



## SOLAR POLE SOLUTION

solar pole light / solar pole camera  
solar pole traffic light / solar pole wifi modular



## SOLAR POLE

### ■ Advantage



1. The vertical surface of the solar pole effectively avoids the accumulation of dust, dirt, sand, snow leaves etc.
2. The solar pole does not need to be cleaned frequently, saving labor costs.
3. The solar pole is slim design, no PV panel, low wind loads, no need large place to spread out the pole for absorbing sunlight.
4. Compare with the large solar panel, it is more safe and strong.



#### ① Resist sandstorm

Applicable to the Middle East, it can effectively resist sandstorms, sand can not accumulate on the surface of vertical solar panels, keep solar pole work efficiently.



#### ② Resistance to storm

Suitable for heavy rain, typhoon and climatic regions solar pole surface streamlined design can effectively reduce wind resistance, resist rainstorm weather.



#### ③ Resistance to hail

The surface of the vertical power generation system is protect by a hard glass which resists hail attacks and will not be broken down.

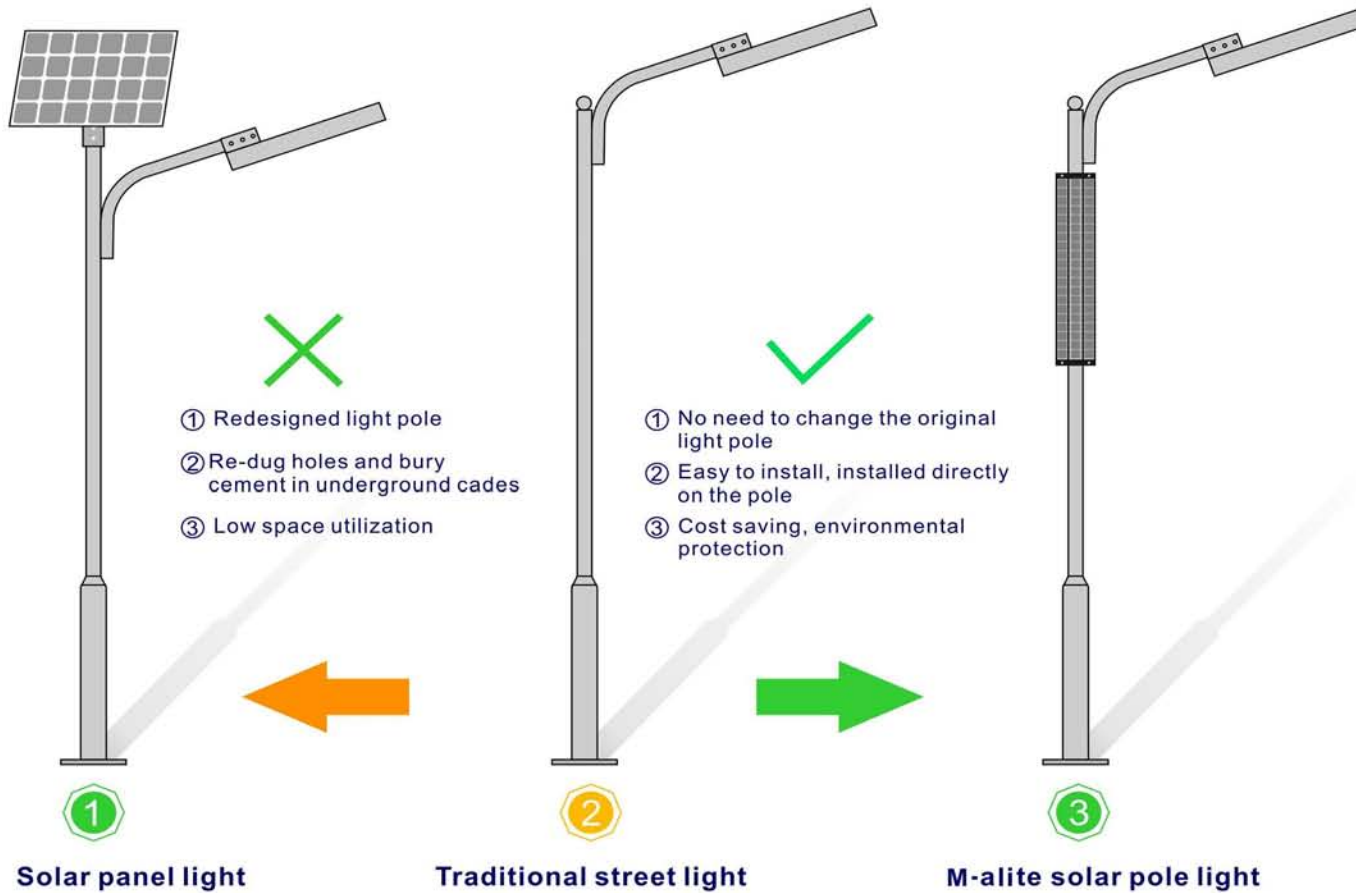


#### ④ Resistance snow backlog

Prevent winter snow, damage solar panels, or reduce solar panel efficiency.

## How to transform traditional street lights?

- Clear advantages for sunfree solar poles.



### Benefits:

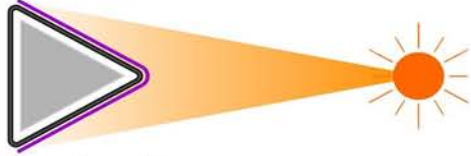
- It's much better to change the city power street light to solar street light by local government encouragement, not only for green energy development, but also for the environment friendly.
- It can be expenses saved, because it has simply and easy installment processes, which can be settle on the old pole, additionally, replace the old or broken light makes the city and living area more safe and clean.



## Vertical PV integration

Clear advantages for M-alite solar poles.

①



**Triangular pole:**  
Less sun exposure area.  
The angle between the irradiated surface and the sunlight is small, and the energy conversion efficiency is low.



②



**Square pole:**  
Less sun exposure area.  
The angle between the irradiated surface and the sunlight is small, and the energy conversion efficiency is low.



③



**6-Sided pole:**  
Less sun exposure area.  
The angle between the irradiated surface and the sunlight is small, and the energy conversion efficiency is low.



④



**M-alite solar pole:**  
Maximum area to collect sunlight.  
Large angle with sunlight, high energy conversion efficiency.  
Perfect solar cell encapsulation.



## Solar pole structural drawings

Solar pole exploded view

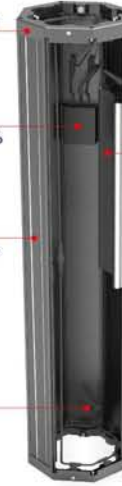
**Solar pole module connector**  
Modular design, easy to connect  
Die-casting aluminum

**MPPT Controller**  
MPPT tracking efficiency 99%  
IP68 waterproof rating

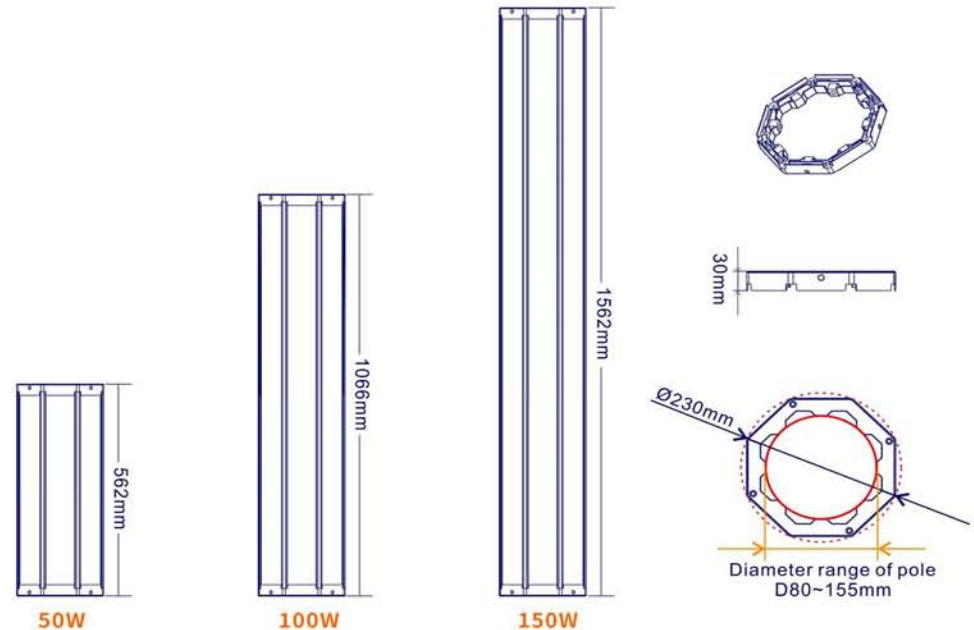
**Battery Box**  
18650 Ternary Lithium Battery  
>1500 Cycles, IP67

**High-efficiency silicon solar cells**  
High-efficiency A-Grade monocrystalline silicon solar cells  
Smallest area, collect more sunlight

**Plug & play technology**  
Plug & play design  
Easy and fast installation



Solar pole dimension



## Solar pole data



### M-alite solar pole

Model No.	SF-STB50	SF-STB100	SF-STB150
Power	50W	100W	150W
Vmp	18V	18V	18V
Imp	1.95A	3.89A	5.84A
Cell Type	Mono Crystalline	Mono Crystalline	Mono Crystalline
Solar Cell Efficiency	21%	21%	21%
Solar Cell	68*13mm*36pcs*8pcs	68*26mm*36pcs*8pcs	68*39mm*36pcs*8pcs
Frame Material	6063 Al	6063 Al	6063 Al
Operating Temperature	-25~65°C	-25~65°C	-25~65°C
Warranty	3 years	3 years	3 years
LifeTime	15 years	15 years	15 years
Product Size	562*230*213mm	1066*230*213mm	1562*230*213mm
Carton Dimension	65*27.5*27.5cm	115*27.5*27.5cm	165*27.5*27.5cm
N.W	6.8KG	11.8KG	17.2KG
G.W	8.8KG	14.2KG	21.0KG

You can customize the battery module according to your requirements.

### M-alite battery & controller

Battery Capacity	11.1V 19.2Ah	11.1V 38.4Ah	11.1V 57.6Ah
Battery Type	Ternary Lithium Battery	Ternary Lithium Battery	Ternary Lithium Battery
Battery Lifetime	>1500 Cycles	>1500 Cycles	>1500 Cycles
IP Rating	IP67	IP67	IP67
Battery Box Size	142.5*38.5*215mm	142.5*38.5*415mm	142.5*38.5*615mm
Controller System	MPPT	MPPT	MPPT
System Voltage	12V	12V	12V





**SOLAR  
POLE  
LIGHT**

**■ Advantage**



Highly efficient LED technology.



Omnidirectional 360° sunlight collection.



Solar powered Green and Eco-friendly.



Lithium battery, long life.



MPPT technology, charge conversion efficiency of up to 96%.



No need of cleaning. No sand, snow, dust, dirt.



A-Grade mono solar panels. High-efficiency silicon solar cells.



Excellent workmanship, outstanding look.



Excellent optical design.



No electricity consumption



Simple installation, Plug&Play.



No carbon dioxide emissions.



Fashional super slim design. Low wind resistance.



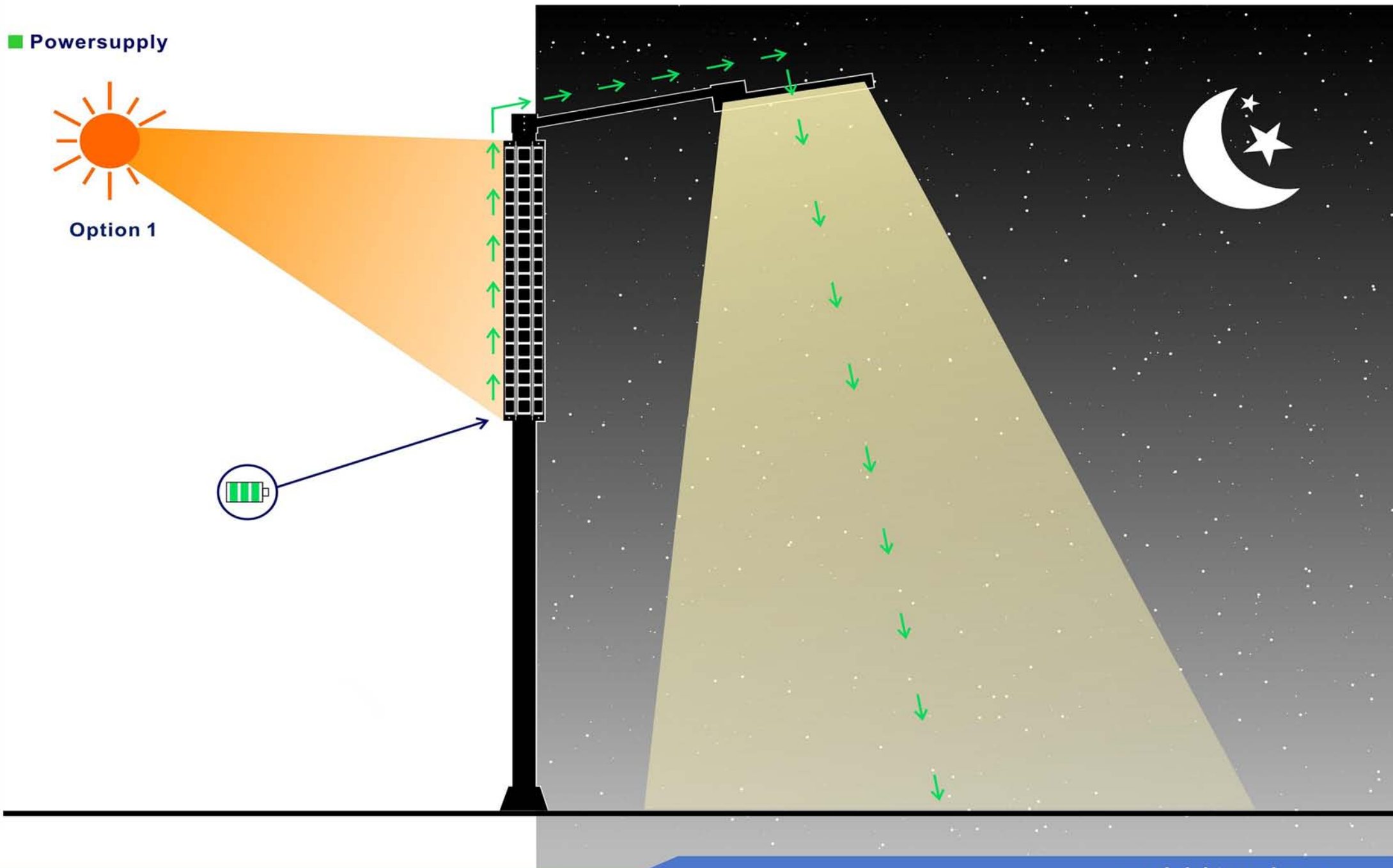
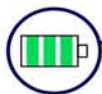
No need of cabling, trenching.



■ Powersupply



Option 1





Option 2

