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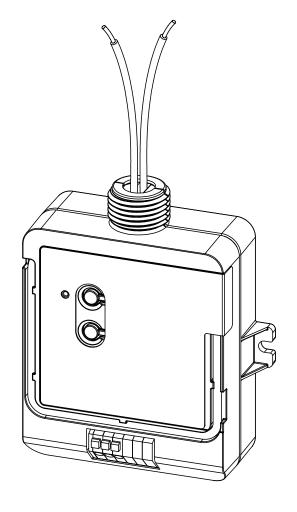
### PowPak<sub>™</sub> CCO Module

The PowPak<sub>TM</sub> CCO Module is a low-voltage radio frequency (RF) control that provides a single dry contact closure output based on input from Pico<sub>®</sub> controls and Radio Powr Savr<sub>TM</sub> occupancy and daylight sensors. It can be powered by to 24 V  $\sim$  or 24 V  $\rightleftharpoons$  for easy connection and integration into building management, HVAC, VAV, and other 3rd-party systems.

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

### **Features**

- Single contact closure output including both normally open (NO) and normally closed (NC) dry contacts
- Maintained output type
- Operates at 24 V ∼ or 24 V ==
- Receives wireless inputs from up to nine Pico<sub>®</sub> controls, six Radio Powr Savr<sub>™</sub> occupancy/vacancy sensors, and one Radio Powr Savr<sub>™</sub> daylight sensor
- Utilizes Lutron Clear Connect<sub>®</sub> RF Technology refer to model number chart below for frequency band data
- Screw tabs provided for surface mounting (recommended); junction box mounting available via half-inch (NPT trade size) threaded nipple
- Complies with requirements for use in a compartment handling environmental air (plenum) per NEC<sub>®</sub> 2011 300.22(C)(3)



Model Number	Frequency Band	Region
RMJ-CCO1-24-B	431.0 – 437.0 MHz	431.0 – 437.0 MHz
URMJ-CCO1-24B	431.0 – 437.0 MHz	431.0 – 437.0 MHz (BAA Compliant)
RMQ-CCO1-24-B	433.05 – 434.79 MHz	Hong Kong
RMM-CCO1-24-B	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.

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## **Specifications**

## **Regulatory Approvals**

### RMJ & URMJ- models only

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

#### **Power**

- NEC® Class 2
- Operating voltage: 24 V ~ / 24 V ==
- Operating current, nominal: 45 mA (24 V∼) 35 mA (24 V===)

### **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**

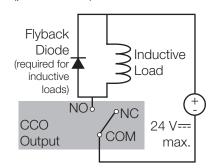
- Ambient operating temperature: 32 °F to 131 °F (0 °C to 55 °C)
- 0% to 90% humidity, non-condensing
- For indoor use only

### **Contact Closure Output**

 Accepts input voltages of 0-24 V ~ / 0-24 V==; see chart below for load switching capacities

Switching	Resistive
Voltage	Load R
0-24 V===	1.0 A
0-24 V~	0.5 A

- Provides both normally open (NO) and normally closed (NC) dry contacts
- Maintained output type
- CCO terminals accept 20 to 16 AWG (0.5 to 1.5 mm<sup>2</sup>) solid or stranded wire
- Output is latching
- The CCO is not rated to control unclamped, inductive loads. Inductive loads include, but are not limited to, relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only). See diagram below. For more information, please see Application Note #434 (p/n 048434).

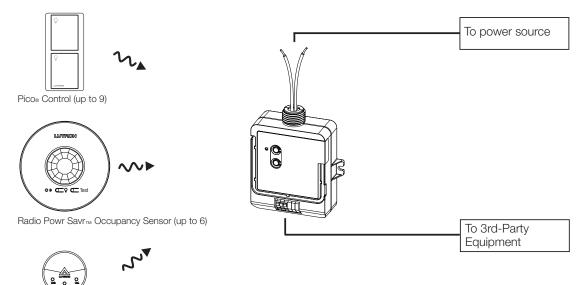


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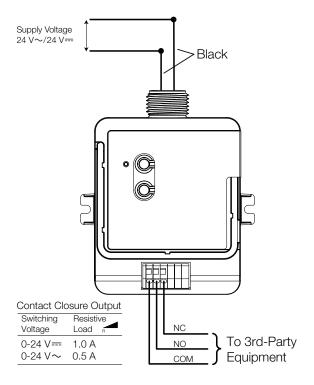
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# System Diagram



# Wiring Diagram

Radio Powr Savr™ Daylight Sensor (up to 1)

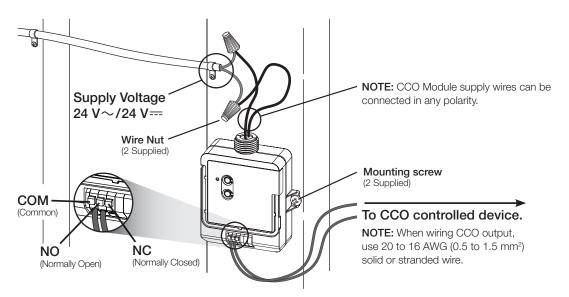


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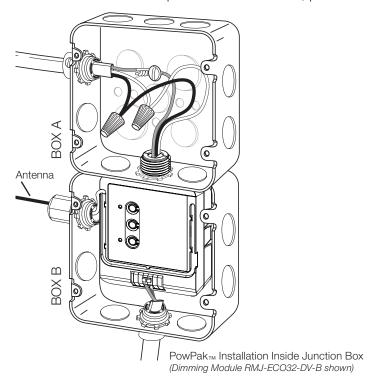
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# Wiring Diagram



**NOTE:** The CCO output may be wired using either the NO or NC terminal. Refer to the Default Operation chart on page 6 for more information regarding the behavior of the CCO output terminals.

In some applications, a PowPak<sub>TM</sub> 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).



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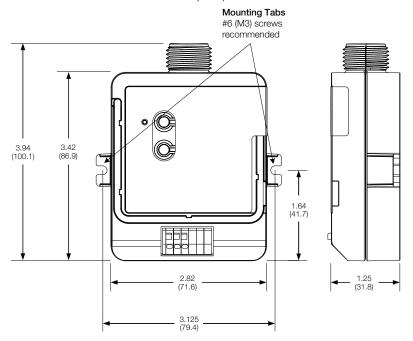
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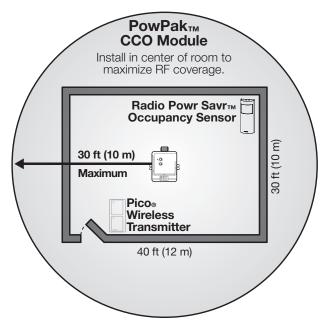
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### **Dimensions**

Dimensions are shown as: in (mm)



# Range Diagram



All Wireless Transmitters must be installed within 30 ft (10 m) of the PowPak $_{\text{TM}}$  CCO Module.

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

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# **Default Operation**

Transmitting Device	Transmitted Command	CCO Default Action
Pico <sub>®</sub>	On	NO = Close, NC = Open
Wireless Control	Off	NO = Open, NC = Close
	Raise	No Action
	Lower	No Action
	Preset	NO = Close, NC = Open
Radio Powr Savr™	Occupied	NO = Close, NC = Open
Occupancy Sensor	Unoccupied	NO = Open, NC = Close
Radio Powr Savr™	Occupied	No Action
Vacancy Sensor	Unoccupied	NO = Open, NC = Close
Radio Powr Savr™ Daylight Sensor	Ambient Light Below Target Level	NO = Close, NC = Open
	Ambient Light Above Target Level	NO = Open, NC = Close

# **LUTRON** SPECIFICATION SUBMITTAL

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Job Name:	Model Numbers:
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