

Solar Pathway

S O L A R G A R D E N L I G H T

SPFX PWY

T E C H N I C A L S P E C I F I C A T I O N



natural[®]led

IP₆₅



Solar Pathway

SOLAR GARDEN LIGHT

Solar pathway enjoy a smart and unique design together with the best components available on the market. Using LiFePo4 Battery, PWM controller and also made in aluminum makes it the most sustainable and reliable solar landscape light solution.

MODEL9799 SPFX10PWY3.5/42/T5/ACCT4/BK

NOMINAL FLUX 560 LUMENS

NOMINAL POWER 3.5 WATTS

IP RATING IP65

LIGHTING

Efficiency160 Lumens/Watts

Efficiency for Amber 100 Lumens/Watts

Chips LED **BRIDGELUX**

LED lifetime Over 80 000 hours LM80

Optics/CCT T-V -- **Amber** / 2200K to 5000K

BATTERY

Technology Lithium Iron Phosphate LIFEPO4

Capacity 40Wh

Autonomy 12 hours - 4 Rainy Days back up

Charging time 5-6 hours

Lifespan..... Over 2000 CYCLES @ 80%

Working temp..... -20°C to 60 °C

ENERGY

Solar panel 5 Watts / 9V

Cells type..... Monocrystalline Panel Grade A 25 years

Certificates IEC 61215 - IEC 61730 I and II - IEC 60904

ELECTRONIC

Controller..... Pulse Width Modulation Smart Control

Sensor..... Passive Infrared Sensor

Protection Battery Management System (BMS)

MECHANICAL

Pole mounting Φ 3.97" /101mm

Material Aluminium

Product..... 10"x10"x40.87" / 256 x 256 x1038

Carton Size.....12"x12"x43" / 300 x 300 x1095

Net Weight10.58lbs / 4.8Kg

Gross Weight14.77lbs / 6.7Kg

naturaLED retains the right to modify or change product specifications without prior notice, as part of our ongoing commitment to improvement



Landscape



Yard



Pathway



Warranty: 5 years for fixture, 3 years for battery.

LUMINAIRE HOUSING & LEDS

560 LUMENS - 2200 TO 5000 K

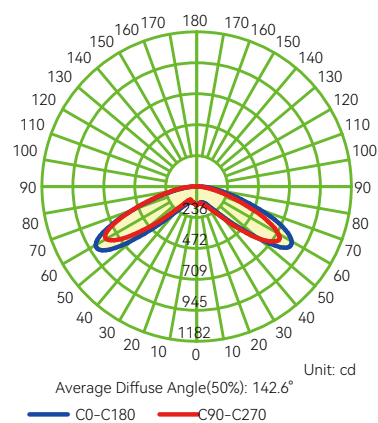
High pressure die-cast aluminum renders IP65 ingress protection.

Our Luminaire is equipped with Bridgelux high efficiency chips providing an overall 167 Lumens per Watt efficacy. CRI 80.



LIGHT DISTRIBUTION CURVES

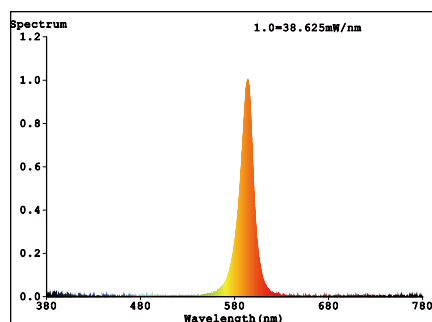
TYPE-V AVERAGE BEAM ANGLE (50%): 142.6° DEG



AMBER SPECTRUM



Can meet the turtle light requirement.



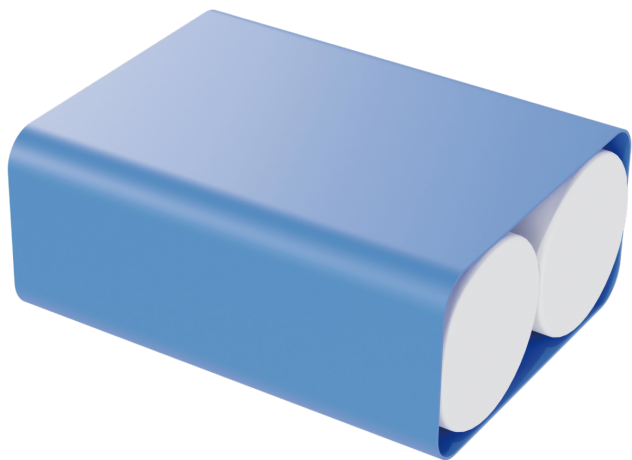
PIR SENSOR



PASSIVE INFRARED SENSOR

Human body emits the heat in form of infrared radiation and PIR sensor is specially programmed to detect this type of radiation emitted or reflected from objects. In addition, they are small, inexpensive, low power and easy to use.

BATTERY LIFEPO4



The Solar Pathway is equipped with Iron Phosphate Lithium LiFePo4 battery. This technology is proved to be the best chemical technology for solar application on the market.

Proving over 2000 Cycles @ 80% DOD operation time, and the warranty for battery is 3 years.

EXTREME TEMPERATURE -20 °C TO 60 °C (-4°F TO 140°F)

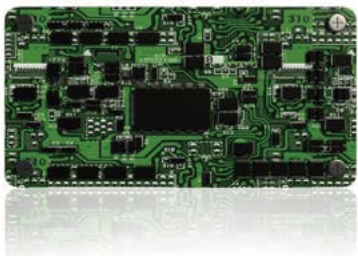
Even under extreme temperature of -20°~60° (-4°F TO 140°F), the normal function and lifespan of battery will not be influenced or damaged.

EASY MAINTENANCE

Easy and direct access to the battery casing for maintenance. The casing is made with rigid PVC for perfect waterproof and heat dissipation.

BMS ELECTRONIC PROTECTION BATTERY MANAGEMENT SYSTEM

The full name of the Battery Management System, is the link between the battery and the user, is mainly responsible for the management of the battery's charging and discharging performance, in order to ensure that the battery's safe, stable and long-life operation.



The BMS Protects against :

- OVER/UNDER CURRENT
- OVERLOAD
- OVER/UNDER VOLTAGE
- OVER/UNDER CHARGE
- TEMPERATURE MANAGEMENT

COMPARISONS OF DIFFERENT BATTERY TECHNOLOGIES

LIFETIME & CYCLES AT 80% DOD*

Comparison of different battery technologies



Lead Acid
200



NimH
700



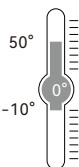
Lithium ION
800



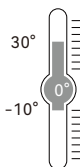
Lithium LifePO4
2000

CHARGING TEMPERATURE RANGE WITHOUT CAPACITY LOSS

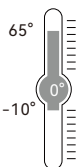
Minimum & Maximum temperature range for Optimal charging during the day



Lead Acid



NimH



Lithium ION



Lithium
LifePO4

SOLAR PANEL

High efficiency mono-crystalline Solar panels. Carefully selected Grade A Solar cells. Up to 20.4% efficiency.

Optional reinforced PC shield provide a full cover protection against water and dust ingress, refraining from external damage to panel function, prolonging lifetime of panel operation.

solar cells
GRADE **A**



IK07 



with cover
IK10 



CONTROLLER PWM



REMOTE CONTROL
(OPTIONAL)

- Switch between Night Constant mode and Night Motion sensing mode.
Press "M", the led fixture blinks once to switch to Bright with motion at night.
Press "M", the led fixture blinks twice to switch to constant ON at night.

- CCT: Amber/3000K/4000K/5000K

- Press "O", the light will keeps steady 100% brightness all the time.
- Press "-" to lower the brightness 10%.
Press "+" to higher the brightness 10%.
- Press "50%", the light will keeps steady 50% brightness all the time.

- Light model of Motion sensor:
M1, M2, M3 & AUTO

- ON/OFF-: Press" ON/OFF" you can control the light to turn on/off manually.
Only work in the model of constant ON at night.

→ Only work in the model of constant ON at night.

Interval for switching between presence
and absence: 1 minute

	After Dark	No Motion Detected	Motion Detected	Total Wh
Mode 1	4H	60%	100%	31Wh
	10H	15%	100%	
	After Dark	No Motion Detected	Motion Detected	Total Wh
Mode 2	3H	80%	100%	29Wh
	2H	60%	80%	
	9H	10%	80%	
	After Dark	No Motion Detected	Motion Detected	Total Wh
Mode 3	14H	25%	80%	26Wh

F E A T U R E S

PWM(Pulse Width Modulation) smart controller system, a proven reliable, efficient solution for remote signal transmission on the market, because of **three vital features**:

- Accuracy:

Adjust brightness by regulating pulse width to achieve accurate lighting effects.

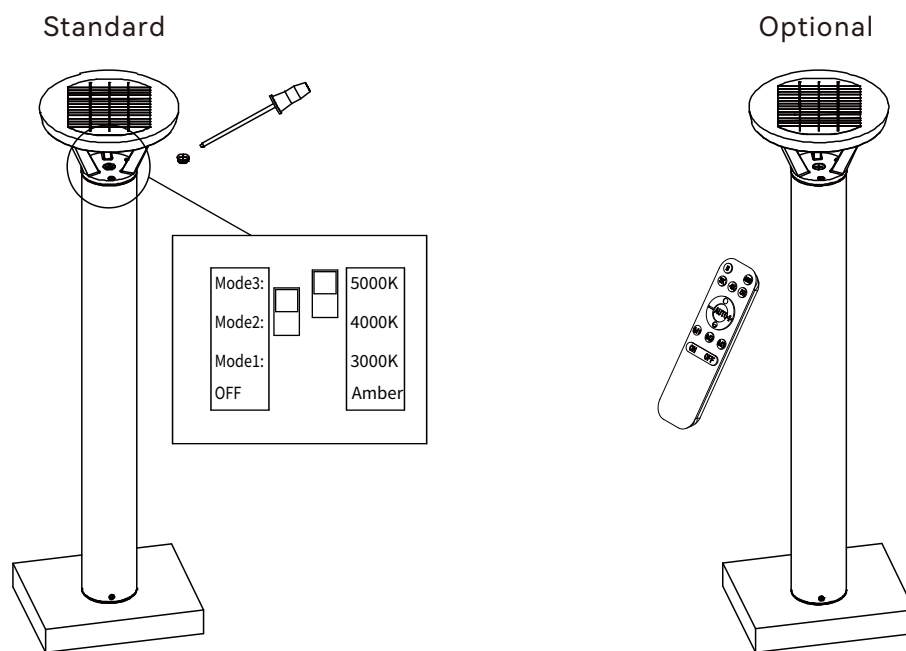
- Efficiency:

Discard traditional adjustment via current intensity which cause extra energy consumption.

- Safety:

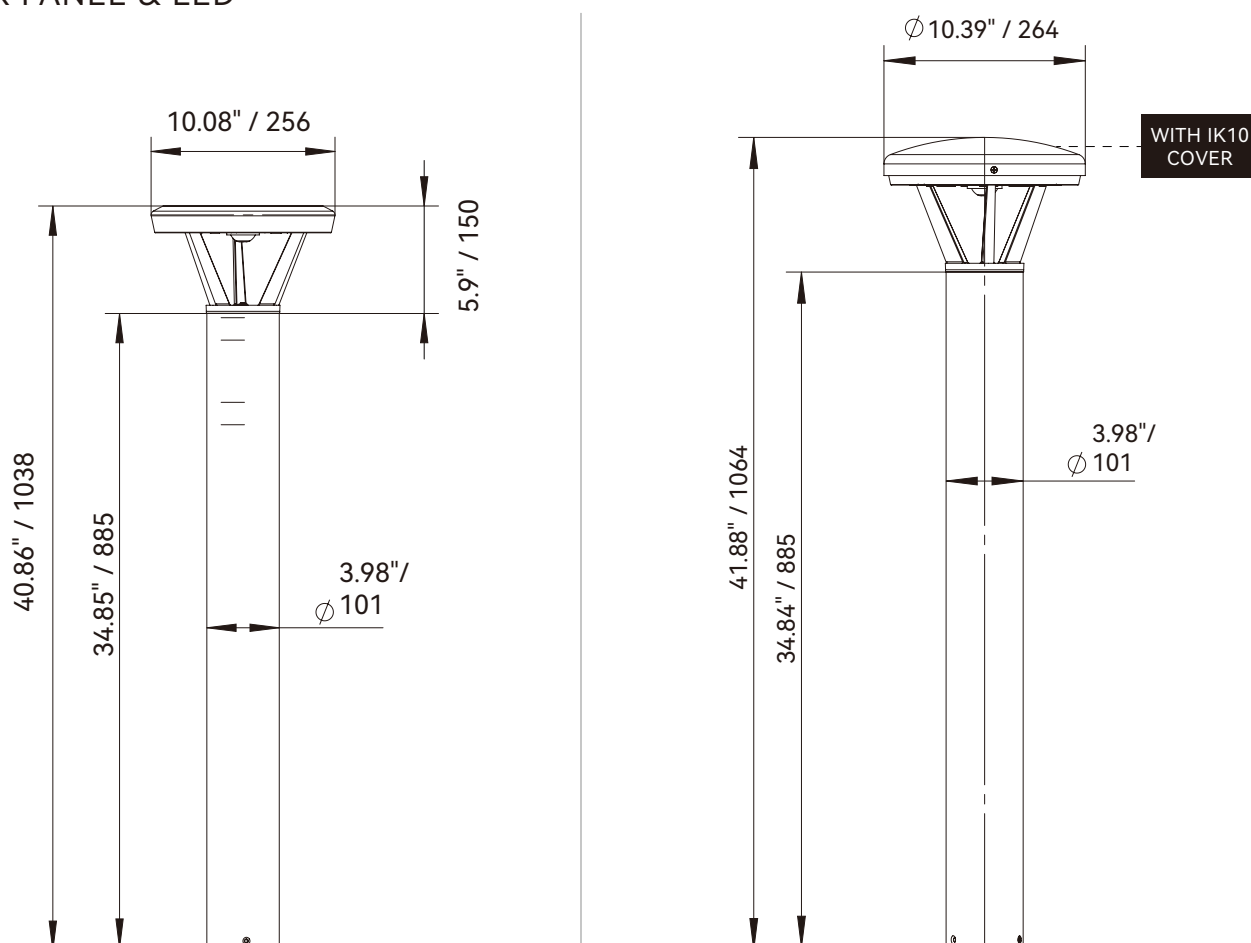
Reduce current surge while on and off and potential damage to driver and LED chips.

SELECTABLE CCT AND MODE



DIMENSIONS*

SOLAR PANEL & LED





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