade on/fade off, long fade off, and rapid full on
- Utilizes Lutron reliable Clear Connect RF technology to communicate wirelessly with up to 9 transmitting devices (Radio Powr Savr sensors and/or Pico® wireless controls)
- Controls always operate locally, do not require system control
- Available in white or black finish
- Dimming module available in 1- or 3-receptacle models

Benefits
- Easy to install, requires no wires or tools
- Easily incorporate task lighting into lighting solution, while saving energy through dimming
- Button press programming to associate the plug-in dimmer with the same Radio Powr Savr sensors and Pico wireless controls that control the overhead lighting

Models
MRF2-3LD-XX—300 W tabletop lamp dimmer, incandescent/halogen, 120 V~
MRF2-3PD-1-XX—300 W plug-in dimming module, 1-receptacle, incandescent/halogen, 120 V~
MRF2-3PD-3-XX—300 W plug-in dimming module, 3-receptacle, incandescent/halogen, 120 V~

(XX in the model number represents color/finish code; please visit www.lutron.com for color choices.)

Lutron® Clear Connect™
Wireless Signal **Received**

Step ⑤ Plug load control selection

PowPak™ plug-in appliance module

Design statement: Specify a PowPak plug-in appliance module to directly control plug loads, such as computer monitors or printers.

PowPak plug-in appliance module dimensions
W: 2.3" (58 mm)
H: 3.3" (84 mm)
D: 1.2" (30 mm)

Features
- Utilizes Lutron reliable Clear Connect™ RF technology to communicate wirelessly with up to 9 transmitting devices (Radio Powr Savr™ occupancy/vacancy sensors and/or Pico® wireless controls)
- Control up to 15 A of general purpose load (1/2 HP motor load); no minimum load required
- Patented Softswitch® technology extends relay life to 1,000,000 cycles
- Can be hidden discretely behind furniture
- Controls always operate locally, do not require system control
- Available in white or black finish, and 1- or 3-receptacle models

Benefits
- Save energy by switching off plug loads when space is unoccupied
- Button press programming to associate the plug-in appliance module with the same Radio Powr Savr occupancy/vacancy sensors and Pico wireless controls that control the overhead lighting

Models
MRF2-15APS-1-XX—15 A plug-in appliance module, 1-receptacle, 120 V~
MRF2-15APS-3-XX—15 A plug-in appliance module, 3-receptacle, 120 V~

(XX in the model number represents color/finish code; please visit www.lutron.com for color choices.)

Lutron® Clear Connect™
Wireless Signal **Received**

PowPak relay module with Softswitch

Design statement: Specify a PowPak relay module with Softswitch to switch receptacles, controlling plug loads which consume energy when space is not in use.

PowPak relay module with Softswitch dimensions
W: 2.89" (48 mm)
H: 3.44" (87 mm)
D: 1.25" (32 mm)

Features
- 16 A general purpose switch for control of 15 A 120 V receptacles
- Receives input from up to 9 Pico wireless controls, 6 Radio Powr Savr occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor via Lutron reliable Clear Connect RF technology
- Model available with a dry contact closure output for integration with 3rd party equipment; contact closure output provides occupancy status
- Patented Softswitch technology extends relay life to 1,000,000 cycles
- 120 V/277 V input

Benefits
- Save energy by switching off power to plug loads when space is unoccupied
- Button press programming to associate the module with the Radio Powr Savr sensors and Pico wireless controls

Mounting
- Mounts through a 1/2" NPT trade-size knock-out to a junction box or to a fixture. Can also be mounted inside of a standard 4" x 4" junction box

Models
RMJ-16R-DV-B—16 A general purpose switch (15 A 120 V receptacles)
RMJ-16RCCO1-DV-B—16 A general purpose switch (15 A 120 V receptacles) with (1) contact closure output

Lutron® Clear Connect™
Wireless Signal **Received**

Step ⑥ 3rd party integration control selection

PowPak™ contact closure output module

Design statement: A PowPak contact closure output module is designed for spaces where integration with 3rd party equipment through contact closures is desired.

PowPak contact closure output module dimensions
W: 2.89" (48 mm)
H: 3.44" (87 mm)
D: 1.25" (32 mm)

Features
- Single dry contact closure device
- Receives input from up to 9 Pico® wireless controls, 6 Radio Powr Savr™ occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor via Lutron reliable Clear Connect™ RF technology
- Voltage: 24 V AC/DC
- Maximum load of 1 A @ 24 VDC or 0.5 A @ 24 VAC; no minimum load required
- Maintained output type

Benefits
- Button press programming to associate the module with the Radio Powr Savr sensors and Pico wireless controls

Mounting
- Screw tabs provided for surface mounting. Can also be mounted to a 1/2" NPT trade-size knock-out on a junction box

Models
RMJ-CCO1-24-B—(1) contact closure output

Lutron® Clear Connect™
Wireless Signal **Received**

Step 7a Wireless control selection

Pico® wireless controls

Design statement: Use a Pico wireless control anywhere in the space to control loads with a touch of a button.

3-button
with Raise/
Lower

2-button
with Raise/
Lower

3-button

2-button

Pico wireless control dimensions
W: 1.28" (33 mm)
H: 2.60" (66 mm)
D: 0.33" (8 mm)

Features
- Utilizes Lutron reliable Clear Connect RF technology to communicate wirelessly with wireless load controllers (wallbox controls, remote-mount modules, and/or plug-in devices)
- RF range: 100 ft (18 m) line of sight, or 30 ft (9 m) through wall
- Available in multiple button configurations with options for preset and raise/lower buttons
- 10-year battery life

Benefits
- Easily add a new and/or additional point of control without the need for new wires
- Easy configuration for use as a handheld control, car visor control, wall-mount control, or tabletop control with use of the optional pedestal

Models
Pico wireless controls
PJ-3BRL-GXX-YYY—3-button with Raise/Lower
PJ-2BRL-GXX-YYY—2-button with Raise/Lower
PJ-3B-GXX-YYY—3-button
PJ-2B-GXX-YYY—2-button

(XX in the model number represents color/finish code and YYY represents labeling options. Please visit www.lutron.com/Pico for more information.)

Lutron® Clear Connect™
Wireless Signal **Sent**

Step 7b Wireless control accessories selection

Pico® wireless control accessories

Design statement: Use accessories to enhance the flexibility of the Pico wireless control.

Wall-mount with Claro faceplate
with Pico faceplate adapter

Wall-mount with Pico single
Euro faceplate with adapter

Single and double pedestals

Features
• Pico wireless controls are designed to fit in the opening of a
  Claro® or Euro Pico faceplate
• Claro faceplates are available in finishes to complement the
  Pico wireless control
• European-style faceplates with adapters afford an
  architectural-style appearance and are available in both matte
  and metal finishes
• Tabletop pedestals are offered to support up to 4 Pico wireless
  controls and are available in white and black finishes

Benefits
• Pico faceplate adapter and Euro Pico faceplate with adapter
  allow for easy installation of the Pico wireless control in
  a faceplate
• Tabletop pedestals help ensure that the Pico wireless control
  is always within reach

Models
Wall-mount accessories
PICO-FP-ADAPT—Pico faceplate adapter for Claro faceplate
CW-1-XX—Claro 1-gang faceplate
CW-2-XX—Claro 2-gang faceplate
CW-3-XX—Claro 3-gang faceplate
CW-4-XX—Claro 4-gang faceplate
PFP-1-B-FXX-CPN5692—Single Euro Pico faceplate with adapter
PFP-2-B-FXX-CPN5692—Double Euro Pico faceplate with adapter
Tabletop accessories
L-PED1-XX—Single pedestal
L-PED2-XX—Double pedestal
L-PED3-XX—Triple pedestal
L-PED4-XX—Quadruple pedestal

(XX in the model number represents color/finish code;
please visit www.lutron.com for color choices.)

|	**Lutron® Clear Connect™**
〰	Wireless Signal **Sent**

Stairwell Retrofit Solution

The PowPak™ stairwell fixture communicates wirelessly with Radio Powr Savr™ occupancy/vacancy sensors. Based on the stairwell occupancy information received from the sensors, the PowPak stairwell fixture automatically adjusts the light output. The occupied and unoccupied light levels are field adjustable to meet the project's code requirements.

Unoccupied: 10% light level

Occupied: 50% light level

☐ PowPak stairwell fixture

☐ Radio Powr Savr occupancy/vacancy sensor (wall-mount)

	Lutron® Clear Connect™
〰▶	Wireless Signal **Sent**

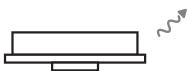|	**Lutron® Clear Connect™**
◀〰	Wireless Signal **Received**
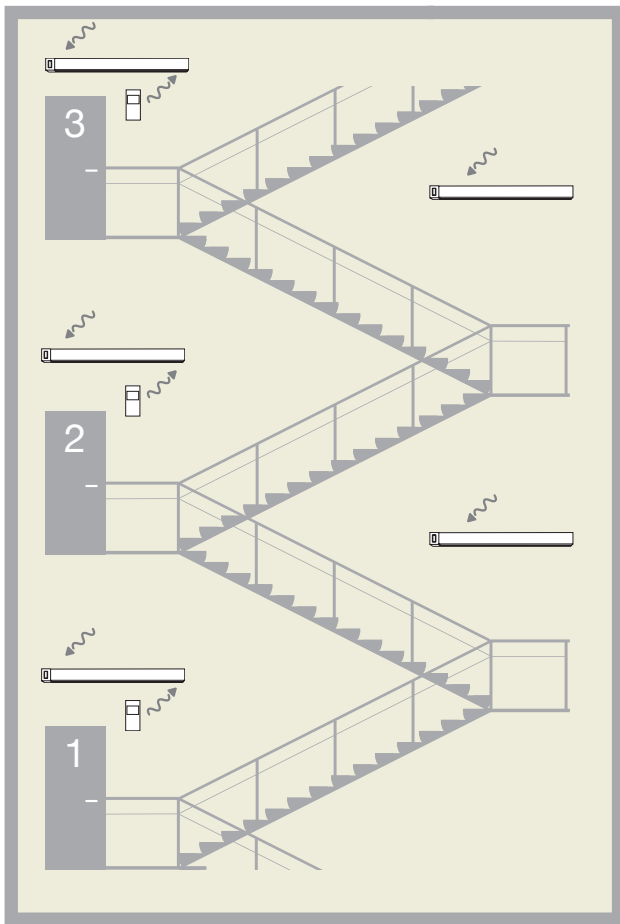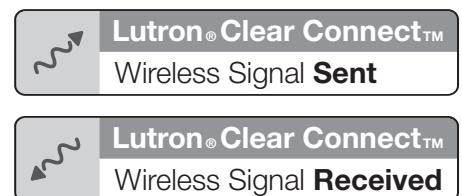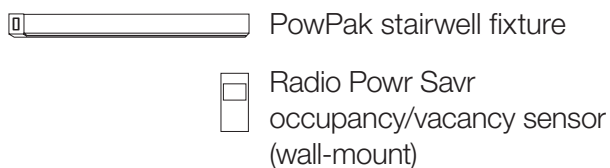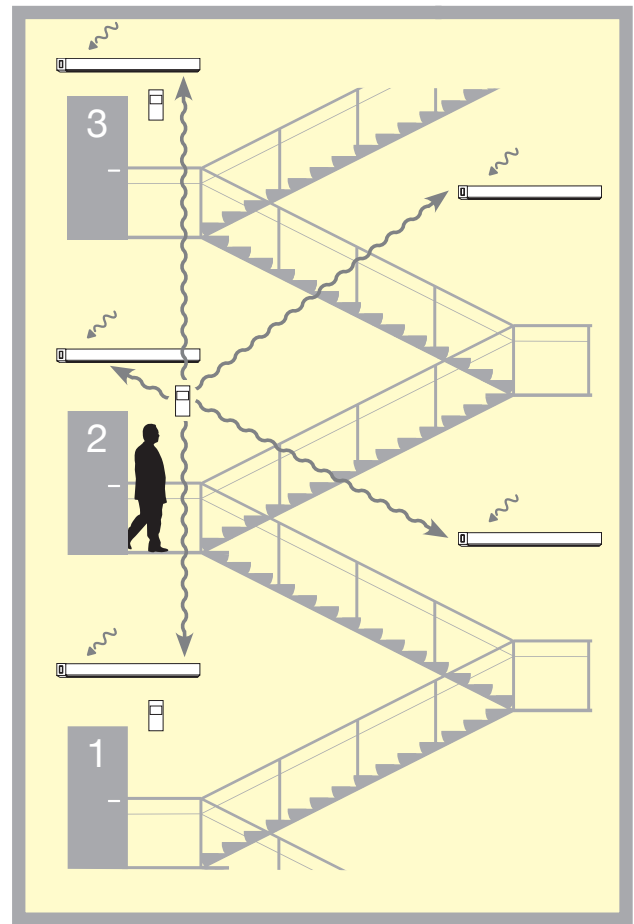
How it works

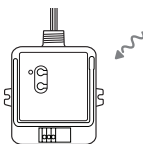## Variable Air Volume (VAV) integration

In response to information received from a Radio Powr Savr™ occupancy/vacancy sensor, the PowPak™ contact closure output module communicates room occupancy to the VAV terminal unit. By not heating or cooling an unoccupied room, the electricity consumed by the HVAC system can be reduced.

Filter	Cooling coil	Supply fan		
VAV		Damper open	VAV	Damper closed

Occupied   **Unoccupied**
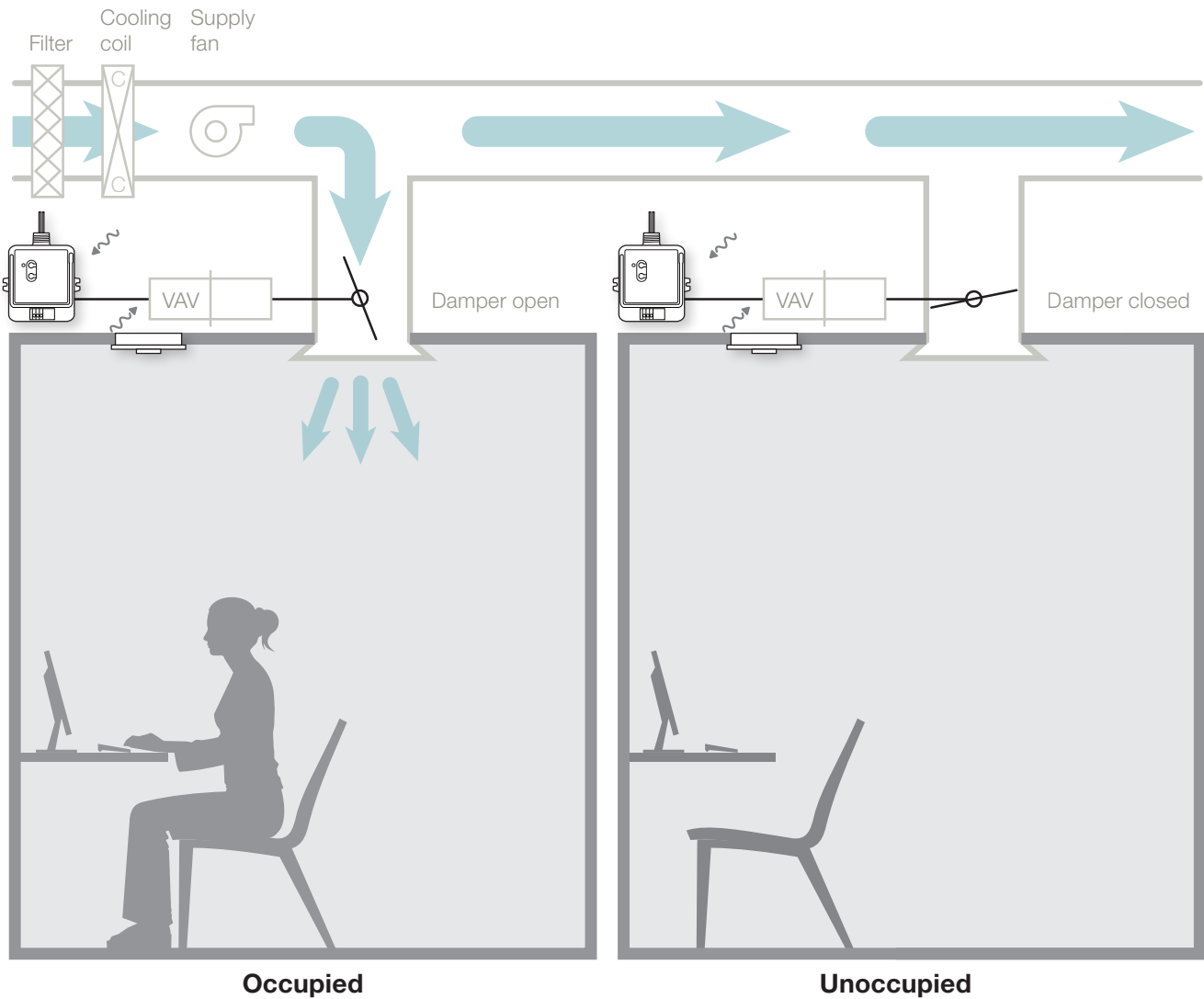
Radio Powr Savr
occupancy/vacancy
sensor (ceiling-mount)

PowPak contact closure
output module

	Lutron® Clear Connect™
∿	Wireless Signal **Sent**

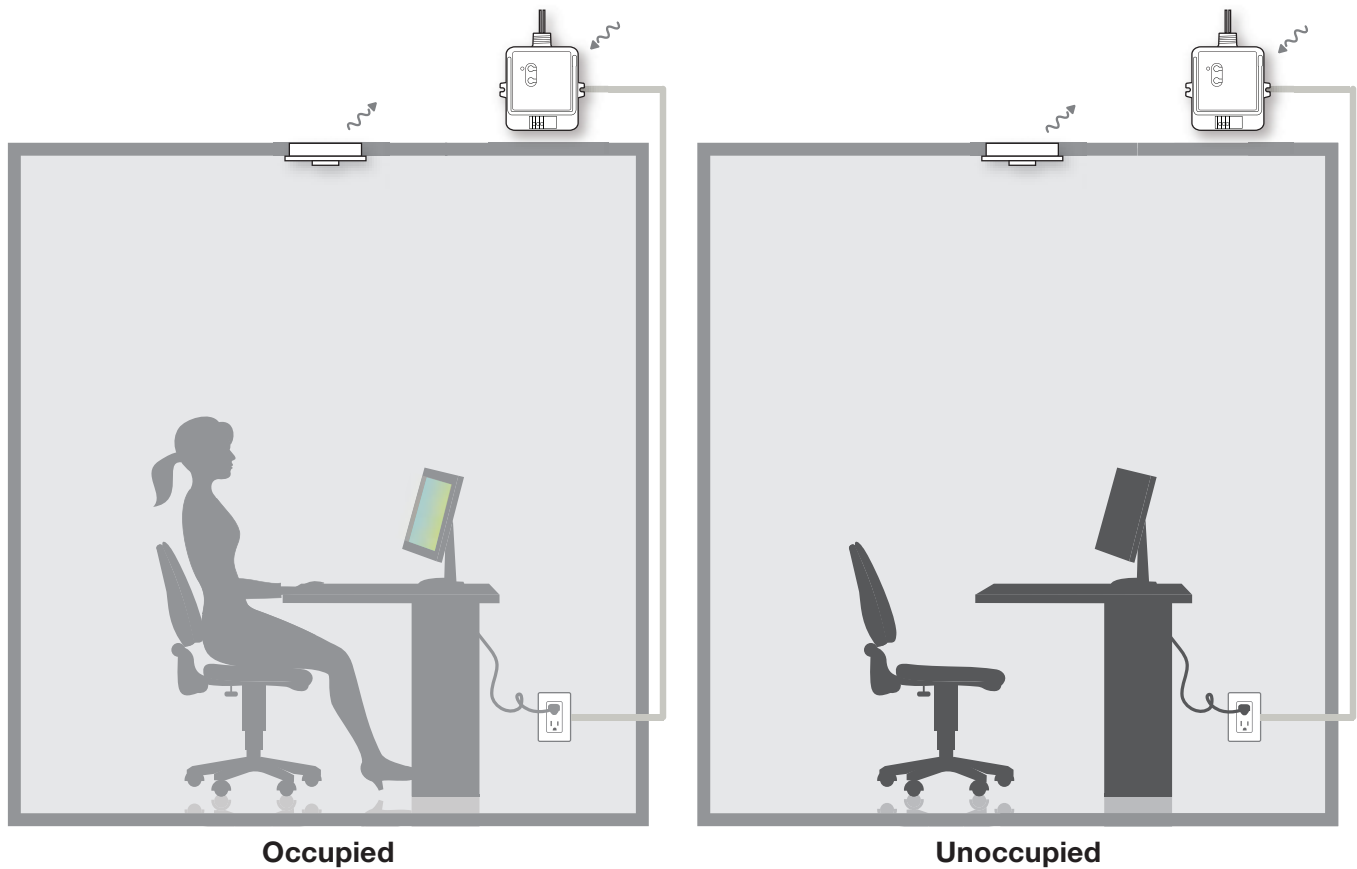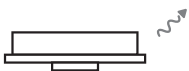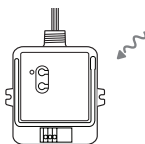|	Lutron® Clear Connect™
∿	Wireless Signal **Received**

Plug load control by switching receptacles

Plug loads, such as task lighting, computer monitors, and printers, account for 10–15% of commercial energy usage[1]. By utilizing the PowPak relay module with Softswitch® and a Radio Powr Savr occupancy/vacancy sensor to switch receptacles, energy savings can be obtained. The occupancy/vacancy sensor communicates room occupancy wirelessly to the relay module. Based on the occupancy status received, the relay module switches the power to the receptacles on or off, reducing the amount of energy consumed.

Occupied   **Unoccupied**

Radio Powr Savr
occupancy/vacancy
sensor (ceiling-mount)

PowPak relay module
with Softswitch

Lutron® Clear Connect™
Wireless Signal **Sent**

Lutron® Clear Connect™
Wireless Signal **Received**

Maestro® occupancy/vacancy sensing dimmers and switches*

Design statement: Maestro occupancy/vacancy sensing dimmers and switches are alternate energy-saving solutions for smaller spaces with unobstructed views.

Maestro occupancy/vacancy sensing with switch
W: 2.83" (75 m)
H: 4.61" (119 m)
D: 1.125" (30 mm)

Maestro occupancy/vacancy sensing with dimmer
W: 2.83" (75 m)
H: 4.61" (119 m)
D: 1.125" (30 mm)

Features
- Lutron XCT™ signal processing technology greatly enhances the performance of PIR sensors, enabling them to "see" fine motions that other sensors could not previously detect
- 180˚ sensor field-of-view, must have unobstructed view
- Up to 30 ft x 30 ft major motion coverage and 20 ft x 20 ft minor motion coverage
- Adjustable timeout - 1, 5, 15, or 30 minutes
- High-low sensitivity adjustment
- Vacancy model available to meet CA Title 24 requirements
- Switch models feature ambient light detection
- Available in 27 colors and finishes

Benefits
- Save energy automatically with the simple addition of occupancy/vacancy sensing
- Easy to install, directly replaces an existing control with no new wiring required

Models**
Switch
MS-OPS2-XX—2 A lighting, occupancy/vacancy, 120 V~
MS-OPS5M-XX—5 A lighting, 3 A fan (1/10 HP motor), occupancy/vacancy, 120 V~
MS-OPS6M2-DV-XX—6 A lighting, 3 A fan (1/10 HP motor, 120 V only), occupancy/vacancy, 120-277 V~
MS-OPS6M2N-DV-XX—6 A lighting, 3 A fan (1/10 HP motor, 120 V only), occupancy/vacancy, neutral wire, 120-277 V~
#### Dimmer
MS-OP600M-XX—600 W incandescent/halogen, occupancy/vacancy, 120 V~

(XX in the model number represents color/finish code; please visit www.lutron.com for color choices.)

* Maestro occupancy/vacancy sensing dimmers and switches are not components of Energi TriPak™ and cannot communicate with Radio Powr Savr™ sensor or Pico® wireless controls.
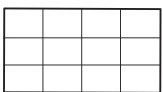** Vacancy only models available, see page 37.

Storage room—switching, 1 zone

Line Voltage
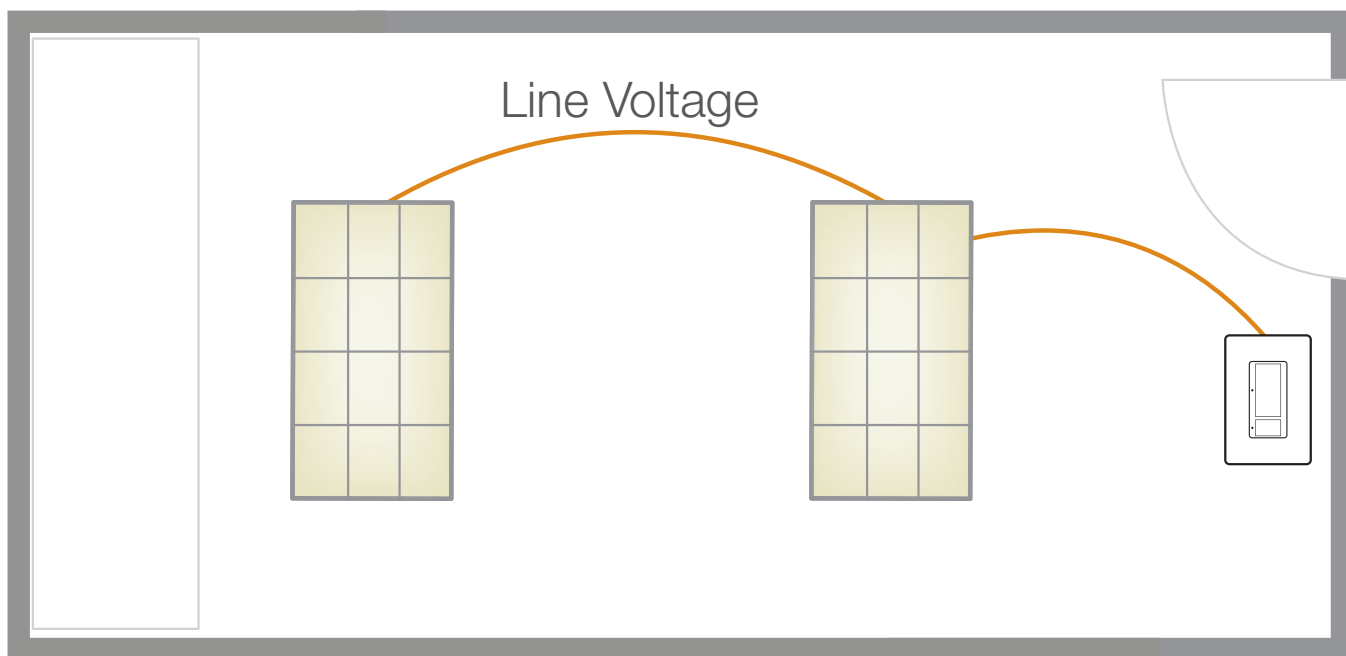
Product key:
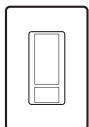
Maestro occupancy/vacancy sensing with switch
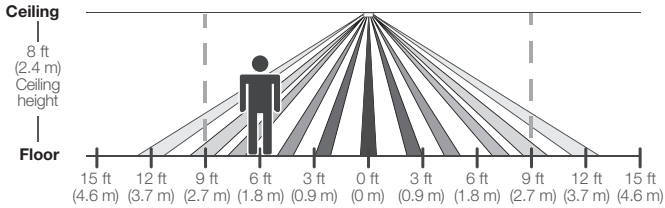(mounted in 1-gang Claro® faceplate)
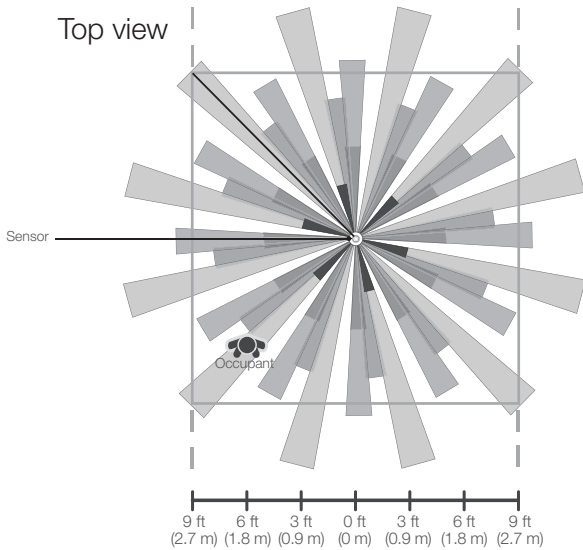
Switched lighting load

Sensor coverage diagrams

Ceiling-mount, 360°

Coverage varies by ceiling height

Floor view

Top view

Wall-mount*, 180°

1,500 ft^2—minor motion; 3,000 ft^2—major motion

Top view
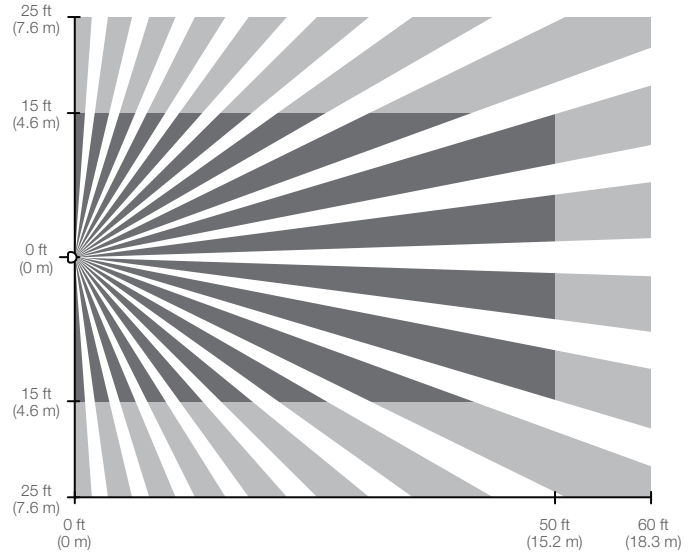
Key:

Minor motions

Major motion

Ceiling-mount sensor coverage chart (for sensor mounted in center of room)

Ceiling height	Maximum room dimensions for complete floor 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)

* Sensor mounting shown at 7 ft (2.1 m). Mounting height should be between 6 and 8 ft (1.6 and 2.4 m).
** 12 ft (3.7 m) is the maximum mounting height allowed.

Corner-mount*, 90°

1,225 ft² — minor motion; 2,500 ft² — major motion
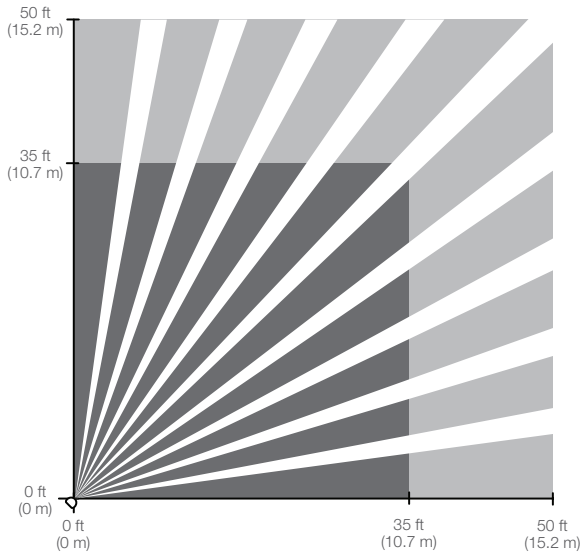
Top view

In-wall, 180°

400 ft² — minor motion; 900 ft² — major motion
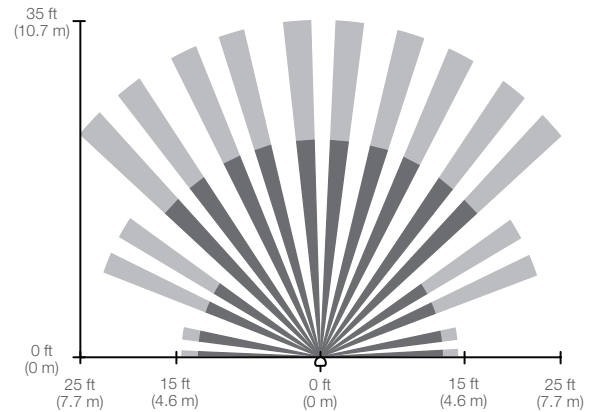
Top view

Hallway*, long narrow field of view

Coverage varies by hallway width and length

Top view
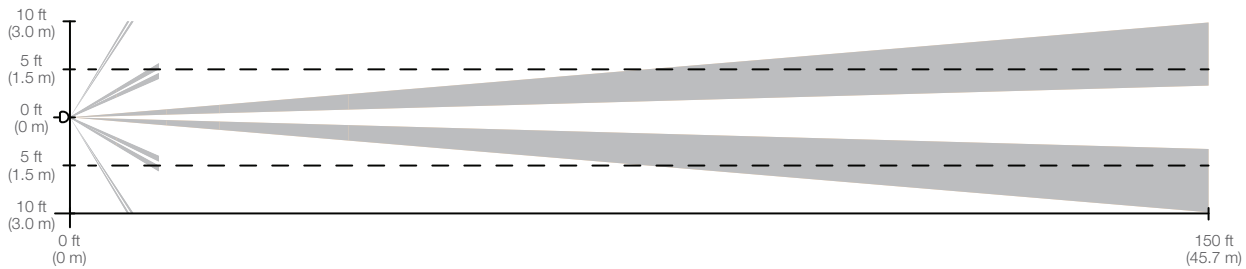
Hallway sensor maximum recommended length chart (sensor centered within hallway)

Width of hallway	Length of hallway
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)

* Sensor mounting shown at 7 ft (2.1 m). Mounting height should be between 6 and 8 ft (1.6 and 2.4 m).

Ordering information

Model number	Description	List Price (US)
Maestro Wireless® switches[1]		
MRF2-6ANS-XX	6 A lighting, 3 A fan (1/10 HP motor), 120 V~	88.00
MRF2-8ANS-120-XX	8 A lighting, 5.8 A fan (1/4 HP motor), spec grade, 120 V~	120.00
MRF2-8S-DV-XX	8 A lighting, 3 A fan (1/10 HP motor, 120 V only), spec grade, 120–277 V~ , no neutral	150.00
MRF2-6ANS-277-XX	6 A lighting, spec grade, 277 V~	170.00
Maestro Wireless switch companions		
MA-AS-XX	Multi-location companion switch, 120 V~	35.50
MA-AS-277-XX	Multi-location companion switch, 277 V~	44.00
Maestro Wireless dimmers[1]		
MRF2-600M-XX	600 W incandescent/halogen, 120 V~	88.00
MRF2-6MLV-XX	600 W/600 VA incandescent/halogen/MLV, 120 V~	100.00
MRF2-6ND-120-XX	600 W/600 VA incandescent/halogen/MLV, spec grade, neutral wire, 120 V~	130.00
MRF2-10D-120-XX	1000 W/1000 VA incandescent/halogen/MLV, spec grade, 120 V~	130.00
MRF2-F6AN-DV-XX	6 A lighting, 3-wire fluorescent, spec grade, 120–277 V~	180.00
MRF2-6ELV-120-XX	600 W ELV, 120 V~	189.00
Maestro Wireless dimmer companions		
MA-R-XX	Multi-location companion dimmer, 120 V~	27.50
MA-R-277-XX	Multi-location companion dimmer, 277 V~	44.00
Maestro Wireless tabletop lamp dimmer		
MRF2-3LD-XX	300 W lamp dimmer, incandescent/halogen, 120 V~	130.00
PowPak™ stairwell fixtures[2]		
FXSW23214HDU51	4 ft, 2 lamp, T8, field adjustable high and low end, factory preset: 50% high-end, 10% low-end, 120/277 V~	390.00
FXSW23214HDU82	4 ft, 2 lamp, T8, field adjustable high and low end, factory preset: 80% high-end, 20% low-end, 120/277 V~	390.00
PowPak™ relay module		
RMJ-5R-DV-B	5 A general purpose switch	89.00
RMJ-5RCCO1-DV-B	5 A general purpose switch with (1) contact closure output	99.00
RMJ-16R-DV-B	16 A general purpose switch	109.00
RMJ-16RCCO1-DV-B	16 A general purpose switch with (1) contact closure output	119.00

Model number	Description	List Price (US)
PowPak dimming module with EcoSystem®		
RMJ-ECO32-DV-B	Controls up to 32 EcoSystem, EcoSystem H-Series or Hi-lume® 3D ballasts, or Hi-lume A-Series LED drivers	170.00
EcoSystem H-Series ballasts[3]		
EHDT832MU110	T8 linear, 32 W, 1-lamp, 120-27 V~, 1.0 ballast factor	79.00
EHDT832MU117	T8 linear, 32 W, 1-lamp, 120-277 V~, 1.17 ballast factor	79.00
EHDT832MU210	T8 linear, 32 W, 2-lamp, 120-277 V~, 1.0 ballast factor	79.00
EHDT832MU217	T8 linear, 32 W, 2-lamp, 120-277 V~, 1.17 ballast factor	79.00
EHDT528MU110	T5 linear, 28 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT528MU210	T5 linear, 28 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT554MU110	T5HO linear, 54 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT554MU210	T5HO linear, 54 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT817MU110	T8 linear, 17 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT817MU210	T8 linear, 17 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT825MU110	T8 linear, 25 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT825MU210	T8 linear, 25 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT514MU110	T5 linear, 14 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT514MU210	T5 linear, 14 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT521MU110	T5 linear, 21 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT521MU210	T5 linear, 21 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT524MU110	T5HO linear, 24 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT524MU210	T5HO linear, 24 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT539MU110	T5HO linear, 39 W, 1-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT539MU210	T5HO linear, 39 W, 2-lamp, 120-277 V~, 1.0 ballast factor	89.00
EHDT832GU310	T8 linear, 32 W, 3-lamp, 120-277 V~, 1.0 ballast factor	129.00
EHDT832GU317	T8 linear, 32 W, 3-lamp, 120-277 V~, 1.17 ballast factor	129.00
PowPak contact closure output module		
RMJ-CCO1-24-B	(1) contact closure output	89.00
PowPak plug-in dimming module		
MRF2-3PD-1-XX	300 W, 1-receptacle, incandescent/halogen, 120 V~	99.00
MRF2-3PD-3-XX	300 W, 3-receptacle, incandescent/halogen, 120 V~	99.00

[1] Price indicated for gloss colored products.

[2] Partial list only, for complete list of available fixtures visit www.lutron.com/stairwellfixture.

[3] Dimming ballasts require rapid start sockets. For more information, see Lutron App Note #122.

Model number	Description	List Price (US)
PowPak™ plug-in appliance module		
MRF2-15APS-1-XX	15 A plug-in switch, 1-receptacle, 120 V~	99.00
MRF2-15APS-3-XX	15 A plug-in switch, 3-receptacle, 120 V~	99.00
Radio Powr Savr™ occupancy/vacancy sensors[1]		
LRF2-OCR2B-P-WH	Ceiling-mount, 360° field of view, occupancy/vacancy sensor	85.00
LRF2-VCR2B-P-WH	Ceiling-mount, 360° field of view, vacancy-only sensor	85.00
LRF2-OWLB-P-WH	Wall-mount, 180° field of view, occupancy/vacancy sensor	85.00
LRF2-VWLB-P-WH	Wall-mount, 180° field of view, vacancy-only sensor	85.00
LRF2-OKLB-P-WH	Corner-mount, 90° field of view, occupancy/vacancy sensor	85.00
LRF2-VKLB-P-WH	Corner-mount, 90° field of view, vacancy-only sensor	85.00
LRF2-OHLB-P-WH	Hallway, occupancy/vacancy sensor	85.00
LRF2-VHLB-P-WH	Hallway, vacancy-only sensor	85.00
Simple Energy Retrofit Packages[2]		
MRF2-1S8A-1OC	(1) Maestro Wireless® 8 A, no neutral switch, 120/277 V~, (1) Claro® 1-gang faceplate, (1) Radio Powr Savr wireless ceiling-mount occupancy/vacancy sensor	198.00
MRF2-1S8A-1VC	(1) Maestro Wireless 8 A, no neutral switch, 120/277 V~, (1) Claro 1-gang faceplate, (1) Radio Powr Savr wireless ceiling-mount vacancy-only sensor	198.00
Radio Powr Savr occupancy/vacancy sensors accessories		
L-CMDPIRKIT	Ceiling-mount sensor lens masking kit	11.80
L-CRMK-WH	Ceiling-mount recess-mounting bracket	17.00
WGOMNI-CPN3688	Wire guard for ceiling-mount sensor, white	80.00
WGWS-CPN3688	Wire guard for wall-mount and hallway sensors, white	80.00
STI-9618-CPN3688	Wire guard for corner-mount sensor, white	80.00
Radio Powr Savr daylight sensor		
LRF2-DCRB-WH	Ceiling-mount daylight sensor	120.00
Pico® wireless controls[3]		
PJ-3BRL-GWH-YYY	3-button with Raise/ Lower, white only	25.00
PJ-2BRL-GWH-YYY	2-button with Raise/ Lower, white only	25.00
PJ-3B-GWH-YYY	3-button, white only	25.00
PJ-2B-GWH-YYY	2-button, white only	25.00
PJ-3BRL-GXX-YYY	3-button with Raise/ Lower	56.00
PJ-2BRL-GXX-YYY	2-button with Raise/ Lower	56.00
PJ-3B-GXX-YYY	3-button	56.00
PJ-2B-GXX-YYY	2-button	56.00

Model number	Description	List Price (US)
Pico accessories		
L-PED1-XX	Pico wireless control single pedestal	60.00
L-PED2-XX	Pico wireless control double pedestal	80.00
L-PED3-XX	Pico wireless control triple pedestal	100.00
L-PED4-XX	Pico wireless control quadruple pedestal	120.00
PICO-FP-ADAPT	Pico wireless control faceplate adapter	8.00
PFP-1-B-FXX-CPN5692[4]	Single Euro Pico faceplate with adapter	40.00
PFP-2-B-FXX-CPN5692[4]	Double Euro Pico faceplate with adapter	44.00
Lamp Socket Wiring Tester		
FDB-LSWT-T5/T8	600 V, 100 KHz, 0.125 A max, CAT III	180.00
Maestro® occupancy/vacancy sensing switches[5]		
MS-OPS2-XX	2 A lighting, occupancy/vacancy sensing switch, 120 V~	29.00
MS-VPS2-XX	2 A lighting, vacancy-only sensing switch, 120 V~	29.00
MS-OPS5M-XX	5 A lighting, 3 A fan (1/10 HP motor), occupancy/vacancy sensing switch, 120 V~	41.00
MS-VPS5M-XX	5 A lighting, 3 A fan (1/10 HP motor), vacancy-only sensing switch, 120 V~	41.00
MS-OPS6M2-DV-XX	6 A lighting, 3 A fan (1/10 HP motor, 120 V only), occupancy/vacancy sensing switch, 120-277 V~	49.00
MS-VPS6M2-DV-XX	6 A lighting, 3 A fan (1/10 HP motor, 120 V only), vacancy-only sensing switch, 120-277 V~	49.00
MS-OPS6M2N-DV-XX	6 A lighting, 3 A fan (1/10 HP motor, 120 V only), occupancy/vacancy sensing switch, neutral wire, 120-277 V~	49.00
MS-VPS6M2N-DV-XX	6 A lighting, 3 A fan (1/10 HP motor, 120 V only), vacancy-only sensor, neutral wire, 120-277 V~	49.00
Maestro occupancy/vacancy sensing switch companions		
MA-AS-XX	Multi-location companion switch, 120 V~	35.50
MA-AS-277-XX	Multi-location companion switch, 277 V~	44.00
Maestro occupancy/vacancy sensing dimmers[5]		
MS-OP600M-XX	600 W incandescent/halogen, vacancy/vacancy sensing dimmer, 120 V~	54.00
MS-VP600M-XX	600 W incandescent/halogen, vacancy-only sensing dimmer, 120 V~	54.00
Maestro occupancy/vacancy sensing dimmer companions		
MA-R-XX	Multi-location companion dimmer, 120 V~	27.50
Faceplates		
CW-1-XX	Claro® 1-gang faceplate	4.90
CW-2-XX	Claro 2-gang faceplate	9.80
CW-3-XX	Claro 3-gang faceplate	15.00
CW-4-XX	Claro 4-gang faceplate	20.00

[1] Vacancy models meet California Title 24 section 119(j) requirements.

[2] Available in white finish only.

[3] Price indicated for light or power text or icon labeling only.

[4] Price indicated for Artic White and Midnight finishes only, contact Lutron for additional finish options and pricing.

[5] Price indicated for gloss finish only.

Sources

1 Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey,
   released April 2009. (www.eia.doe.gov/emeu/cbecs/cbecs2003/lighting/lighting1.html)
2 Determinants of Lighting Quality II by Newsham, G. and Vetch, J., 1996.
3 Light Right Consortium. Research Study on the Effects of Lighting on Office Workers.
   http://www.lightright.org.research/index.htm
4 Heschong Mohone Group for the California Energy Commission. Windows and Offices:
   a study of Office Worker Performance and the Indoor Environment. October 2003.

www.lutron.com
World Headquarters 1.610.282.3800
Technical Support Center 1.800.523.9466 (Available 24/7)
Customer Service/Quotes 1.888.LUTRON1 (1.888.588.7661)

© 04/2012 Lutron Electronics Co., Inc.
P/N 367-2110 REV C

save
energy
with
Lutron™