

BZ-150 UNIVERSAL VOLTAGE POWER PACK



This is the Wattstopper universal voltage power pack. The BZ-150 Universal Voltage Power Pack is full featured and can provide 24 VDC operating voltage to Wattstopper's low voltage occupancy sensors. In addition, the BZ-150 enables manual-on, hold-on, hold-off and load shed applications when used with lighting control panels or building management systems. This device is constructed with environmentally friendly materials and is RoHS-compliant.

The BZ-150 consists of a high-efficiency switching power supply and a high-current relay. It has an input of 120/277 VAC, 50/60Hz, and an output of 24VDC, 225mA. It turns the connected load on and off automatically based on occupancy sensor input, or manually with a low-voltage momentary switch. The dip switch setting allows the user to select Auto ON or Manual ON as the operating mode. Additional low-voltage inputs provide hold-on and hold-off features for broader applications.

- Self-contained power supply relay system
- Efficient switching power supply providing optimized current output based on number of sensors
- LED indicates status of relay or if there is a low-voltage overcurrent
- Hold-on and hold-off inputs integrate with BMS, lighting control panels & other building systems
- Integrates with low-voltage momentary switch to control

any 24VDC occupancy sensor

- The product meets the materials restrictions of RoHS
- Provides auto-on or manual-on field-selectable operating mode
- Zero crossing circuitry for reliability and increased product life
- UL 2043 plenum rated for cost-effective installation
- 1/2" snap-in nipple attaches to standard electrical enclosures through 1/2" knockouts
- 14 AWG wires on the relay for 20A operation
- BAA/TAA-compliant models available

For other items like the BZ-150 UNIVERSAL VOLTAGE POWER PACK [click here](#).

For more information on Wattstopper's line of lighting solutions [click here](#).

BZ-200 – LIGHTING & PLUG LOAD POWER PACK



This is the lighting & plug load power pack. The BZ-200 power pack switches connected loads On and Off in response to Wattstopper low voltage occupancy sensors. It also provides up to 225mA at 24VDC to power the sensors. This device is constructed with environmentally friendly materials and is RoHS-compliant.

The BZ-200 consists of a high-efficiency switching power supply and a high-current relay. It has an input of 120-277 VAC, 50/60Hz, and an integral On / Off button to switch out power, allowing the installer to quickly verify load operation. Following installation, the power pack turns the connected load On and Off automatically based on occupancy sensor input. **Check out Wattstopper DLM products [here](#).**

- Efficient switching power supply provides optimized current output based on number of sensors
- Includes short circuit and thermal protection
- LED indicates status of relay or presence of low-voltage overcurrent
- UL 2043 plenum rated for cost-effective installation
- UL listed for control of lighting and plug loads
- Tested to NEMA 410 criteria for electronic ballast and driver inrush current
- 1/2" threaded nipple attaches to standard electrical enclosures through 1/2" knockouts
- 12 AWG wires on the relay for 20A operation
- The product meets the materials restrictions of RoHS
- BAA/TAA-compliant models available

BZ-250 – LIGHTING & PLUG LOAD FLEX CONTROL POWER PACK



This is the lighting & plug load flex control power pack. The BZ-250 power pack switches lighting or plug loads On and Off in response to low voltage control inputs, and provides up to 225mA at 24VDC to power Wattstopper occupancy sensors. It enables Manual-On sequences of operation, as well as HoldOn, Hold-Off and load shed applications when used with lighting control panels or building automation systems. This device is constructed with environmentally friendly materials and is RoHS-compliant.

The BZ-250 consists of a high-efficiency switching power supply and a high-current relay. It turns the connected load Off automatically based on occupancy sensor input, and On either automatically based on occupancy, or manually in response to a low-voltage momentary switch. The installer can select Auto-On or Manual-On operation via an actuator switch on the power pack. The BZ-250 also accepts low-voltage Hold-On and Hold-Off inputs for broader applications. The BZ-250 relay can be set to open, close or maintain state prior to loss of power, so that lighting is in the preferred state (On, Off or last state) when power is restored. **Check out Wattstopper DLM products here.**

- Hold-On and Hold-Off inputs integrate with BAS, lighting control panels & other building systems
- Integrates with low-voltage momentary switch to control any 24VDC occupancy sensor
- Field-selectable Auto-On or Manual-On operation
- Efficient switching power supply provides optimized current output based on number of sensors
- Includes short circuit and thermal protection
- LED indicates status of relay or presence of low-voltage overcurrent
- UL 2043 plenum rated for cost-effective installation
- UL listed for control of lighting and plug loads
- Tested to NEMA 410 criteria for electronic ballast and driver inrush current

- 1/2" threaded nipple attaches to standard electrical enclosures through 1/2" knockouts
 - 12 AWG wires on the relay for 20A operation
 - The product meets the materials restrictions of RoHS
 - BAA/TAA-compliant models available
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LQRJ-WPM-6P — WALLBOX POWER MODULE



Wallbox Power Module

The Wallbox Power Module controls up to six zones of light and will operate the following sources with a continuous Square Law dimming curve or on a full conduction non-dim basis:

Check out the [RadioRA 2 collection here.](#)

- Incandescent
- LED
- Tungsten Halogen
- Electronic Low-Voltage (ELV)
- Magnetic Low-Voltage (MLV) Transformer
- Metal Halide / High Pressure Sodium Switched
- Neon/Cold Cathode
- LutronR Tu-WireR Electronic Fluorescent Dimming Ballasts
- Approved LED and CFL lamps / fixtures
- Up to 64 DALI compliant output devices (devices must

comply with IEC/EN 60929) can be addressed and grouped into zones (LQRK-WPM-6D and LQR-WPM-6D only). The Power Module can be configured for wired, QS link (HomeWorksR QS only), or wireless, RF link (HomeWorksR QS and RadioRAR 2), communication.

MP20 – SENSOR SWITCH POWER PACK / SECONDARY PACK



The MP20 power/relay pack and MSP20 secondary relay pack work with low voltage occupancy sensors to switch lighting loads on and off. The MP20 also transforms 120, 240, and 277 VAC single phase power to Class 2 15 VDC to power remote sensors. Although plenum rated, the elongated mounting nipple allows for these packs to be mounted either directly through a 1/2 inch knockout in a junction box, or to be located inside an adjacent box for specific local code requirements. Up to 14 sensors may be connected to one MP20. Multi-circuit control can be handled by multiple MP20 or MSP20 packs. MP20s can be wired continuously hot (line side), it's leg (load side) without nuisance delays upon turn on.

FEATURES

- Powers Low Voltage Sensors (MP20)
- Switches Line Voltage Loads
- Plenum Rated

PHPM-PA-120-WH — PHASE-ADAPTIVE POWER MODULE



- Provides capability for a zone on a GRAFIK Eye control unit (or other product) to dim a fully loaded circuit of lighting.
 - May be used to control incandescent, electronic low-voltage, magnetic low-voltage, and neon/cold cathode lighting sources, as well as Lutron Tu-Wire fluorescent dimming ballasts.
 - Automatically selects leading-edge or trailing-edge dimming for low-voltage transformers.
 - Provides power and dimming for one zone.
 - Up to 3 power modules may be wired on a single GRAFIK Eye zone.
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PHPM-PA-DV-WH — DUAL VOLTAGE PHASE-ADAPTIVE POWER MODULE



- Provides capability for a zone on a GRAFIK Eye control unit (or other product) to dim a fully loaded circuit of lighting.
- May be used to control incandescent, electronic low-voltage, magnetic low-voltage, and neon/cold cathode lighting sources, as well as Lutron Tu-Wire fluorescent dimming ballasts.
- Automatically selects leading-edge or trailing-edge dimming for low-voltage transformers.
- Provides power and dimming for one zone.
- Up to 3 power modules may be wired on a single GRAFIK Eye zone.

PP 20 — SWITCH POWER PACK SINGLE POLE



Power packs are the heart of the low voltage sensor system. A PP20 Series power pack transforms Class I high voltage (120/277 VAC or 347 VAC) to Class 2 15 VDC for powering remote sensors. The PP20 and the SP20 Series slave pack are also capable of switching lighting loads on and off using their internal relays. Class 2 wire leads connect to 18 to 22 AWG low voltage cable running to the sensors, making installation easy and clean. Power packs also have an elongated chase nipple that allows it to be mounted either directly through a $\frac{1}{2}$ inch knockout into a junction box, or inside an adjacent box for meeting specific local code requirements in ceiling plenums.

The most versatile power pack is the PP20, which utilizes a patented relay contact protection and can power up to 14 sensors. Dual-circuit control can be handled by two PP20's, one PP20 2P Series 2-Pole power pack, or a PP20 power pack and a SP20 slave packs.

FEATURES

- Powers Low Voltage Sensors (PP20/PP20 2P only)
 - Self-Contained Relay(s) Switch Line Voltage Loads
 - Relay Contact Protection
 - Plenum Rated
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PP-DV — DUAL VOLTAGE POWER PACKS



PP and UPP 1 Series Power Packs provide both the 24 V- 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

PP20 2P – SWITCH POWER PACK 2-POLE



Power packs are the heart of the low voltage sensor system. A PP20 Series power pack transforms Class I high voltage (120/277 VAC or 347 VAC) to Class 2 15 VDC for powering remote sensors. The PP20 and the SP20 Series slave pack are also capable of switching lighting loads on and off using their internal relays. Class 2 wire leads connect to 18 to 22 AWG low voltage cable running to the sensors, making installation easy and clean. Power packs also have an elongated chase nipple that allows it to be mounted either directly through a $\frac{1}{2}$ inch knockout into a junction box, or inside an adjacent box for meeting specific local code requirements in ceiling plenums.

The most versatile power pack is the PP20, which utilizes a patented relay contact protection and can power up to 14 sensors. Dual-circuit control can be handled by two PP20's, one PP20 2P Series 2-Pole power pack, or a PP20 power pack and a SP20 slave packs.

FEATURES

- Powers Low Voltage Sensors (PP20/PP20 2P only)
- Self-Contained Relay(s) Switch Line Voltage Loads

- Relay Contact Protection
 - Plenum Rated
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RMJS-CC01-24-B – VIVE POWPAK CC0 MODULE (DRY CONTACT)



This is a Vive PowPak CC0 Module (Dry Contact). The Maestro Wireless solution incorporates Maestro Wireless load controls, wireless sensors, and wireless remote controls, which provide a system that delivers energy savings, convenience, and ease of installation. Maestro Wireless dimmers and switches use Lutron patented Clear Connect RF Technology, which enables wireless communication with Radio Powr Savr sensors and Pico remote controls for light control and general switched loads. 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 and preserves existing system setup by extracting local programming from each device. For a complete list of features supported with the Vive hub, call Lite Rite Controls. Note for Replacement: MRF2S – the “S” model can replace the non-“S” model. **Click here to see the Lutron Vive story.**

HIGHLIGHTS:

- The Vive PowPak CC0 Module (Dry Contact) provides low-voltage radio frequency control.
- Lutron patented Clear Connect RF Technology works through walls and floors.
- Controls include Front Accessible Service Switch (FASSTM) for safe lamp replacement.
- Two-wire installation for any retrofit application.
- Power failure memory: If power is interrupted, the control will return to its previously set level prior to interruption.

System Communications and Capacity

- Maestro Wireless controls communicate with the Pico remote controls and Radio Power Savr
- sensors through radio frequency (RF).
- Receives wireless inputs from up to 10 Pico remote controls, 10 Radio Powr Savr occupancy / vacancy sensors, and 1 Radio Powr Savr daylight sensor
- Maestro Wireless local controls must be located within 60 ft. (18 m) line of sight or 30 ft. (9 m) through walls, of Radio Power Savr sensors.
- Maestro Wireless local controls must be located within 60 ft. (18 m) line of sight or 30 ft. (9 m)
- through walls, of a Pico remote control.
- Up to 10 Maestro Wireless controls can be configured to work together.
- Sensors can be assigned to multiple switches.

S120/277/347E-P — B347D-P

Power and Auxiliary Relay Packs



WattStopper B347D-P Power Packs provide 24VDC operating voltage to all WattStopper 24VDC occupancy sensors and daylighting controllers. Auxiliary Relay Packs are similar to power packs, but only have an isolated relay and no transformer power supply.

B347D-P Power Packs consist of a transformer and high-current relay combined in one small, powerful package. The transformer has a primary high voltage input and a secondary, low voltage output (24 VDC, 114 mA with relay connected). The secondary voltage provides operating power to WattStopper sensors. When the occupancy sensors detect motion or daylighting sensors detect inadequate ambient light, they electrically close an internal circuit, which sends 24 VDC back to the Power or Auxiliary Relay Packs that control the lighting system.

- Self-contained transformer relay system
- Available for 347 volt systems
- Capable of switching up to 20 Amps of electrical load (ballast) at 120/277V for S120/277/347 models, 15A at 347V for all models
- Low voltage leads are teflon coated for use in plenum applications
- Can be used as a low voltage switch for other applications or as stand-alone, low voltage switch
- 1/2 inch snap-in nipple attaches to standard electrical

enclosures via 1/2 inch knockouts

- Installation in junction box not required
- Qualifies for ARRA-funded public works projects