

## PP and UPP Series Power Packs

PP and UPP<sup>1</sup> Series Power Packs provide both the 24 V<sub>DC</sub> power supply to operate Lutron® wired occupancy sensors, as well as the 16 A line-voltage relay to control the load, in one compact housing. The unit can be mounted inside a ballast enclosure or inside/outside a junction box.

The manual-ON Power Pack (-DV-M) is used to provide a vacancy-only solution (not configurable for occupancy behavior) when paired with Lutron® wired occupancy sensors. A low-voltage momentary switch should be used to manually turn ON the load while the sensor automatically shuts the load OFF when unoccupied. Pressing the momentary switch can also turn the load OFF.

The auxiliary Power Pack (-SH) must be used in conjunction with at least one line-voltage Power Pack and one Lutron wired occupancy sensor to switch additional loads.

### Features

- High-impact UL94 flammability-rated plastic case construction
- Relay: Class B 266 °F (130 °C) insulating material; silver alloy contacts
- Power Pack units (PP-DV/UPP-DV, PP-347H, PP-DV-M/UPP-DV-M) power up to 3 total devices. PP-SH/UPP-SH counts as 1 device, each occupancy sensor counts as 1 device.
- For indoor use only, 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing



(-DV)  
(-DV-M [vacancy ONLY])  
(-347H)



(-SH)

Model	Power Input	Relay Contact Rating	Control Input	IEC PELV/ NEC® Class 2 Output
PP-DV UPP-DV PP-DV-M (vacancy ONLY) UPP-DV-M (vacancy ONLY)	120-277 V <sub>~</sub> 50/60 Hz 6.5 W	<ul style="list-style-type: none"> <li>• 120-277 V<sub>~</sub> 16 A; All lighting loads<sup>2</sup></li> <li>• 120-277 V<sub>~</sub> 1 HP Motor Load</li> </ul>	24 V <sub>DC</sub> 5 mA	24 V <sub>DC</sub> 150 mA up to 3 Devices <sup>3</sup>
PP-347H	347 V <sub>~</sub> 60 Hz 6.5 W	<ul style="list-style-type: none"> <li>• 347 V<sub>~</sub> 15 A Ballast</li> </ul>	24 V <sub>DC</sub> 5 mA	24 V <sub>DC</sub> 100 mA up to 3 Devices <sup>3</sup>
PP-SH UPP-SH	24 V <sub>DC</sub> (At least one line-voltage Power Pack must be used)	<ul style="list-style-type: none"> <li>• 120-277 V<sub>~</sub> 16 A; All lighting loads<sup>2</sup></li> <li>• 120-277 V<sub>~</sub> 1 HP Motor Load</li> <li>• 347 V<sub>~</sub> 15 A Ballast</li> </ul>	24 V <sub>DC</sub> 5 mA	N/A

<sup>1</sup> “U” denotes BAA compliance

<sup>2</sup> Lighting loads include (but are not limited to): Incandescent, MLV, ELV, Resistive, Inductive

<sup>3</sup> PP-SH/UPP-SH counts as 1 device and each occupancy sensor counts as 1 device

Job Name:	Model Numbers:
Job Number:	

## Specifications

### Regulatory Approvals

- UL® and cUL® Listed
- Complies with requirements for use in other spaces used for environmental air (plenums) per NEC® 2014 300.22(C)(3)

### Power / Performance

- PP-DV, UPP-DV, PP-DV-M, UPP-DV-M: 120-277 V~ 50/60 Hz
- PP-347H: 347 V~ 60 Hz only

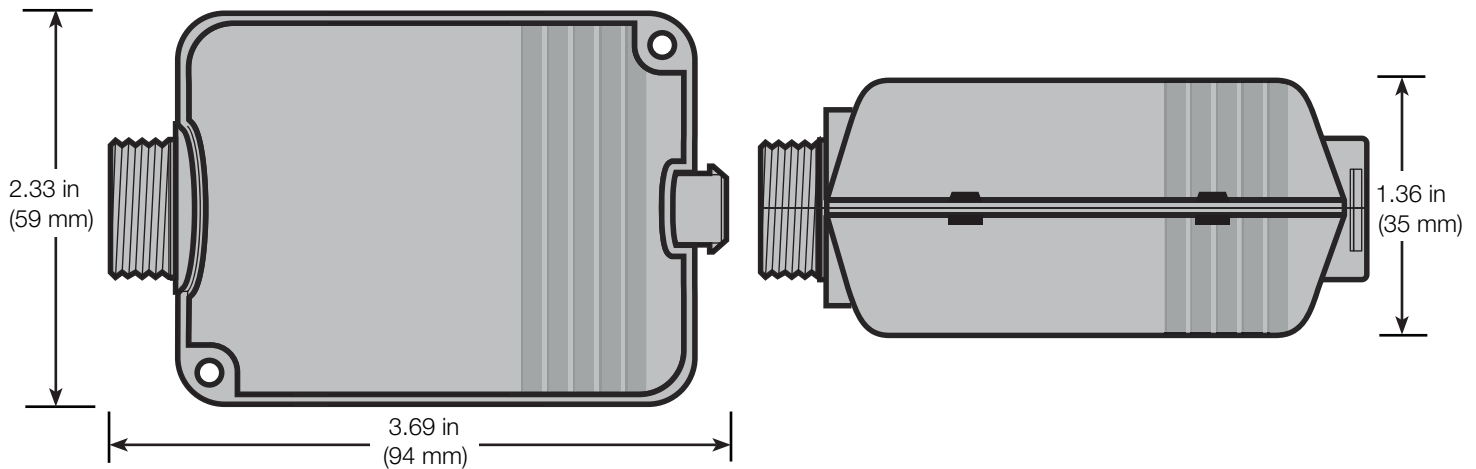
### Wiring

- 7 in (178 mm) wire leads, 18 AWG (0.75 mm<sup>2</sup>) input; 7 in (178 mm) leads, 16 AWG (1.5 mm<sup>2</sup>) contacts.

### Mounting

- Fits inside standard 4 in x 4 in (102 mm x 102 mm) junction box or standard fluorescent fixture ballast cavity
- Mount with 6/32 in (5 mm) x 1/4 in (32 mm) pan head screws
- Mounts inside junction box through knockout, with 1/2 in (13 mm) Electrical Metallic Tubing (EMT) threaded nipple. Recommended volume is 30 in<sup>3</sup> (762 mm<sup>3</sup>).

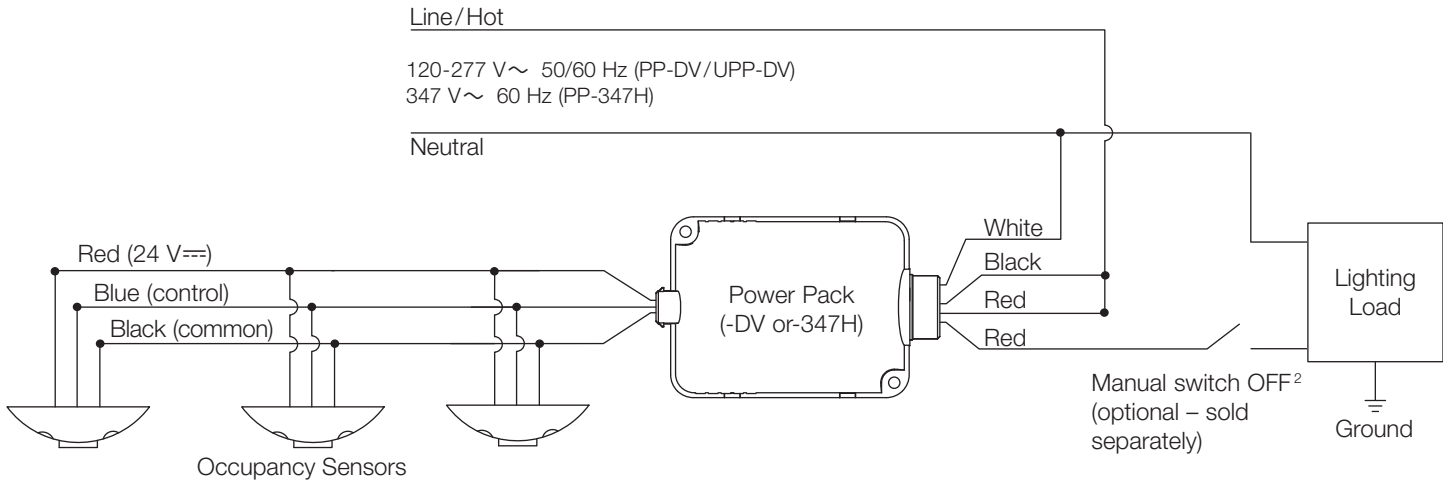
## Dimensions



<p>Job Name:</p>  <p>Job Number:</p>	<p>Model Numbers:</p>
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# Wiring

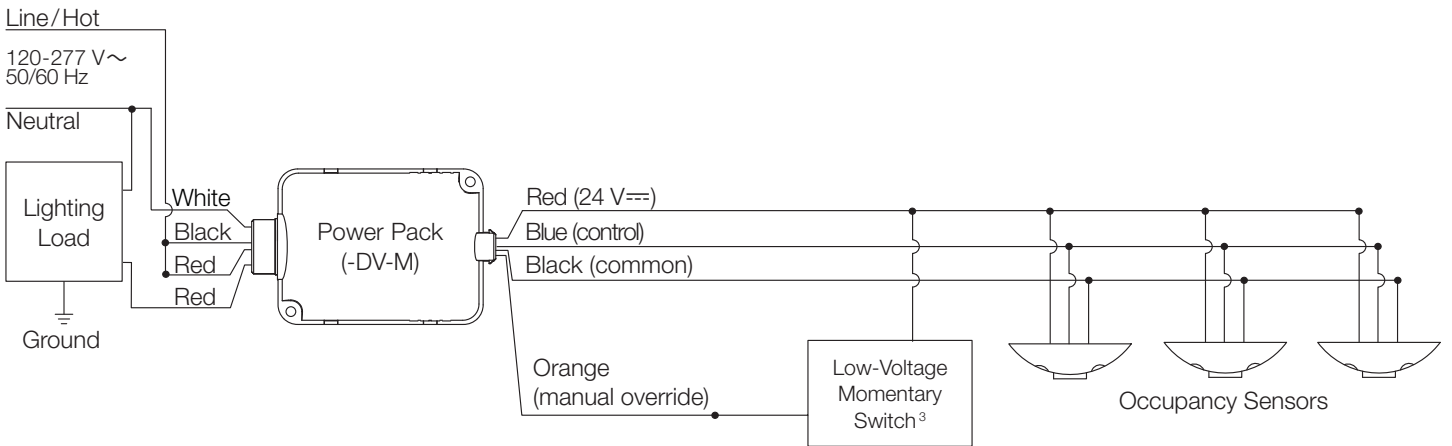
## 3 Sensors with Power Pack (PP-DV, UPP-DV or PP-347H)<sup>1</sup>



<sup>1</sup> Maximum 3 occupancy sensors can be used with PP-DV/UPP-DV or PP-347H.

<sup>2</sup> When lights are manually turned off, switch must be returned back to the on position for occupancy sensors to function as set.

## 3 Sensors with Power Pack - Vacancy-Only Solution (PP-DV-M, UPP-DV-M)<sup>1,2</sup>



<sup>1</sup> Maximum 3 devices (excluding low-voltage momentary switches) can be used with PP-DV-M/UPP-DV-M. Each PP-SH/UPP-SH counts as one device, each occupancy sensor counts as one device.

<sup>2</sup> The PP-DV-M cannot be used for occupancy functionality. It is a vacancy ONLY solution. For occupancy functionality, use the PP-DV.

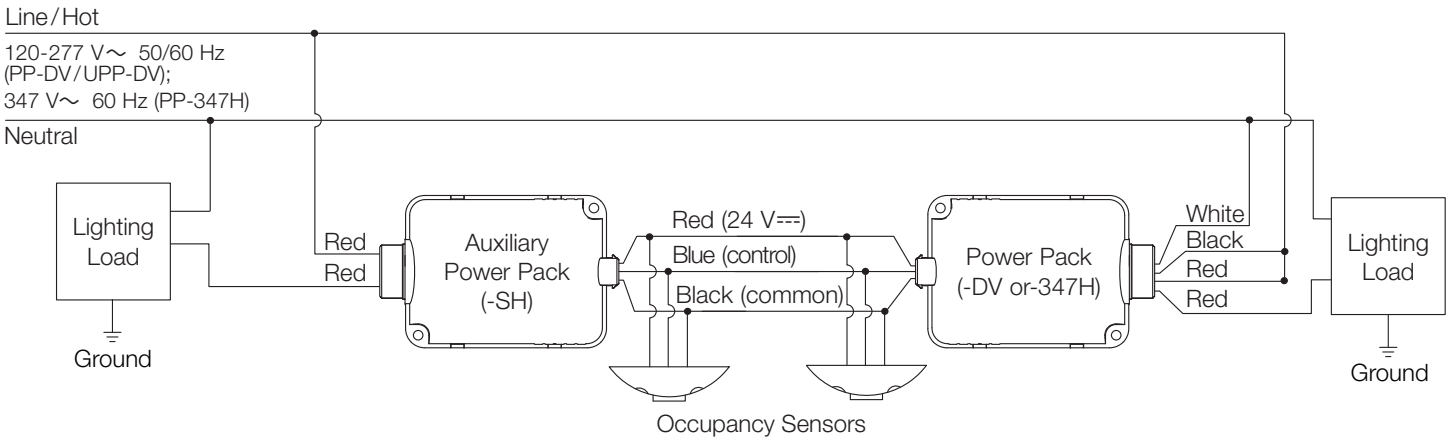
<sup>3</sup> NTRCS-1 (Nova T<sup>®</sup> momentary switch) or any low voltage momentary switch rated for at least 24 VDC, 100 mA.

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Job Name:	Model Numbers:
Job Number:	

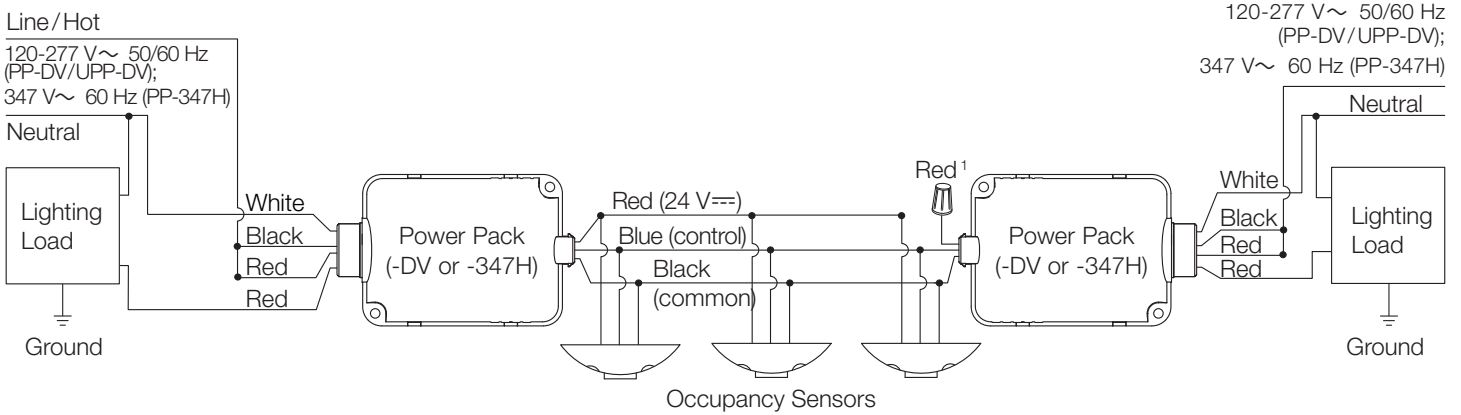
**Wiring** *(continued)*

**Switching Multiple Loads with 1 Power Pack and 1 Auxiliary Power Pack<sup>1</sup>**



<sup>1</sup> Maximum of 3 devices can be used with PP-DV, UPP-DV, or PP-347H. Each PP-SH/UPP-SH counts as one device, each occupancy sensor counts as one device.

**Switching Multiple Loads with 2 Power Packs (PP-DV/UPP-DV)**



<sup>1</sup> Only 1 Power Pack (PP-DV/UPP-DV) should power the occupancy sensors. This 24 VDC output is left disconnected.

Job Name:	Model Numbers:
Job Number:	