369-427f 1 04.03.12

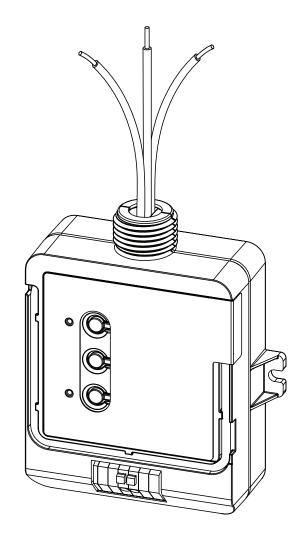
PowPak_™ Dimming Module with EcoSystem_®

The PowPak™ Dimming Module with EcoSystem® is a radio frequency (RF) control that operates up to 32 EcoSystem® ballasts based on input from Pico® controls and Radio Powr Savr™ sensors. Configurable for multiple zones in a single area, the Dimming Module with EcoSystem® is ideal for small areas such as classrooms, conference rooms, and private offices.

Communication with RF input devices, such as Pico® controls and Radio Powr Savr™ sensors, is accomplished using Lutron Clear Connect® RF Technology.

Features

- Controls up to 32 EcoSystem® fluorescent dimming ballasts and LED drivers
- Various operating voltages available refer to model number chart below for details on voltage requirements
- Receives input from up to nine Pico® controls, six Radio Powr Savr™ occupancy/vacancy sensors, and one Radio Powr Savr™ daylight sensor
- Utilizes Lutron Clear Connect_® RF Technology refer to model number chart below for frequency band data
- Mounts to a junction box through a standard half-inch (NPT trade size) knockout
- Complies with requirements for use in a compartment handling environmental air (plenum) per NEC_® 2011 300.22(C)(3)



Model Number	Operating Voltage	Frequency Band	Region
RMJ-ECO32-DV-B	120/277 V∼	431.0 – 437.0 MHz	U.S.A., Canada, Mexico
URMJ-ECO32-DVB	120/277 V∼	431.0 – 437.0 MHz	U.S.A., Canada, Mexico (BAA Compliant)
RMQ-ECO32-DV-B	220-240 V~	433.05 – 434.79 MHz	Hong Kong
RMM-ECO32-DV-B	220-240 V~	868.125 – 868.475 MHz	China and Singapore

NOTE: Contact Lutron for frequency band compatibility for your geographic region if it is not indicated above.

\$LUTRON■ SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369-427f 2 04.03.12

Specifications

Regulatory Approvals

RMJ & URMJ- models only

- UL Listed
- UL 2043 Plenum Rated
- FCC approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules.
- CSA and IC
- COFETEL
- NOM

Power

• Operating voltage:

RMJ & URMJ- model $120/277 \text{ V} \sim 50/60 \text{ Hz} \ 40 \text{ mA}$ **RMQ- model** $220-240 \text{ V} \sim 50/60 \text{ Hz} \ 40 \text{ mA}$ **RMM- model** $220-240 \text{ V} \sim 50/60 \text{ Hz} \ 40 \text{ mA}$

System Communication

- Operates using Clear Connect_™ RF Technology for reliable wireless communication; refer to model number chart on page 1 for frequency band details
- RF range is 30 ft (10 m)

Environment

- Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C)
- 0% to 90% humidity, non-condensing
- For indoor use only

EcoSystem_® Link

- Communicates with up to 32 EcoSystem® enabled dimming ballasts, LED drivers, and interfaces such as C5-BMJ-16A
- EcoSystem_® Digital Link can be wired Class 1 or Class 2 for maximum wiring flexibility
- Terminals accept 18 to 16 AWG (0.75 to 1.5 mm²) solid wire

NOTE: Must use Rapid Start sockets with EcoSystem® ballasts.

NOTE: The PowPak_™ Dimming Module with EcoSystem® does NOT support the C5-XPJ-16A switching module.

NOTE: Wired sensors connected to EcoSystem® devices are NOT supported.

Default Operation

- Associated wireless input devices control all connected EcoSystem® ballasts and drivers
- Occupancy Sensors:
 - Occupied: 100%; Unoccupied: 0% (OFF)
- Pico® Controls:
 - On: 100%; Favorite Level: 50%; Off: 0% (OFF)
- Daylight Sensor: Decreases electric light in response to additional available daylight

Key Design Features

- LED status indicators show communication status and provide programming feedback
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- EcoSystem_® link miswire protection up to 347 V ∼
- Daylight override: Pressing the raise button on an associated Pico
 will temporarily override daylighting for the fixtures in that Pico
 group
 - Daylighting will be re-enabled for that Pico_® group when one of the following occurs:
 - Two hours have passed since the override.*
 - ON, OFF or Preset button has been pressed on a Pico_® controlling that group.
 - All associated Occupancy Sensors have reported unoccupied.
 - * Each time a daylighting override occurs for any Pico® group, the two hour timer is reset.

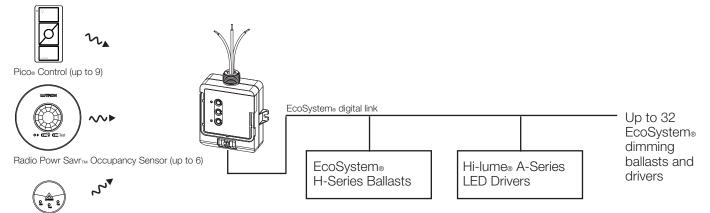
31/2 21/2	ITRON	SPECIFICATION	CHEMITTAL
35 L.L		SPECIFICATION	SUBMITTAL

Job Name: Model Numbers:

Job Number:

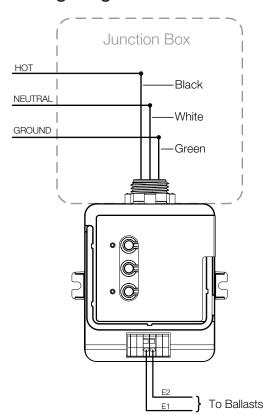
369-427f 3 04.03.12

System Diagram



Radio Powr Savr $_{\text{\tiny TM}}$ Daylight Sensor (up to 1)

Wiring Diagram

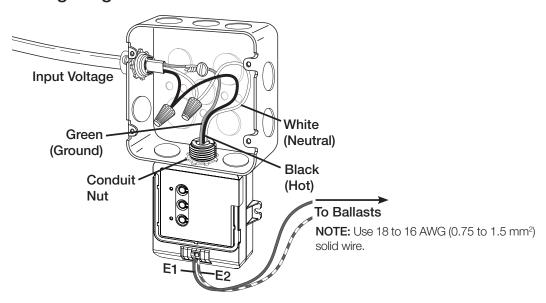


LUTRON SPECIFICATION SUBMITTAL

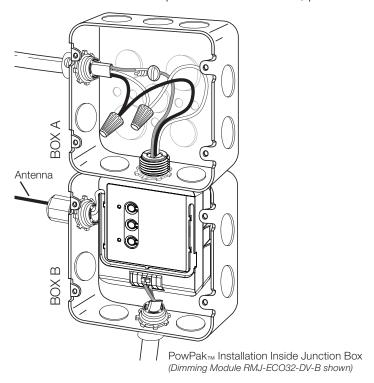
LUTRON SPECIFICATION SUBMITTAL		Page	
I	Job Name:	Model Numbers:	
I			
I	Job Number		

369-427f 4 04.03.12

Wiring Diagram



In some applications, a PowPak_{TM} module can be installed inside a 4 in x 4 in (102 mm x 102 mm) junction box. For information about how to perform this installation, please see Application Note #423 (p/n 048423).

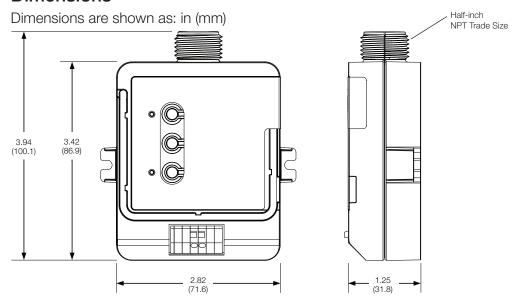


LUTRON SPECIFICATION SUBMITTAL

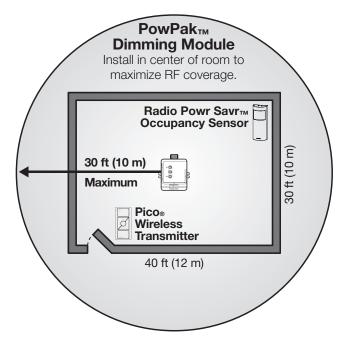
Job Name:	Model Numbers:
Job Number:	

369-427f 5 04.03.12

Dimensions



Range Diagram



All Wireless Transmitters must be installed within 30 ft (10 m) of the PowPak™ Dimming Module.

• Contact Lutron first for applications using foil-backed or metallic ceiling tiles.

LUTRON SPECIFICATION SUBMITTAL

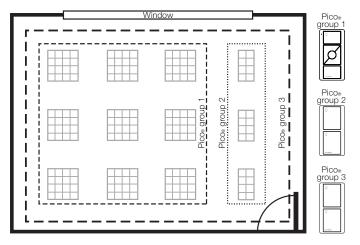
<u></u>		
Job Name:	Model Numbers:	
Job Number:		

369-427f 6 04.03.12

Advanced Configurations

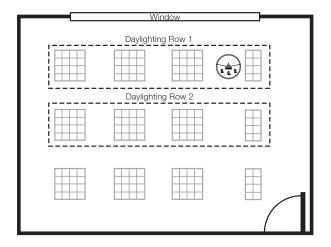
Pico_® Wireless Controls

- Up to nine Pico_® devices, each with their own control group
- Each group can include any of the connected ballasts or drivers
- Favorite levels can be set for each Pico® wireless control



Radio Powr Savr™ Daylight Sensor

- Up to two daylighting rows can be configured
- The Radio Powr Savr™ daylight sensor group can include up to 32 ballasts or drivers



Minimum Light Level Setting (optional)

 Certain applications, such as hallways, may require that the lights never turn off. For these areas, select the 10% minimum light level option.

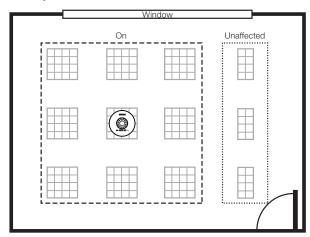
High-End Trim

- The maximum light output of connected ballasts can be decreased by up to 50% for energy savings in over-lit spaces
- High-End Trim affects all connected ballasts and drivers equally, and can be configured from the dimming module or from any associated Pico®

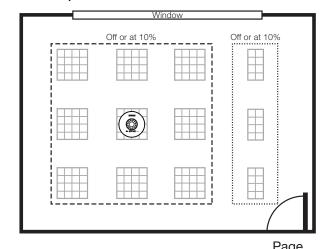
Radio Powr Savr™ Occupancy Sensors

- Radio Powr Savr™ occupancy and vacancy sensors control all connected ballasts or drivers
- Grouped Pico® controls can be used to adjust the Occupied levels of ballasts or drivers that they control from 1% to 100% or can make them unaffected by Occupancy events
- Vacancy events (area becomes unoccupied) turn all ballasts and drivers off or to 10%, if minimum light level is set

Occupied



Unoccupied



LUTRON SPECIFICATION SUBMITTAL

Nac I to I t		
Job Name:	Model Numbers:	
Job Number:		