

Solar Pathway

SOLAR GARDEN LIGHT

SPFX PWY

TECHNICAL SPECIFICATION



natura**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.

MODEL	9799 SPFX10PWY3.5/42/T5/ACCT4/BK
NOMINAL FLUX	560 LUMENS
NOMINAL POWER	3.5 WATTS
IP RATING	IP65
LIGHTING	
Efficiency	160 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 Weight	10.58lbs / 4.8Kg
Gross Weight	14.77lbs / 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

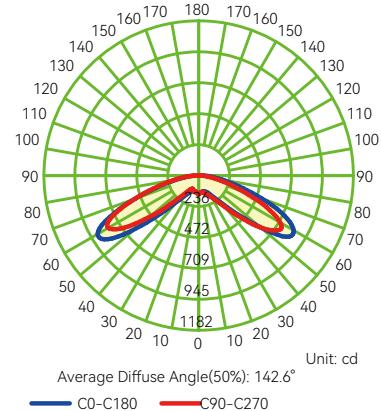
High pressure die-cast aluminum renders IP65 ingress protection.

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



LIGHT DISTRIBUTION CURVES

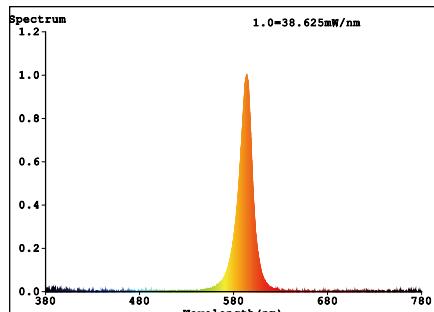
TYPE-V AVERAGE BEAM ANGLE (50%): 142.6% DEG



AMBER SPECTRUM



Can meet the turtle light requirement.



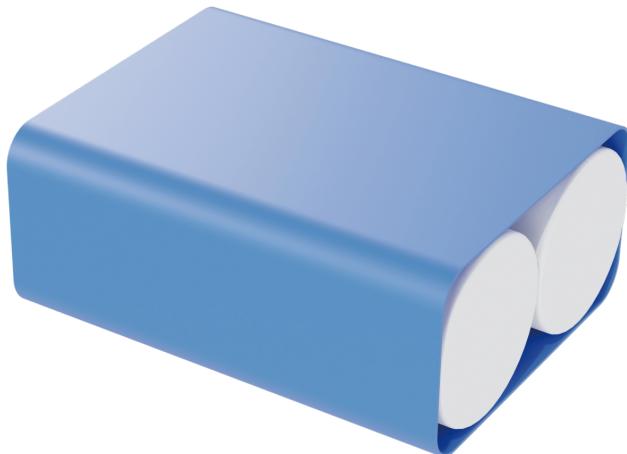
PIR SENSOR



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)

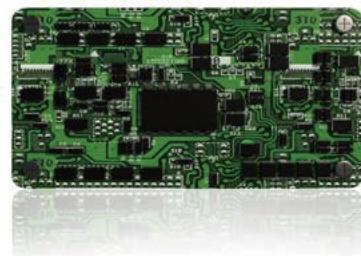
Even under extreme temperature of -20°~60° (-4°F TO 140°F), the normal function and lifespan of battery will not be influenced or damaged.

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

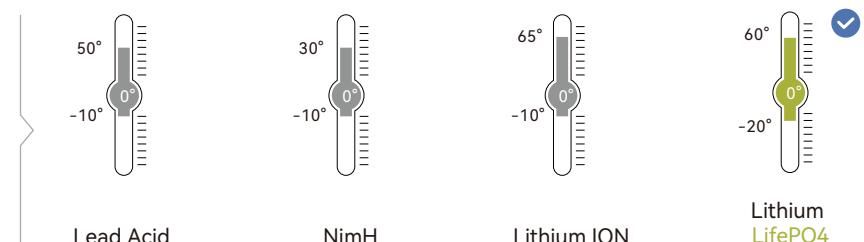
LIFETIME & CYCLES AT 80% DOD*

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



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 "e", 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%	
Mode 2	After Dark	No Motion Detected	Motion Detected	29Wh
	3H	80%	100%	
Mode 3	2H	60%	80%	26Wh
	9H	10%	80%	
	After Dark	No Motion Detected	Motion Detected	Total Wh
	14H	25%	80%	26Wh

FEATURES

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

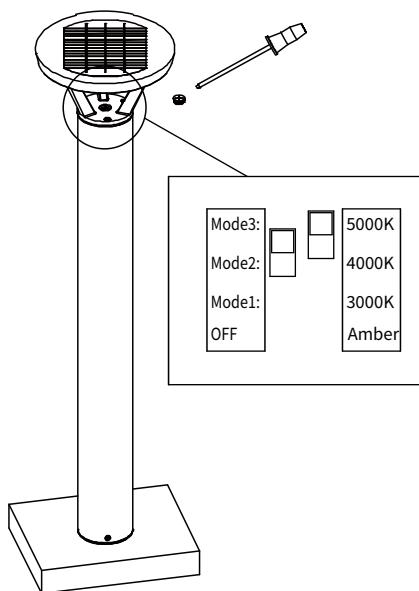
- Accuracy:
Adjust brightness by regulating pulse width to achieve accurate lighting effects.

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

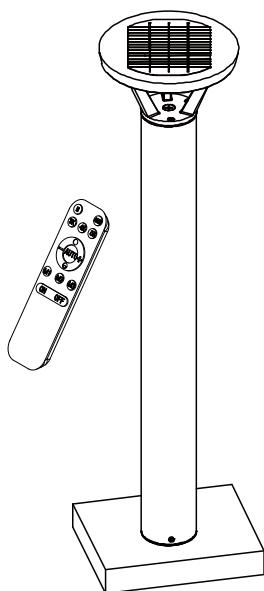
- Safety:
Reduce current surge while on and off and potential damage to driver and LED chips.

SELECTABLE CCT AND MODE

Standard

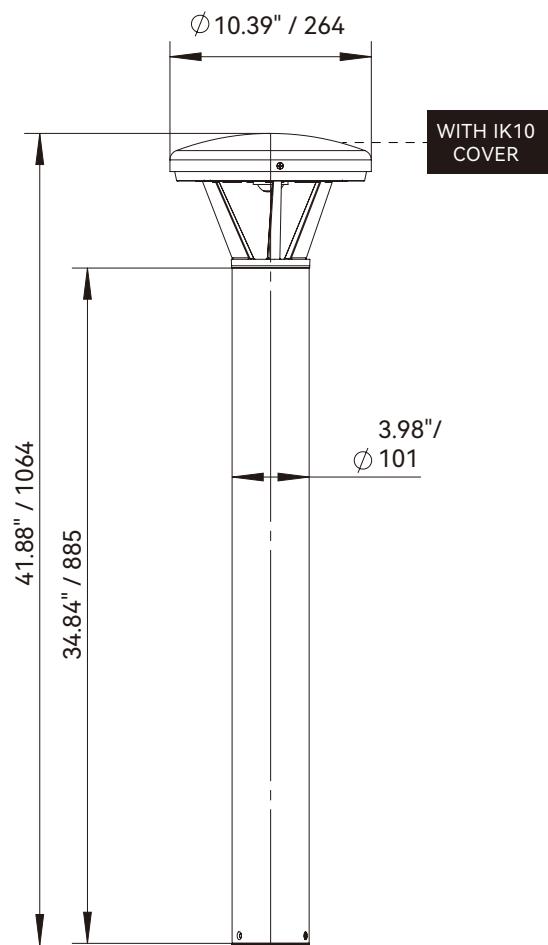
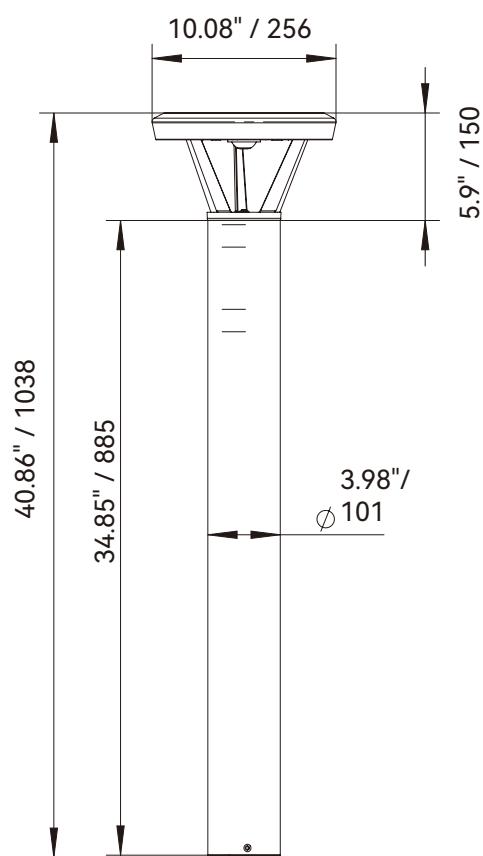


Optional



DIMENSIONS*

SOLAR PANEL & LED





naturaLED

www.naturaLED.com