Catalog Number: Date: Project

# **OVERVIEW**

The nLight nPS 80 EZ dimming pack controls LED luminaires with 0-10V LED drivers from eldoLED. This smart device results in the luminaire being "nLight enabled" - making it both addressable as well as capable of digitally communicating with other nLight enabled controls such as occupancy sensors, photocells, and WallPods. This allows for advanced operation and design flexibility ranging from standalone rooms to building and campus-wide networks.

The nPS 80 EZ device also provides energy saving lumen management. With lumen management the device actively manages the luminaires LED light output such that constant lumen output is maintained over system life, thus preventing the energy waste created by the traditional practice of over-lighting.

An nPS 80 EZ is compatible with all eldoLED 0-10V drivers, however a nIO EZ PH device is also an option for controlling eldoLED ECOdrive (1%) family drivers with an auxiliary power output.

### **FEATURES**

- Optimized for eldoLED drivers
- Supplies nLight bus power
- Remotely configurable/upgradeable
- Push-button programmable
- Plenum rated

# **SPECIFICATIONS**

Size: (not including ½" 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, (7/8" hole) on box or fixture

Color: White (standard)

Red (ER)

Network connection: (2) RJ45 ports

Bus Power Contribution: ~ 40 mA / port (non-ER units only)
Max Dimming Load: Sinks 75mA; 0-10VDC drivers
Wires (all wires 600V rated): Standard: 20 AWG (2), 18 AWG (4)
ER Version: 20 AWG (2), 18 AWG (6)

RoHS Compliant, Title 24 System Component

## 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.



nLight<sub>®</sub>

nPS 80 EZ Dimming Power Pack





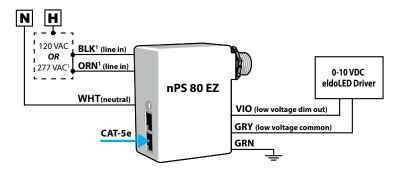
# ORDERING INFORMATION

nPS 80 EZ Example: nPS 80 EZ ER LT								
Series	Emergency		Voltage		Lumen Compensation		Temp/Humidity	
nPS 80 EZ	[blank] ER	Standard Emergency	[blank] 347	120/277VAC 120/347VAC	[blank] N80	Lumen comp. (disabled by default) Lumen comp. (enabled by default)	[blank] LT	Standard Low temp

# **WIRING (DO NOT WIRE HOT)**

T568B pin/pair assignment is recommended for all CAT-5e cables. For Supply Connections, use 14 AWG or larger wires rated for at least 75° C.

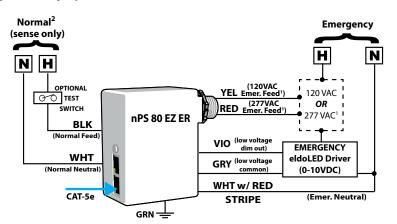
#### Diagram for standard units



#### Notes

1) BLK - 120 VAC, ORN - 277 VAC (or 347 VAC if unit has 347 option)

### Diagram for emergency units

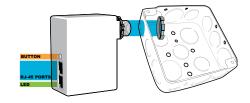


#### Notes

1) YEL - 120 VAC; RED - 277 VAC (or optional 347 VAC) 2) Normal Power connection can sense 120-347VAC

# **INSTALLATION INSTRUCTIONS**

- Mount through a ½" knockout in any junction box or luminaire. Secure with lock nut.
- Following above wiring diagram, connect wires to line voltage feed(s), neutral(s), and load.
- Connect low voltage violet and gray dimming wires to 0-10 VDC driver leads and green wire to an
  approved ground connection. Note wires have 600V rated insulation.
- Interconnect unit (via RJ-45 ports) with other nLight devices in lighting zone using CAT-5e cables.



# **ADDITIONAL EMERGENCY (-ER) INSTRUCTIONS**

# **OPERATION:**

A nPS 80 EZ Family device does not switch power. To turn a luminaire off the device dims the 0-10VDC line down below 0.3mV in order activate the "sleep" mode of the eldoLED driver. To control fixtures powered from emergency, the nPS 80 EZ ER emergency unit must be used and provided with a normal power feed in order to monitor when normal power has been lost. When the unit senses loss of normal power, it will automatically return the luminaire to full bright, regardless of current state or sensor status. Operation complies with UL924 guidelines, however since the nPS 80 EZ ER does not actually switch power to the fixture, a UL924 listing is not required for the device.

#### **PUSH-BUTTON TESTING**

As long as the unit is in the lights off status and normal power is present, you are able to simulate normal power being lost by pressing and releasing the unit's push-button one time. After a few seconds the dimming level will go high for 4 secs, then return to lights off operation. A separate push-button test switch (not included) can also be wired in as shown in above diagrams.

# **INTERFACING WITH A FIRE ALARM PANEL:**

To interface unit to a fire alarm system such that the lights are overridden upon activation of the fire alarm system, the following setup must be used. The fire alarm system must provide a normally closed relay which opens when the fire alarm system is activated. This relay must be put in series with the Black power sense line on the nPS 80 EZ ER. When the normally closed relay opens, the nPS 80 EZ ER will raise lights to full bright to provide egress lighting when the fire alarm system is activated.