

SunMaster ELite II (Battery & AC Main Version)



Features

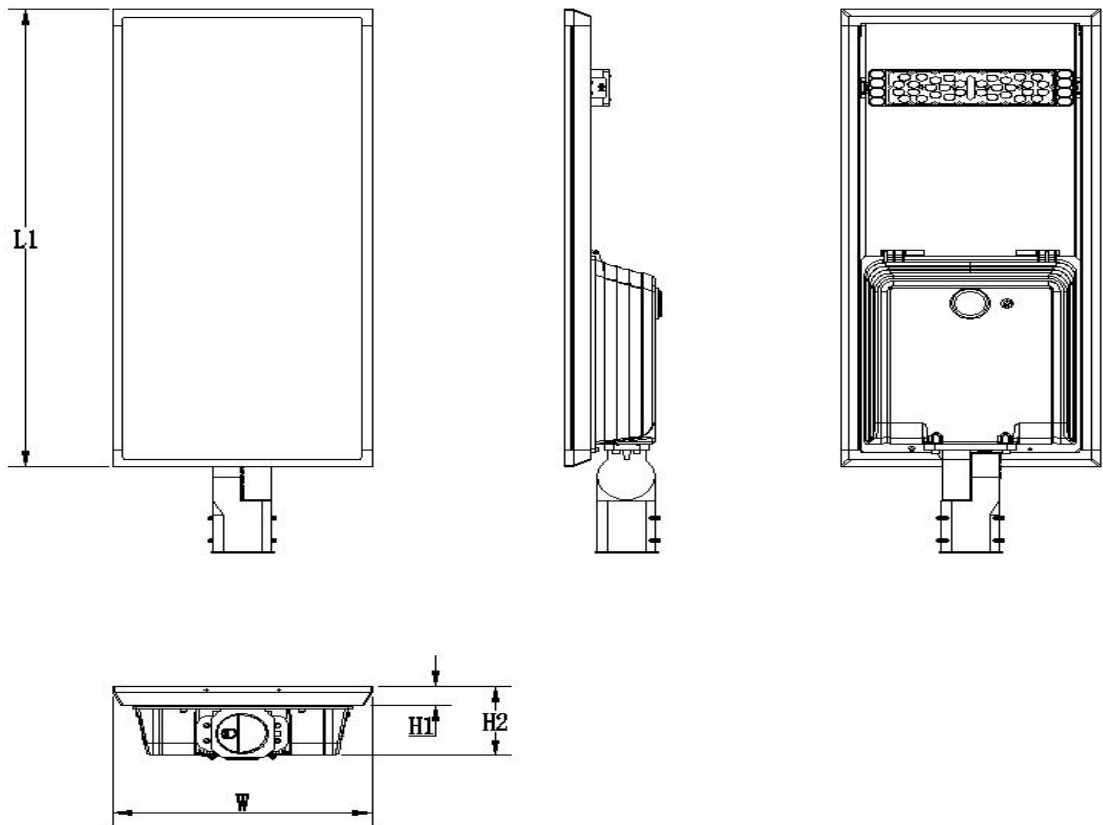
- **High Efficient components, Authentic materials**
 - Hybrid power supply with solar and grid connection
 - LiFePO₄ battery with 2000 lifecycles, safe and reliable
 - Highly quality monocrystalline solar panel
 - Die-casting aluminum housing, robust and durable
 - Easy access to battery compartment
 - Protection grade is IP66 / IK08 (Solar panel: IK07)
 - Post top and side entry optional with $\phi 60$ and 76mm spigot alternatives
- **Professional light distribution, Full nominal**
 - High luminous efficacy of 180-200lm/w to maximize battery performance
 - Lumen packages from 3600lm to 16000lm
 - Adjustable LED module optional
 - $\pm 70^\circ$ luminaire mounting angles adjustable
- **Intelligent dimming, High brightness and long battery life**
 - Intelligent charge and discharge management, 365 day light, 2-3 overcast days autonomy
 - Coupled with motion sensor for longer working hours
 - 3/5 years warranty

Product Parameters:

Product Model	UNI-SL01-1H-020	UNI-SL01-1H-030	UNI-SL01-1H-040	UNI-SL01-1H-050	UNI-SL01-1H-060	UNI-SL01-1H-080	UNI-SL01-1H-090
System Voltage	12V			24V			
Monocrystalline Solar Panel	40W/18V	40W/18V	50W/18V	60W/18V	80W/18V	100W/18V	120W/36V
LiFePO ₄ Battery	12.8V/15AH	12.8V/15AH	12.8V/30AH	12.8V/30AH	12.8V/45AH	12.8V/60AH	25.6V/30AH
Charge Time (H)	6.9	6.9	11.0	7.2	8.0	8.6	7.2
Full Power Working Time (H)	7.7	5.1	7.7	6.1	7.7	7.7	6.8
System Power (W)	20	30	40	50	60	80	90
Sensor Distance	IR sensor: Height =6m, Width = 7m Microwave sensor: Height =8m, Width = 10m Photo sensor + Timer Dimming						
Hybrid	Battery & AC Main						
AC Input Voltage	100-240Vac 50/60Hz						
LED Life Time	>100,000 Hrs (L70@Ta=25°C)						
Luminaire Efficacy at Battery mode(Tq=25°C)	180-200lm/W						
Luminous Flux (lm)	3600	5400	7200	9000	10800	14400	16200
Efficacy at AC Main mode(Tq=25°C)	155lm/W	155lm/W	155lm/W	155lm/W	160lm/W	160lm/W	160lm/W
Lumen at AC Main mode(lm)	3100	4650	6200	7750	9600	12800	14400
Brightness Level at Different modes*	When people approach: 2H*100%+3H*50%+6H*20%+1H*30%, When nobody: 20% with motion sensor;						
Overcast Days	1-2 Days						
CCT	3000K/3500K/4000K/5000K/5700K/6500K						
SDCM	≤7						
CRI	Ra>70						
Light Distribution	Type II S , Type II M , Type III M						
Charge Temperature	0°C ~ 55 °C						
Discharge Temperature	-10°C ~ 55°C						
Storage Temperature	-20°C ~ 55 °C						
Warranty	3/5 years						
Housing Materials	Die-casting Aluminum Housing + Extruded Aluminum Frame + PC						
Finishing	Dark Grey Pantone 8403C						
IP/IK	IP66/IK08 (Solar panel IK07)						
Insulation Class	Class I						
Spigot Diameter (mm)	Φ60/Φ76						
Installation Height (m)	2-4	3-5	4-6	5-7	5-7	6-8	8-10
Maximum projected area (m²)	0.22	0.22	0.26	0.37	0.43	0.5	0.62
Wind-Resistance (km/h)	130						
Luminaire Dimension (mm)	543×400×138	543×400×138	640×400×138	914×400×138	1051×400×138	1246×400×138	1538×400×138
Luminaire Packing Dimension (mm)	620×480×225	620×480×225	720×480×225	995×480×225	1130×480×225	1325×480×225	1610×480×225
Net Weight (±0.2kg)	10	11	12	15	16	18	23
Gross Weight (±0.2kg)	13	14	15	19	20	22	26

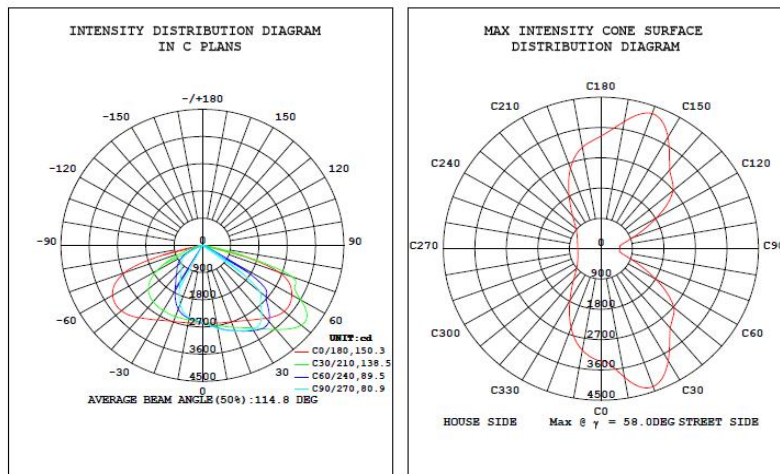
*Factory default value, the lighting mode can be customized as per specific requirements.

Luminaire Dimension:

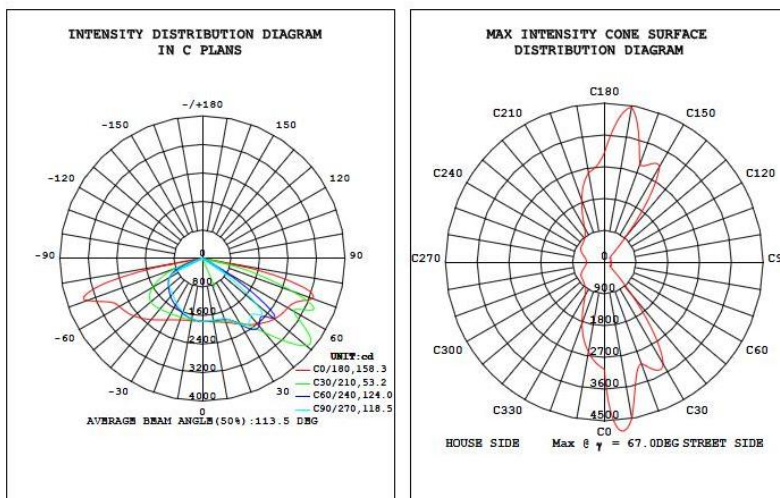


Model No.	Dimension (mm)			
	L1	W	H1	H2
UNI-SL01-1-020	543	400	39	138
UNI-SL01-1-030	543	400	39	138
UNI-SL01-1-040	640	400	39	138
UNI-SL01-1-050	914	400	39	138
UNI-SL01-1-060	1051	400	39	138
UNI-SL01-1-080	1246	400	39	138
UNI-SL01-1-090	1538	400	39	138

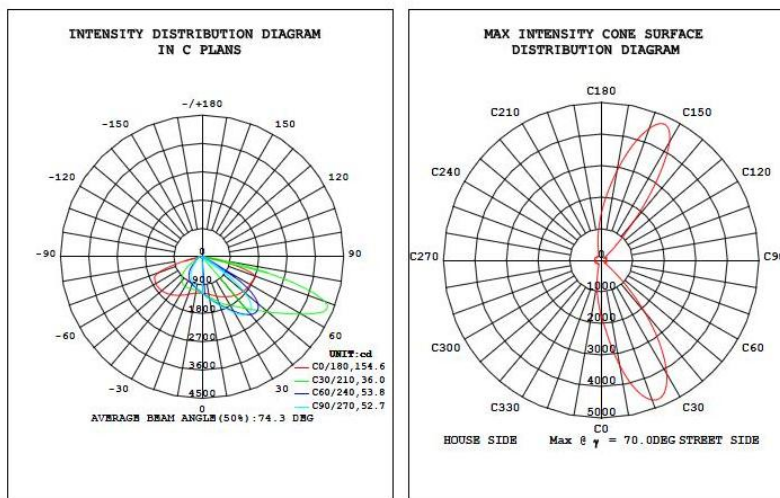
Light Distributions:



Type II S (5050)



Type II M (5050)



Type III M (3030)

Note: The pictures are only the references of typical light distribution type, and the specific parameters shall be subject to the actual IES of the product.

Installation Diagram:



Fixed LED Module



Adjustable LED Module (optional)

1. Install the solar luminaire onto the light pole by tightening the bolts with 15Nm torque.

2. Adjust the mounting angle of solar luminaire when necessary and make sure the luminaire is fixed in place.

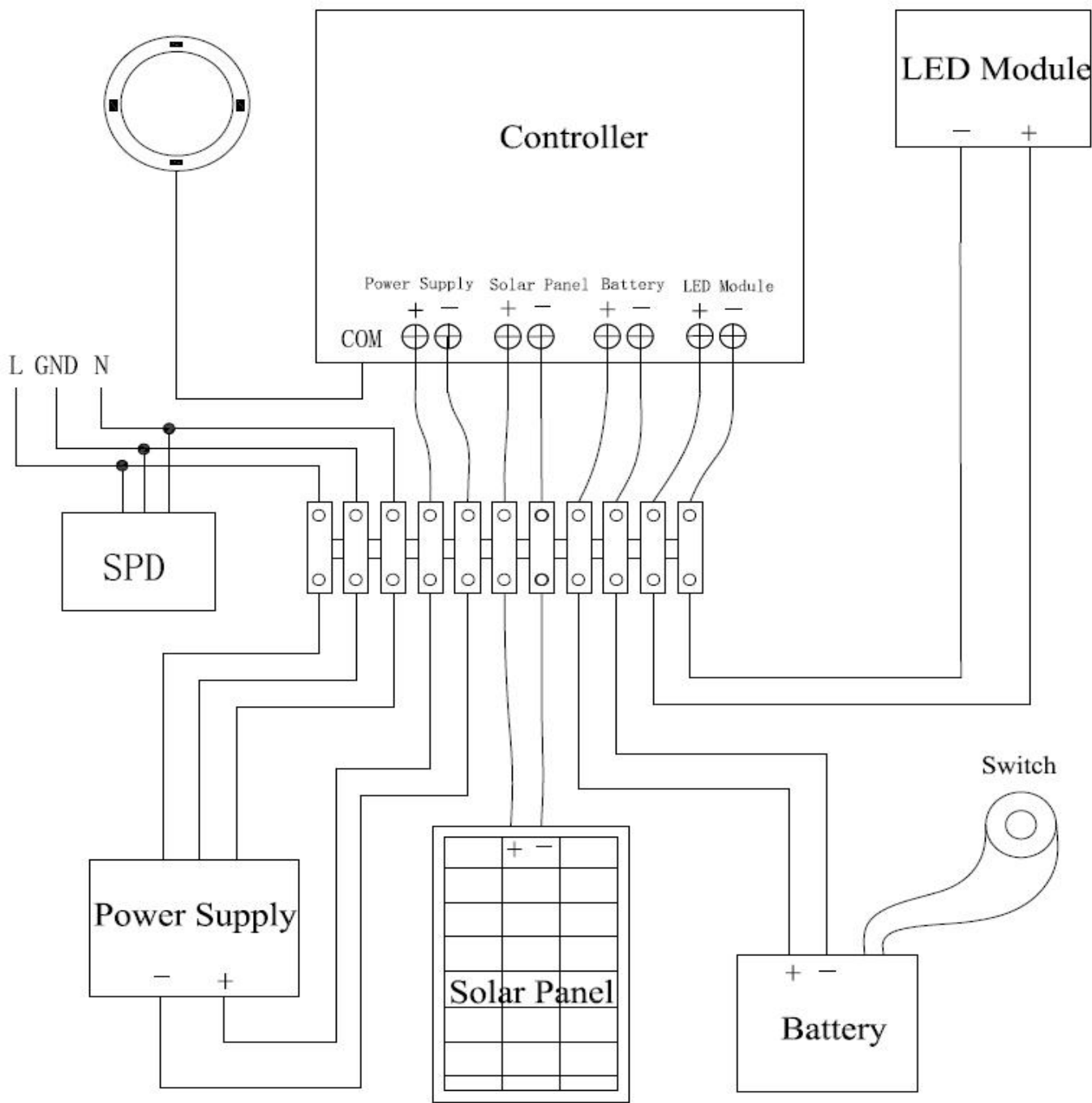


3. Adjust the LED module to the desired angle. (Tool free, Adjustable LED Module Optional)

4. Turn on the solar luminaire after installation by switching on the on-off button.



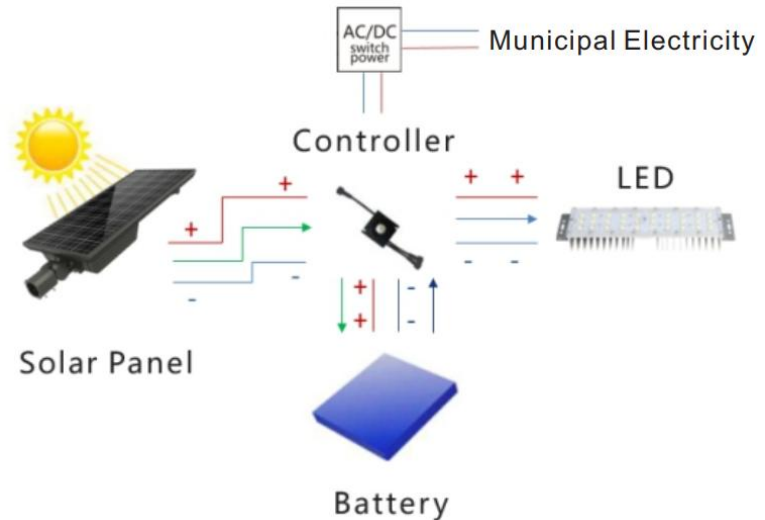
Wiring Diagram:



Complementary Function of Commercial Power :

1. Battery Priority:

When the battery voltage is higher than the switching voltage, the battery power should be used preferentially; when the battery voltage is lower than the power supply and switching voltage is set lower than the battery voltage, the battery is in the preferential mode



2. Municipal Electricity Priority:

In case of municipal power access, municipal power shall be supplied to the load preferentially. When there is no municipal power or the municipal power voltage is incorrect, it shall switch to battery for power supply. When switching voltage is set higher than the maximum voltage of the battery, the commercial power is in the preferential mode.

When the commercial power complementary controller is in use, it is required to pay attention to:

- A. Commercial power only supplies power to the luminaires, but not to the battery.
- B. Switching voltage point can be set via the remote controller.
- C. In the course of using, if the battery is removed, under normal power supply condition of battery panel and commercial power, commercial power can be supplied to the luminaires at night and the luminaires can operate normally

Maintenance:

- To ensure the solar panels can receive light effectively, please clean the surface of the solar panels with a soft cloth and water regularly. Do not use chemicals and abrasives that containing strong solubility such as ammonia.
- Recommended storage time shall be less than 3 months as the battery will be affected by self-discharge. If it has been transported or stored for a long time, it is necessary to check, charge and make record regularly, otherwise it will affect the capacity and service life of the battery.
- Make sure installing the solar panel face to the direction where has most sunlight, so that it can effectively absorb the sunlight energy. Avoid tall buildings or trees that may block the sunlight, and places with heavy dust need to be cleaned up in time.
- All screws shall be tightened evenly according to the standard, and should not be loosened and shaken.

Cautions:

- Solar panels belongs to “fragile” product category. Please do not scratch or apply impact on panel during installation, as the scratches, dust, and occlusion on the surface will affect the efficiency of power generation of solar panels.
- Solar panels facing south for places in the northern hemisphere, and facing north in the southern hemisphere.
- When the product is not in use, it shall be charged every 3 months. If long-term transportation or storage is required, it shall be checked, charged and recorded in time, otherwise battery life may be affected. Charging method: under a sufficient sunlight, turn on the lamp, turn the solar panel facing to the sun, charge continuously for 1-2 days, read the status with the remote control that display it is in charging.
- The installation of lamps should be away from WIFI, omnidirectional antennas for mobile communications, small base stations for telecommunications, and TV antennas. Signal sources that are too close may disable the dimming function.
- The lamp should not be installed on the vibrating surface, and the shaking of the lamp may cause the sensor to be triggered by mistake.
- The dimming function of the lamp may be affected by the presence of vibrating objects in its sensing area.

- The microwave sensor has a good penetration performance though plastic and wood. Please avoid metal shielding around, which will reflect and block microwaves, affecting the actual induction performance.
- Walls, glass, ceramics will bring microwave reflection and penetration attenuation, reduce the sensing distance of the sensor, the thicker the material, the more serious the attenuation.
- In the actual application environment, the sensing range of microwave sensors will be different due to the different reflectivity of obstacles.
- If there is a glass barrier between the infrared sensor and the detection object, and the far infrared ray passing through in it, while the heat source in the detection range is almost not moving or moving at high speed, sensor may not be triggered.
- The movement of animals and objects within the sensing range may cause false triggering, causing the light to turn on.
- Microwave sensor is not suitable for lakes, rivers, seaside and similar places.
- Turn on the switch of the lamp before use. Before installation, test whether the lamp is able to charge and discharge (the solar panel is charging under the sunlight and the lights are off. Solar panels is discharging when panel is fully blocked and lights are on).
- Do not put the lamp in water or fire, there may be a risk of explosion.
- This product can withstand hurricanes of Category 14, hurricanes higher than Category 14 may cause damage to the product.
- Maintenance/teardown shall be conducted by professional or technical personnel. For the lamps are no longer in service, the battery needs to be taken out by professionals too.
- The external wiring of this luminaire adopts Y-type connection, if the external flexible cable or cord of this luminaire is damaged, the wire should be replaced by the manufacturer or its service agent or a similarly qualified person to avoid danger
- If there is a need for change of light source in this lamp, it should be replaced by the manufacturer or its service agent or a similarly qualified person.
- The product contains lithium batteries, which is regarded as flammable and explosive materials. Please abide by the air transportation regulations during transportation: do not fall violently and lift the package gently during transportation. Storage should be separated from other items to avoid damage.

Warning, danger of electric shock



- When the continuous rainy days are longer than the design days, the battery power will be drained. Due to the extremely low charging efficiency in rainy days, you may see the working time is short, this is normal. The working time will improve when the sunny days is back.
- Product specifications are subject to change without notice, and the final interpretation right of this specification belongs to the manufacturer.