

HanleyLED™

Simplify Your Systems



PhoenixNRG II

Game Saving Solution, made with High Efficiency Everything!

161 modules max per 100w 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 and power supplies

PhxNRG II is available in both 12 volt and 24 volt options

Guaranteed life over 50,000 hours

DIY Layout Tool at hanleyledsolutions.com *(Available in English, Spanish & French)*

See our PhxNRG I, III, and IV modules for even more savings and versatility

LM79 LM80

L70:5+ YEARS

170
lm/W

H^e
HIGH
EFFICIENCY

C_{UL} US
E476250

CLASSIFIED
C_{UL} US
E487794

warranty
10^P 5^L

CC
constant
current

12v

24v

2"-10"
ideal depth

11/28/2022

High Efficiency Everything!

PhoenixNRG Series PE-2 & PN2-24



Specifications

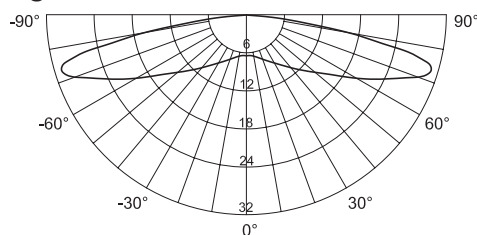
Viewing Angle	170° High Efficiency Optics
Input Voltage	12vDC (PE-2) 24vDC (PN2-24)
Watts	.62w/mod (1.09w/ft)
Luminous Efficacy	170 (lm/W)
Modules/Foot	1.77/ft (fully stretched)
Protection Grade	IP65 waterproof
Packaging	Anti-static bag, 80 modules (45ft)/bag, 7 bags/inner carton, 14 bags/outer carton
Warranty	10 Year (Product) / 5 Year (Labor)
Operating Temp.	-40° ~ +60°C -40° ~ +140°F
Storage Temp.	-40° ~ -70°C -40° ~ +158°F
PE-2 Cascade	40 mods single-ended power feed 80 mods double-ended power feed
PN2-24 Cascade	80 mods single-ended power feed 160 mods double-ended power feed



Color	Part #	Color Temp	Lumens
Warmest White	HLED-PE2W27K	2700K	105 lm/mod (185 lm/ft)
Warm White	HLED-PE2W32K	3200K	105 lm/mod (185 lm/ft)
Warm White	HLED-PE2W4K	4000K	105 lm/mod (185 lm/ft)
Natural White	HLED-PE2W5K	5000K	105 lm/mod (185 lm/ft)
White	HLED-PE2W65K	6500K	105 lm/mod (185 lm/ft)
Pure White	HLED-PE2W7K	7000K	105 lm/mod (185 lm/ft)
Pure White	HLED-PN2-7K24	7000K	105 lm/mod (185 lm/ft)

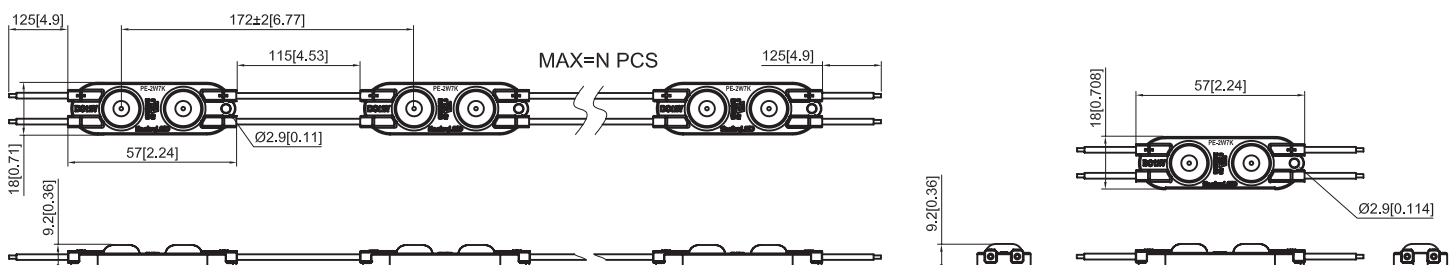
*Additional color temps available upon special order (MOQs Apply)

Light Distribution



	MAX Power Supply Load						
Model	35W	60W	100W	120W	150W	180W	240W
PE-2	56 mods	96 mods	160 mods	192 mods	240 mods	288	384 mods
	MAX Power Supply Load						
Model	35W 24v	60W 24v	96W 24v	100W 24v	150W 24v	240W 24V	288W 24v
PN2-24	56 mods	96 mods	154 mods	161 mods	240 mods	384	462mods

Profile Drawings



12 Volt vs 24 Volt Comparison

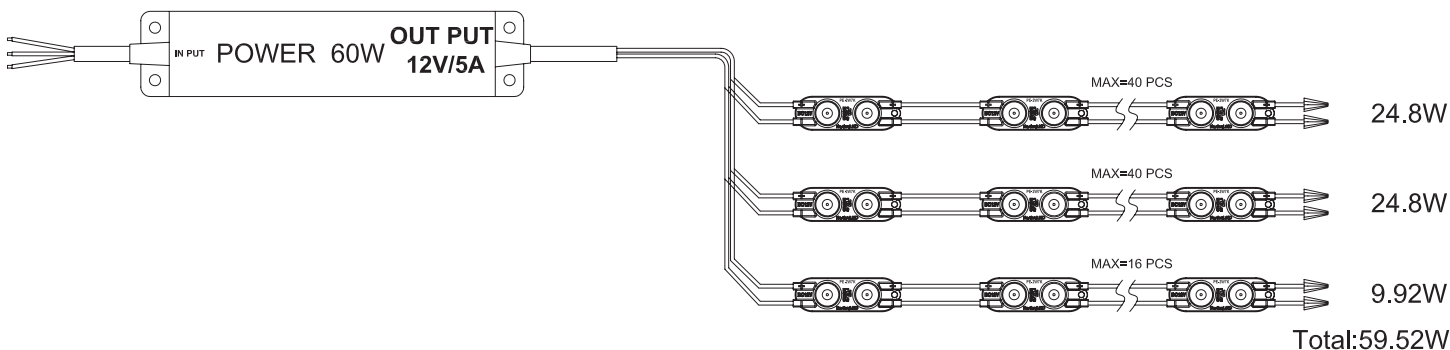
The number of mods per power supply of our 12v PhxNRG mods is the SAME as our 24v mods.

MAIN DIFFERENCE BETWEEN 12v AND 24v

- A) The only key functional advantage of 24 volt vs. 12 volt is the number 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.

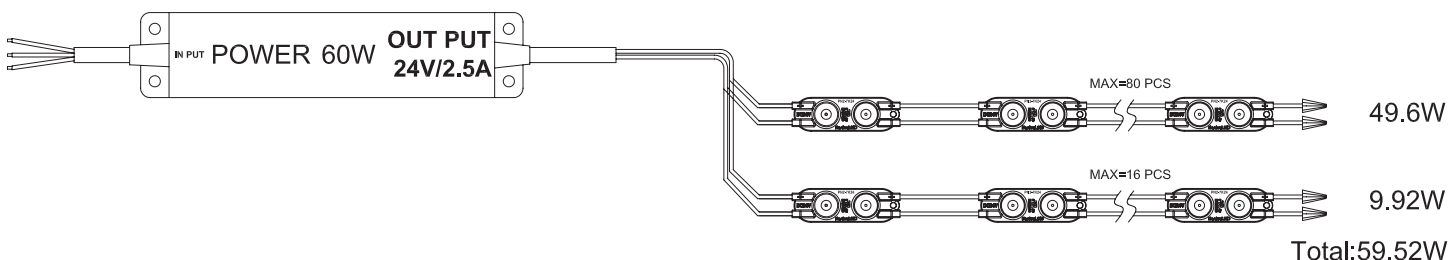
PE-2 12 volt (single-ended wire in a series) 96 Modules

MAX 40 modules in a series



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

MAX 80 modules in a series



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").

HIGH EFFICIENCY

PhoenixNRG Bars

Want to make your shop
Highly Efficient, too?

Reduce install mistakes and
improve efficiency by
transforming your shop
with our **24 volt System**.

With our **24 volt PhxNRG MODULES**,
our **24 volt PhxNRG BARS** and
our **24 volt Wingspan** products, you only need
24 volt Hanley Premium Power Supplies
stocked in your shop.

PhoenixNRG Bar with SwiftConnect Watertight Wiring System