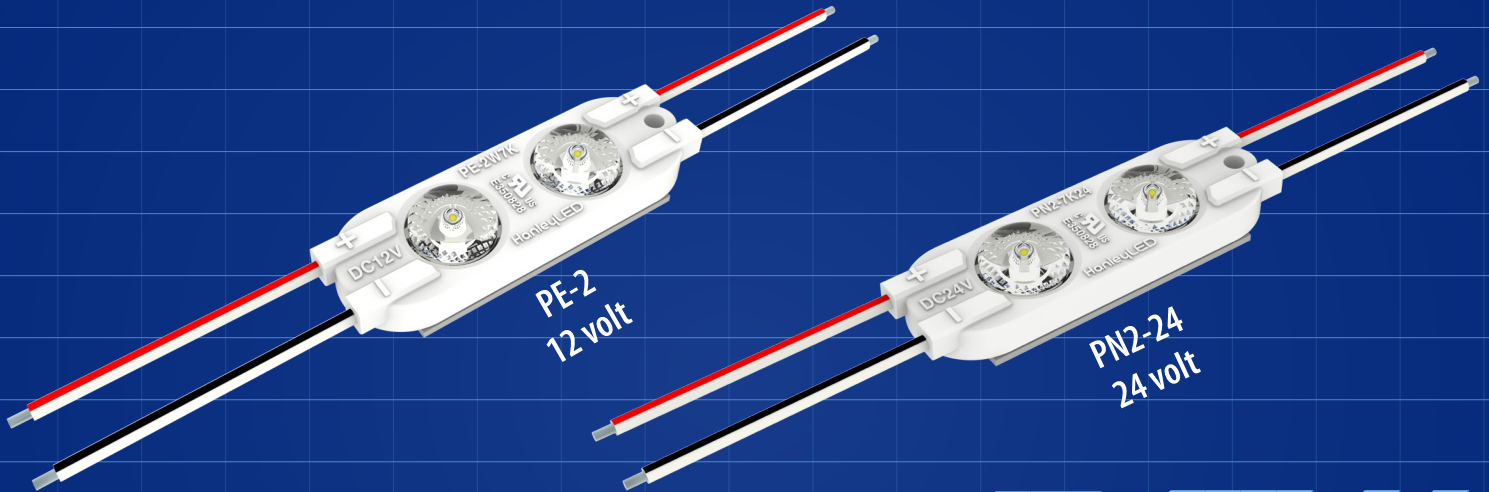


HanleyLED™



PHOENIXNRG II

Want to make your shop Highly Efficient, too?

Reduce install mistakes and improve efficiency by transforming your shop with our 24volt System. With our 24volt PhxNRG MODULES, our 24volt PhxNRG BARS & 24volt Wing Span products, you only need 24volt Hanley Premium Power Supplies stocked in your shop.

- Game Saving Solution, made with High Efficiency Everything!
- 161 Modules Max per 100W Hanley Premium Power Supply (cuts at least 1 power supply per sign, on average)
- 50% brighter output
- Better spacing with High Efficiency Phoenix Lens
- Less labor installing less modules & power supplies
- PhxNRG II is available in both 12-volt & 24-volt options
- Guaranteed Life over 50,000 hours
- DIY Layout Creator at hanleyledsolutions.com (Available in English, Spanish and French)
- See our PhxNRG I, III & IV modules for even more savings & versatility

LM79

LM80

L70:5+ YEARS

UL US
E 350828

CLASSIFIED
UL US
E487794

CC
constant
current

2.5"-10"
ideal depth

170
lm/W

warranty
7^P5^L

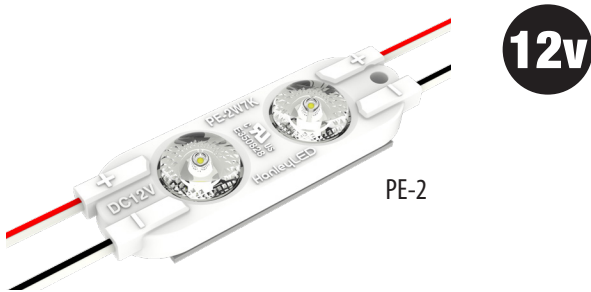
H^e
HIGH
EFFICIENCY

12v

24v

PhoenixNRG Series

PE-2 & PN2-24



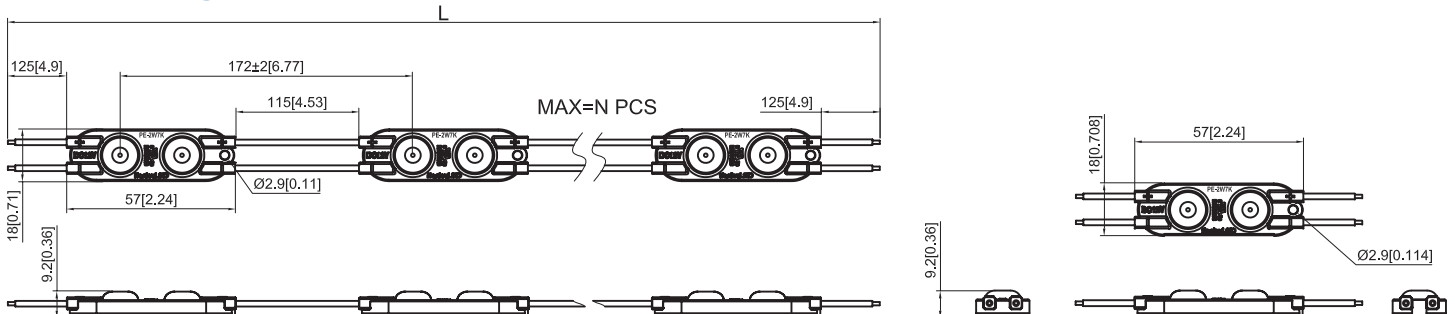
Specifications

Viewing Angle	170° High Efficiency Optics
Input Voltage	12vDC (PE-2) 24v DC (PN2-24)
Watts	.62w/mod (1.09w/ft.)
Luminous Efficacy	170 (lm/W)
Modules/Foot	1.77/ft. fully stretched
Protection Grade	IP65 water proof
Packaging	Anti-static bag, 80 modules (45 ft)/bag 7 bags/inner carton 14 bags/outer carton
Warranty	7 Year (Product) / 5 Year (Labor)
Operating Temp.	-40° ~ +60 °C / -40° ~ +140 °F
Storage Temp.	-40° ~ -70 °C / -40° ~ +158 °F
PE-2 Cascade	40mods single-ended power feed 80mods double-ended power feed
PN2-24 Cascade	80mods single-ended power feed 160mods double-ended power feed

Color	Part#	Color Temp	Lumens
Pure White	HLED-PE2W7K	7000K	105 lm/mod (185lm/ft.)
Warm White	HLED-PE2W32K	3200K	105 lm/mod (185lm/ft.)
Natural White	HLED-PE2W5K	5000K	105 lm/mod (185lm/ft.)
Pure White	HLED-PN2-7K24	7000K	105 lm/mod (185lm/ft.)

Additional color temps available upon special order (MOQs Apply)

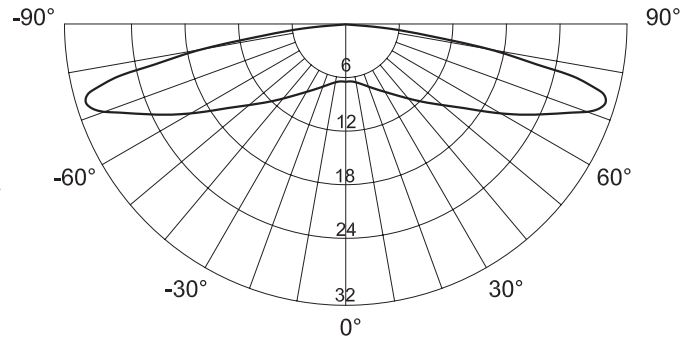
Profile Drawings



LM79 LM80 L70:5+ YEARS

MODEL	MAX POWER SUPPLY LOAD				
	35W 12V	60W 12V	100W 12V	150W 12V	240W 12V
PE-2	56mods	96mods	160mods	240mods	384mods
MODEL	MAX POWER SUPPLY LOAD				
	35W 24V	60W 24V	100W 24V	150W 24V	240W 24V
PN2-24	56mods	96mods	161mods	240mods	384mods

Light Distribution



PhoenixNRG Series

PE-2 & PN2-24

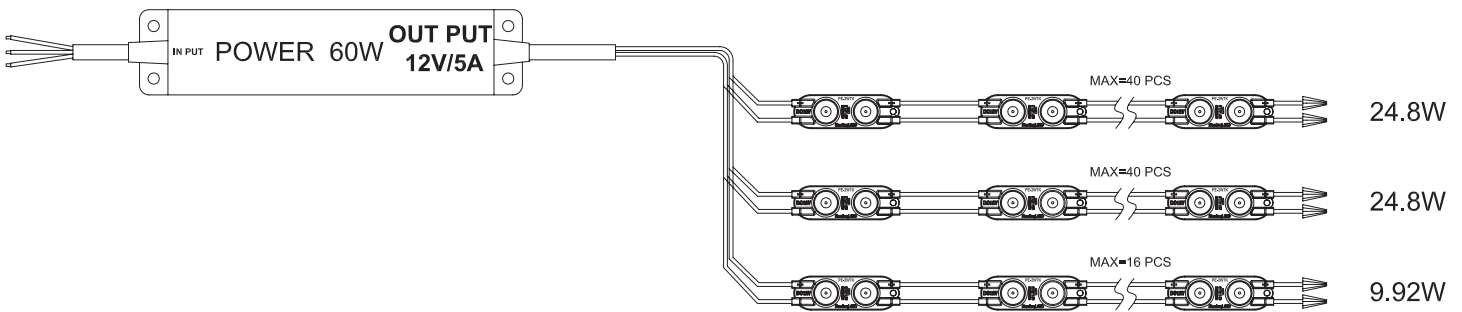
12v vs. 24v Comparison

The number of mods per power supply of our 12v PhxNRG mods is the SAME as our 24v modules.

- A) The only key functional advantage of 24v vs. 12v is the # of modules you can wire in a series together to avoid too much voltage-drop. Too much voltage drop could result in damage to the modules.
- B) "Constant Current" modules produce a much longer wire in a series or daisy-chain than "Constant Voltage". However, even Constant Current modules eventually have a daisy chain limit.

PE-2 12volt (single-ended wire in a series) 96 Modules

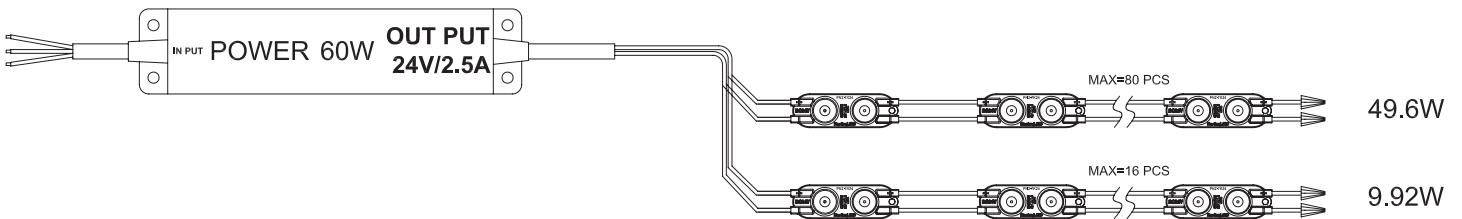
MAX 40 modules in a series



Total:59.52W

PN2-24 24volt (single-ended wire in a series) 96 Modules

MAX 80 modules in a series



Total:59.52W

Why is a longer "daisy chain" limit preferred?

- A) Less labor for wiring and less extra "rip strip" needed to complete the wiring for your sign
- B) Reduces "shop mistakes" / "install error". When a sign fabricator is busy, it's easy for an installer to wire in a series too many LEDs together. This causes the sign to be dimmer in one spot vs another (resulting in uneven lighting). At that point, it can cost a sign fabricator hundreds, if not thousands of dollars to re-wire the sign. So using modules that offer longer "daisy-chain limits" is a time & money saver.

When you reach the "daisy chain" limit of a module, but still have more modules to attach to the power supply, you have a couple options:

- A) Cap the last module in the LED chain, and connect another strip of LED wire (ex: Paige Rip Strip) to the power supply and run it to your next chain of LEDs
- B) Attach more LEDs to your original LED chain, but run a strip of LED wire from the last module of the series back to the power supply (This is called a "Home Run" or a "Double Ended Power Feed")