

OVERVIEW

The nLight AIR rPP family of power packs are lighting control devices designed to offer flexible control for commercial and industrial lighting applications. The rPP consists of a relay, 0-10V dimming control, and a low voltage power supply output to power and wireless switches and sensors. The rPP is capable of switching loads up to 20 A via a latching relay designed with robust inrush protection from the harsh switching requirements of fluorescent and LED loads. Select power packs provide +24VDC low voltage output to power up to 4 nLight AIR mounted occupancy sensors and photocells. The nLight AIR rPP is designed for use as part of an nLight AIR group of devices or with nLight Eclipse.

FEATURES

- Communicates with nLight AIR luminaires, switches and sensors as part of lighting control groups
- Handheld smartphone/tablet programming of groups and behavior via Clairity iOS or Android app
- Interfaces with nLight Eclipse as part of a fully networked system to support features such as scheduling, demand response, and web-based software applications
- Works with nLight AIR wallpods, occupancy sensors, and photocell devices
- Non-volatile memory retains programming during power outage
- Suitable for plug load control
- UL924 listed option for simplified lighting control on emergency lighting circuits
- User button for self-test and CIAIRity beaconing capabilities
- Communicates with nLight ECLYPSE, with support for up to 128 devices per each wireless group.
- Provides BLE beaconing
- UL2043 listed for plenum applications
- DS and non-dimming options supply 24VDC to power up to 4 rCM nLight AIR low voltage sensors

Warranty

Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

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nLight® AIR
rPP20
Power/Relay Pack



ORDERING INFORMATION

Example: rPP20 DS 24V G2			
Series	Dimming and Low Voltage Output	Emergency	Generation
RPP20 nLight Air Power/Relay Pack	24V No dimming, 24V Output Terminals D 0-10VDC Dimming output (via chase nipple), no 24V Output Terminals DS 24V 0-10VDC Dimming output (via side leads), 24V Output Terminals	[blank] None ER UL924 Emergency Operation, via power sense leads EM UL924 Emergency Operation, via power interrupt detection	G2 Generation 2 compatibility

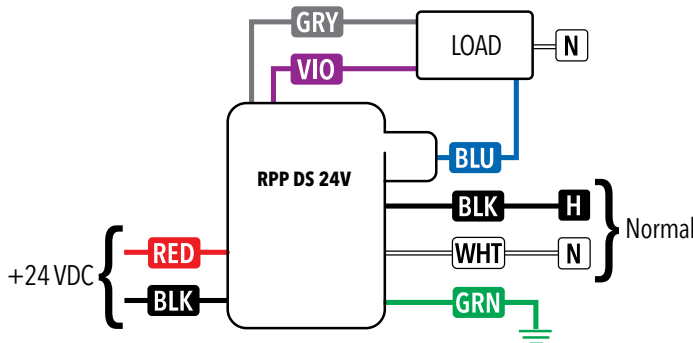
SPECIFICATIONS

Size: (not including 1/2" chase nipple) 3.38" H x 2.53" W x 1.83" D (8.59 cm x 6.43 cm x 4.65 cm)
 Weight: 6 oz
 Mounting: 1/2" Knockout
 Color: White (standard), Red (ER)
 Temperature: -10°C to 60°C up to 5 amps; -10°C to 50°C up to 20 amps
 Humidity: 5 to 95% non-condensing
 Location: Damp Location Rating
 Wires: Line and load 12 AWG stranded
 Neutral, ground, and power sense (ER version)
 18 AWG stranded
 0-10V, 20 AWG stranded
 Operating Voltage: 120-277VAC
 Max Load: 20A general purpose, tungsten and standard ballast; 16A electronic ballast
 Motor Load: 1/2 HP
 Relay type: Latching
 Frequency: 50/60Hz

DC Output Terminals: Push-in Terminals, solid or tinned 16-20AWG
 DC Output Voltage/Current: 24 VDC, 100 mA max output
 0-10V Dimming: Sinks 100mA; 0-10VDC dimmable ballasts or LED drivers; "D" 0-10V leads Class 1, "DS" 0-10V leads Class 2
 Radio Frequencies: 900 MHz up to +20dBm, 2.4 GHz up to +10 dBm
 Wireless Standard: 900 MHz: IEEE 802.15.4-based; 2.4 GHz: Version 4.0+ of the Bluetooth specification
 Wireless Range: 900 MHz: Up to 1000 ft. (~304m) in free space / line of sight, 400-600 ft. through obstruction depending on building construction; 2.4 GHz: up to 60 ft. (~18m) in free space/line of sight
 Security: Application Data Encryption AES-128 bit, Mutual Entity Authentication, Message Confidentiality, Message Authentication and Replay Prevention, Limited Anonymity
 FCC/IC IDs: FCC: 2ADCB-RMODIT
 IC: 6715C-RMODIT

WIRING (Do not wire hot)

RPP DS 24V

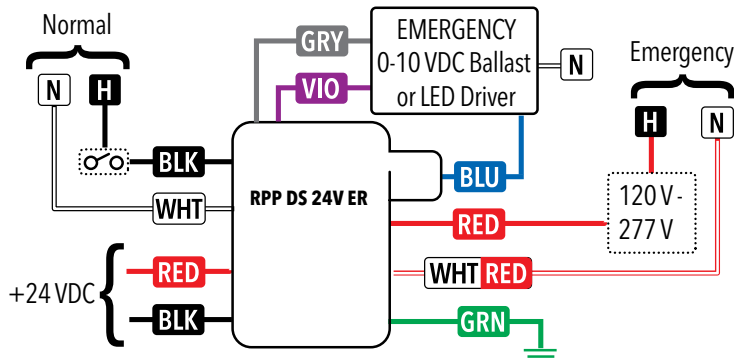


Legend

BLK - Unswitched Hot 120-277V
 WHT - Neutral
 BLU - Switched Output
 VIO - 0-10V Dim
 GRY - 0-10V Common
 RED (Terminal) - +24VDC
 BLK (Terminal) - DC Common
 GRN - Ground

WIRING FOR EMERGENCY (-ER) UNITS

RPP D/DS 24V ER



Legend

RED - 120-277VAC Emer. Hot
 WHT/RED - Emer. Neutral
 BLK - Unswitched Norm. Hot
 WHT - Norm. Neutral
 BLU - Switched Output
 VIO - 0-10V Dim (+)
 GRY - 0-10V Com (-)
 RED (Terminal) - +24VDC
 BLK (Terminal) - DC Com
 GRN - Ground
 [Optional Test Switch] - Optional Test Switch (by others)

UL924 Sequence of Operation:

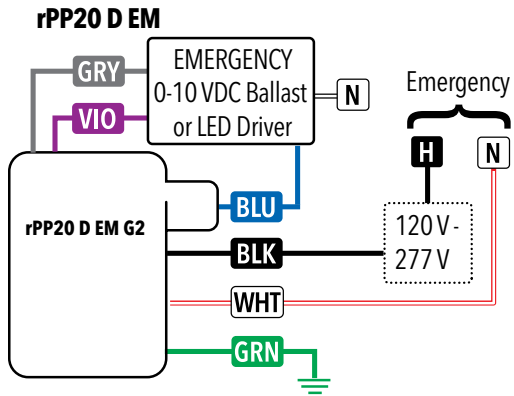
When normal power sense leads have absence of voltage

- Relay is closed and 0-10V dimming is at high end trim level
- Device ignores wireless lighting control commands
- 24VDC output is disabled

NOTES:

1. 24VDC output terminals only available on DS, non-dimming

WIRING FOR EMERGENCY (-EM) UNITS



Legend

BLK- 120-277VAC Emergency Hot
 WHT - Emergency Neutral
 BLU- Switched Output
 VIO - 0-10V Dimming (+)
 GRY - 0-10V Common (-)
 GRN - Ground

UL924 Sequence of Operation (EM Option):

For 90 minutes following any complete AC power interruption >30 ms:

- * Relay is closed and 0-10V dimming is at high end trim level
- * Device ignores wireless lighting control commands