

OVERVIEW

The XPoint Wireless family of Relay Packs (XPA RP20) are lighting control devices designed to offer flexible control for commercial and industrial lighting applications. The XPA RP20 consists of a relay, 0-10V dimming control, and interface to an XPoint Wireless network. The XPA RP20 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. Two UL924 listed options are available that provide full light output under loss of normal power.

FEATURES

- Communicates with XPoint Wireless luminaires, sensors, sensor interfaces via a wireless mesh network
- Works with XPoint Wireless Bridge and nLight ECLYPSE as part of a fully networked system to support features such as scheduling, demand response, and web-based software applications
- Suitable for plug load control
- Non-volatile memory retains programming during power outage
- Power measurement for live and historical monitoring of controlled load, includes power factor adjustment to report active power
- UL924 listed options for simplified lighting control on emergency lighting circuits: "ER" option intended for use on emergency circuit using normal power circuit sensing leads, "EM" option intended for use on circuit with emergency backup power with AC voltage interruption during transfer – see UL924 Application Note for additional details.
- User button for self-test and factory reset capabilities
- UL2043 listed for plenum applications

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.



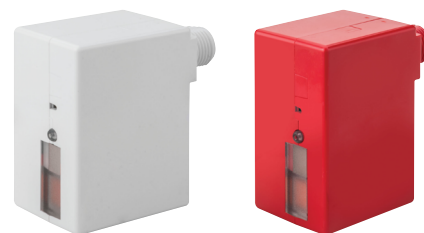
This item is an A+ capable component, which has been designed and tested to provide out-of-the-box luminaire compatibility with simple commissioning, when included as part of an A+ Certified™ Solution.

To learn more about A+, visit www.acuitybrands.com/aplus.



XPoint™ Wireless

XPA RP20 Relay Pack



ORDERING INFORMATION

Example: XPA RP20 D

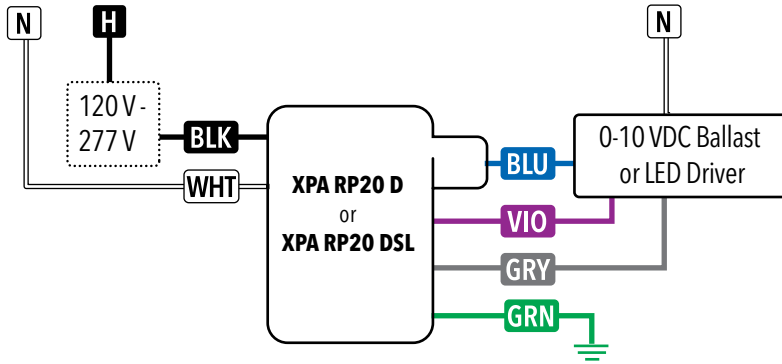
Series	Dimming	Emergency
XPA RP20 Power/Relay Pack	D 0-10VDC Dimming output (via chase nipple) DSL 0-10VDC Dimming output (via side leads)	[blank] None ER UL924 Emergency Operation , via power sense leads EM UL924 Emergency Operation, via power interrupt detection

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 (EM, ER)
Temperature:	-10°C to 60°C up to 12A; -10°C to 50°C 12A to 20A
Humidity:	20 to 90 % non-condensing
Location:	Damp Location Rating
Wires:	5", line voltage 14AWG stranded, low voltage 18AWG stranded
Operating Voltage:	120-277VAC, 50/60 Hz
Max Load:	20A @ 120-277V, Standard Ballast, Tungsten, General Purpose 16A @ 120-277V Electronic Ballast
Motor Load:	1/2 HP
Relay type:	Latching
Power Measurement Accuracy:	+/- 3% measurement of active power
0-10V dimming	Current sinking up to 100 mA; Default trim 1.0 - 9.3VDC (software adjustable from 0.1 to 10.0VDC); Linear control; electrically isolated output
Radio Frequencies:	2.4 GHz up to +18.5 dBm
Wireless Standard:	IEEE 802.15.4-based
Wireless Range:	30' to/from enclosed XPoint Wireless device (e.g., controller internally mounted in luminaire) 60' to/from un-enclosed XPoint Wireless device (e.g., relay pack or sensor externally mounted to junction box/luminaire) Consult with factory to request approval for longer spacings as performance varies with site conditions.
Security:	Application Data Encryption AES-128 bit, Message Authentication and Replay Prevention
FCC/IC IDs:	FCC: 2ADCB-XPMOD; IC: 6715C-XPMOD
Out of Box Operation:	Relay closed and dimming at 100% default output until added to a wireless group.

WIRING (Do not wire hot)

XPA RP20 D/DSL

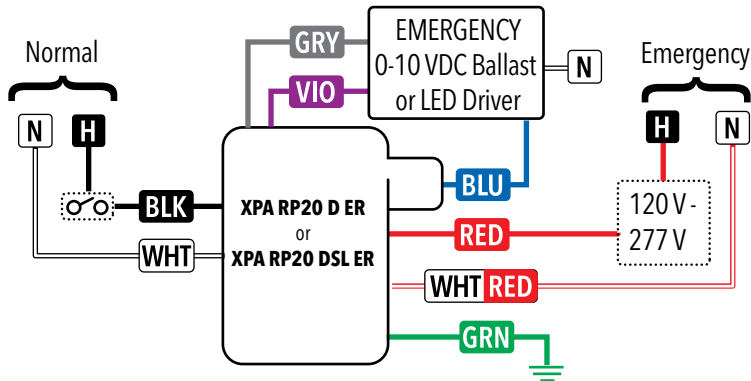


Legend

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

WIRING FOR EMERGENCY (-ER) UNITS

XPA RP20 D/DSL ER



Legend

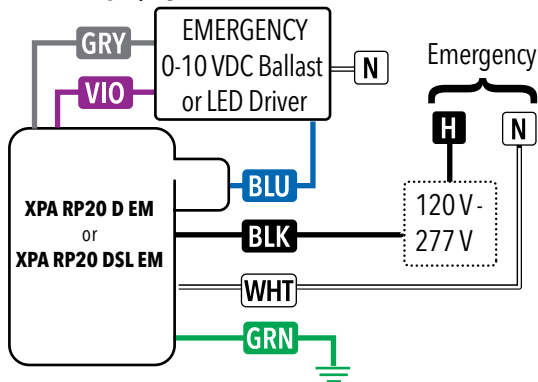
RED - 120-277VAC Emergency Hot
WHT/RED - Emergency Neutral
BLK - Unswitched Normal Hot
WHT - Normal Neutral
BLU - Switched Output
VIO - 0-10V Dimming (+)
GRY - 0-10V Common (-)
GRN - Ground
ⓘ - Normally Closed Test Switch (Optional, by others)

UL924 Sequence of Operation (ER Option):

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

XPA RP20 D/DSL EM



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

RECOMMENDED CONTROLLER SPECIFICATION OPTION FOR EMERGENCY LIGHTING STRATEGY

The following table provides a summary of the recommended control device specification option for use with a given emergency lighting strategy. For complete specification and application guidance, including example wiring diagrams, consult Application Note "Using XPoint Wireless Devices with Emergency Lighting," downloadable from [XPoint Wireless System Resources webpage](#).

Emergency Lighting Strategy	Recommended Control Device Option
<ul style="list-style-type: none">• Diesel genset emergency backup supply• Slow transfer inverter (> 30 ms) emergency backup supply	"EM" Option <ul style="list-style-type: none">• UL924 Listed.• Utilizes Power Interruption Detection to initiate lighting control override during loss of normal power scenarios.• Requires power interruption > 30 ms to luminaire during transfer to emergency backup supply.
<ul style="list-style-type: none">• Fast Transfer (FT) inverter emergency backup supply• Uninterruptible Power System (UPS) emergency backup supply	"ER" Option (UL 924 Listed) <ul style="list-style-type: none">• UL924 Listed.• Utilizes dedicated Normal Power sensing leads to initiate lighting control override during loss of normal power scenarios.• Requires connections to both emergency and normal power circuits.
<ul style="list-style-type: none">• Luminaire-integral Battery Pack (BP) and emergency driver• Luminaire-integral AC micro-inverter• Generator Transfer Device (GTD)• Emergency Bypass Relay (separate from integral control device)	Standard Option <ul style="list-style-type: none">• Not specifically listed for emergency use.• Wired such that a separately listed emergency device provides emergency lighting power and/or control during loss of normal power scenarios.