

## Vive PowPak Dimming Module with 0–10 V<sub>DC</sub> Control

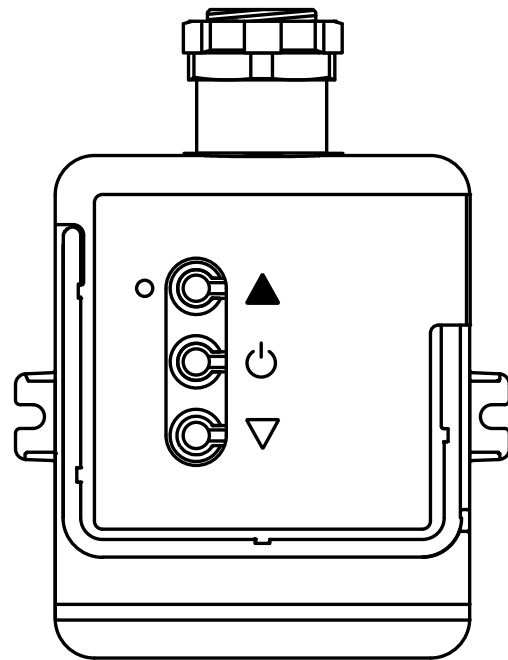
The PowPak Dimming Module with 0–10 V<sub>DC</sub> Control is a radio frequency (RF) control that operates 0–10 V<sub>DC</sub> controlled LED drivers or fluorescent ballasts based on input from Pico remote controls and Radio Powr Savr sensors. The Dimming Module with 0–10 V<sub>DC</sub> Control is ideal for small areas (e.g., classrooms, conference rooms, private offices). Communication with RF input devices (e.g., Pico remote controls, Radio Powr Savr sensors) is accomplished by using Lutron Clear Connect RF Technology.

These products are also compatible with the Vive hub which enables a simple setup process using a standard web browser on any Wi-Fi enabled phone, tablet or computer. It also enables control and monitoring of all Vive devices. The Vive hub can be added at any time. System reprogramming will be required. For a complete list of features supported with the Vive hub, see specification submittal 3691044.

**Note for Replacement:** RMKS - the “S” model can replace the non-“S” model.

### Features

- Controls up to 60 mA of 0–10 V<sub>DC</sub> controlled fixtures together
- Switches up to 8 A total
- 0–10 V<sub>DC</sub> control link automatically sources or sinks to the third-party fixtures
- Configurable high- and low-end trim
- Various operating voltages available; refer to model number chart on next page for details on voltage requirements
- Receives wireless inputs from up to 10 Pico remote controls, 10 Radio Powr Savr occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor
- Utilizes Lutron Clear Connect RF Technology; refer to model number chart below for frequency band data
- Mounts to a 100 mm x 100 mm square junction box through a 20 mm knockout



## Models

Model Number	Region	Operating Voltage	Frequency Band
RMKS-8T-DV-B	Europe	220–240 V <sub>~</sub>	868.125–868.850 MHz

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

### LUTRON SPECIFICATION SUBMITTAL

Page

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

## Specifications

### Regulatory Approvals

- CE (European Union)

### Power

- Operating voltage  
220–240 V~ 50/60 Hz

### Output Ratings

- Switch rating of 8 A. Rated for resistive or capacitive loads as defined by IEC/EN 60669-2-1
- 0–10 V<sub>DC</sub> control link for 60 mA maximum output, source or sink automatically configures

### Other Power Specifications

- Standby power:  
220–240 V~ <1.0 W
- BTU/hour when fully loaded: 9
- Works with all drivers and ballasts that provide a current source that is compliant to IEC 60629 Annex E.2, and whose inrush current does not exceed NEMA410 standards for electronic driver/ballast

### System Communication

- Operates using Clear Connect RF Technology for reliable wireless communication; refer to model number chart on page 1 for frequency band details
- Wireless sensors and controls must be located within 9 m of the associated control module.

### Metal Ceiling Tile Mounting

- Metal ceiling tile grids must have a  $\geq 3$  mm gap of non-metallic material which extends the entire length of the tile on at least one edge. This is often achieved by foam spacers that are used to prevent tile-to-tile rattling.
- Metal ceiling tile grids which are continuous (with no gap) or those that are interlocked, must have a total surface area that is less than 81 m<sup>2</sup> for each section. The overall space can be larger as long as there are non-metallic sections bordering or intersecting the metal sections.

### Environment

- Ambient operating temperature: 0 °C to 40 °C
- 0% to 90% humidity, non-condensing
- For indoor use only
- All drivers and ballasts used with Vive wireless controls must comply with EN 55015/CISPR 15

### 0–10 V<sub>DC</sub> Control Link

- Communicates with up to 60 mA of fixtures
- Control link is IEC SELV
- 0–10 V<sub>DC</sub> control can be installed using basic or double-insulated devices
- Terminals accept one 0.75 mm<sup>2</sup> to 1.5 mm<sup>2</sup> (18 AWG to 16 AWG) solid wire
- Always follow local wiring codes
- Compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E

### Default Operation

- Associated wireless input devices control all connected fixtures together
- Occupancy Sensors:
  - Occupied: 100%; Unoccupied: 0% (OFF)
- Pico Remote 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 indicator shows load status and provides programming feedback
- Configurable high-end and low-end trim
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- 0–10 V<sub>DC</sub> control mis-wire protection up to 30 V<sub>DC</sub>

<b>Job Name:</b>  <b>Job Number:</b>	<b>Model Numbers:</b>
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## Advanced Configurations

### Pico Remote Controls

- Up to 10 Pico remote controls
- Favorite levels can be set for each Pico remote control

### Radio Powr Savr Daylight Sensor

- The Radio Powr Savr daylight sensor will affect all connected LED drivers and ballast equally
- For multiple rows of daylighting, a separate PowPak Dimming Module with 0–10 V<sub>DC</sub> must be used for each daylighting row

### Minimum Light Level Setting (optional)

- Certain applications, such as hallways, may require that the lights never turn off. For these areas, select the minimum light level option and the load will lower to programed low-end level. Default operation lowers to OFF.

### High- and Low-End Trim

- High-end and low-end trim affect all connected fixtures equally, and can be configured from the PowPak Dimming Module.
- Adjustable low-end trim (0%–45%). Trimmable low-end can ensure a stable light level. Some fixtures will flicker or drop out if trimmed too low.
- The maximum light output of connected fixtures can be decreased down to 55% for energy savings in over-lit spaces.

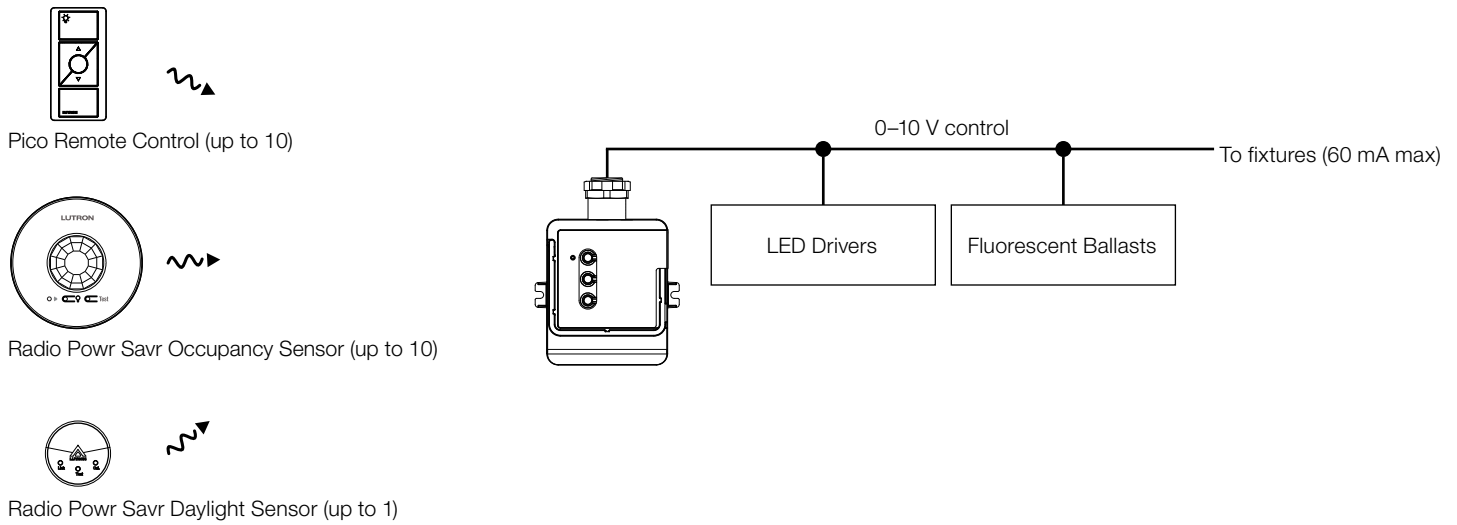
**Note:** The perceived light output of low-end trim may vary between fixture manufacturers and model numbers. For best results, do not mix different drivers or ballasts on the same 0–10 V<sub>DC</sub> circuit.

### Radio Powr Savr Occupancy Sensors

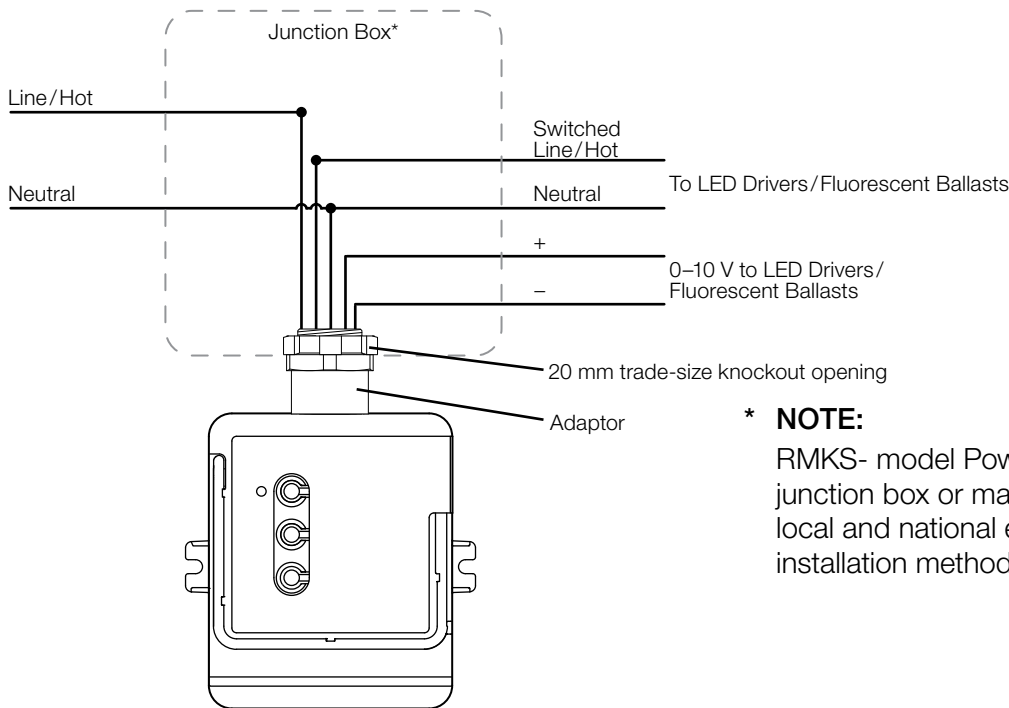
- Radio Powr Savr occupancy and vacancy sensors control all connected drivers or ballasts.
- Pico remote controls can be used to adjust the occupied levels of fixtures that they control from 1% to 100% (of output signal) or can make them unaffected by occupancy events.
- Vacancy events (area becomes unoccupied) turn all driver or ballast models off or to minimum light level.

<p><b>Job Name:</b></p> <p><b>Job Number:</b></p>	<p><b>Model Numbers:</b></p>
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### System Diagram



### Wiring Schematic

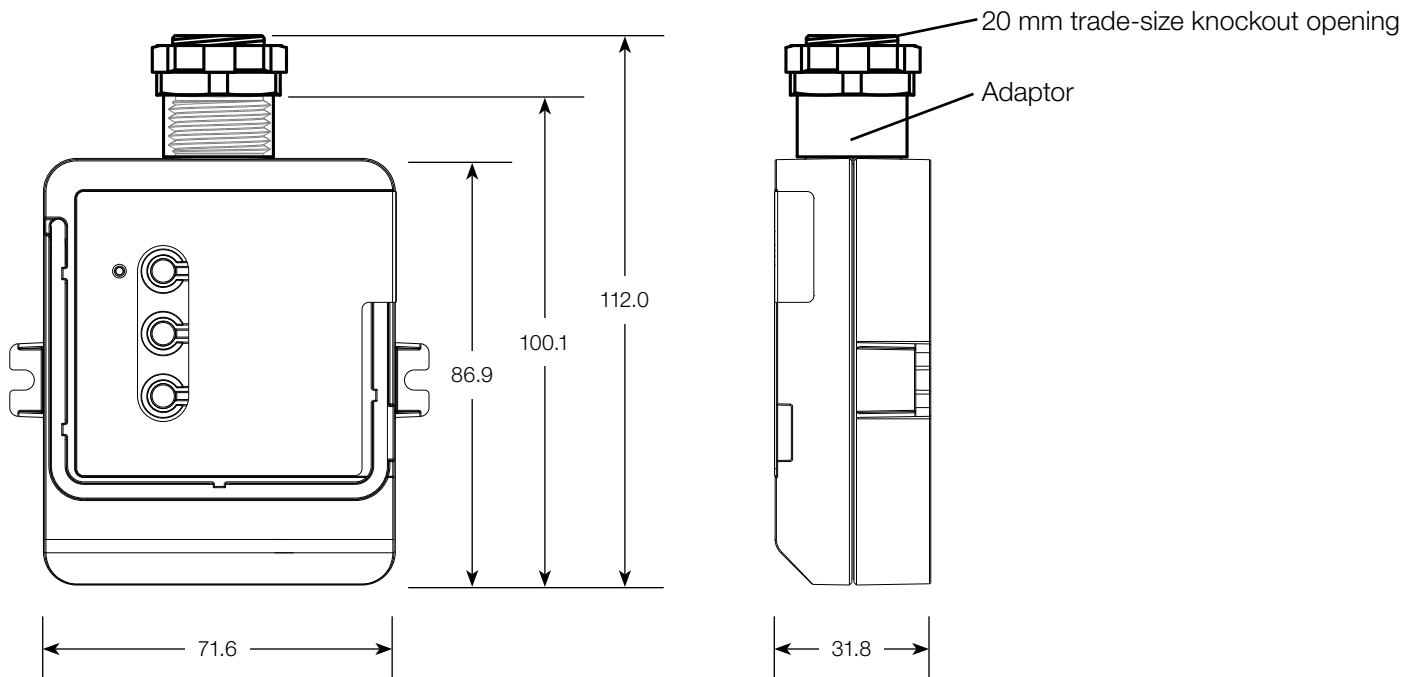


**\* NOTE:**  
 RMKS- model PowPak module can be installed in a junction box or marshalling box. Please follow all local and national electric codes for proper installation methods.

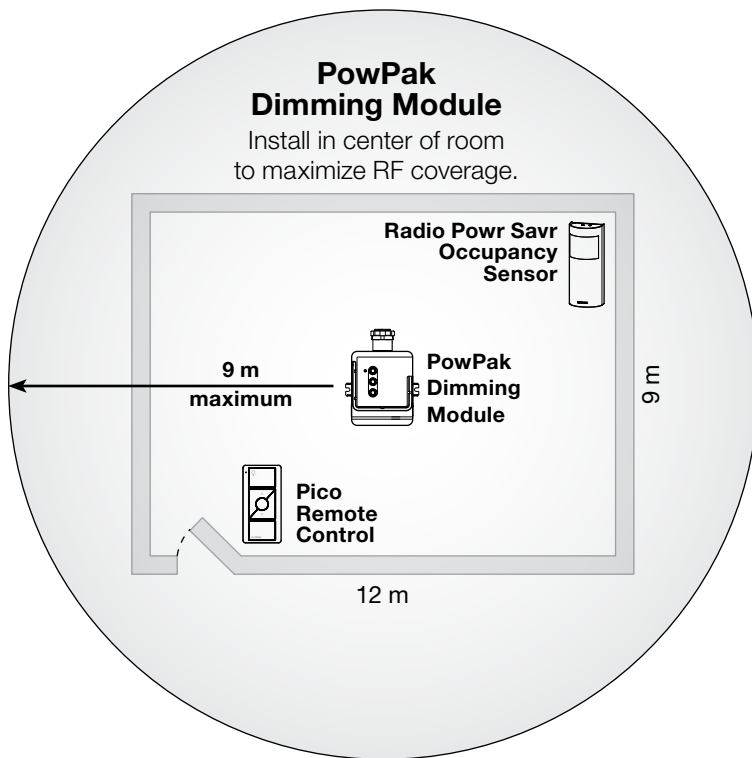
Job Name:	Model Numbers:
Job Number:	

## Dimensions

Dimensions are shown as: mm



## Range Diagram



**NOTE:** Wireless sensors and controls must be located within 9 m of the associated control module.

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Job Name:	Model Numbers:
Job Number:	