



FANTASY LIGHTS GROUP[®]



Green Energy
100% solar



Smart MPPT
Controller



LiFePO4 Li-ion
Battery



Motion
Sensor



IP65
Waterproof

50W 7800lm All in one
Solar LED Street Light

MILIO





MILIO 50W 7,800lm

AIO Integrated Solar Street Light

MILIO is a compact solar light that can provide all-around lighting, suitable for poles of 4 meters to 6 meters, and various installation environments like car parking areas, pedestrian paths, etc. It can be mounted on a straight bar or plugged into the arm of the pole. The led engine is designed with an inclined angle to improve the utilization of light. It has a built-in MPPT solar controller with a charging efficiency of up to 97% and a brand-new top-quality A-grade lithium iron phosphate battery. The motion sensor is also equipped.

You can use the remote control to set different working modes to meet various lighting needs whether it is winter or summer, it can provide stable lighting services 365 days a year.

| | | |
|----------------------------|---|------------------------------|
| Item Number | : | AIO-50WM |
| Max Led Power | : | 50W |
| Peak Luminous Flux | : | 7,800lm |
| CCT | : | 2700K~6500K |
| LED Chip | : | 24pcs SMD5050 |
| CRI | : | >79 |
| LiFePO4 Battery | : | 384WH 12.8V |
| Solar Panel | : | 60W 18V |
| Solar Charge Controller | : | MPPT with PIR remote |
| Lighting Program | : | 2H 100% +4H(30%+70% sensor) |
| | : | +7H (20%+50% sensor) |
| Plug-in Installation | : | 60mm |
| Straight Pole Installation | : | 60mm~80mm |
| Warranty | : | 5 years |



Main Feature



High Luminous Output

The high -brightness SMD5050 is used as the core light source to integrate high -efficiency LED technology, which aims to provide stable, energy -saving and environmentally friendly lighting solutions.



Long Autonomy

Up to 12 hours solar light head can work with 100% power continuously. Using energy saving modes, Autonomy can reach to 3~4 days max without charging.



Motion Sensor

PIR Motion Sensor with upto 10m wide range human body infrared rays detector - it gathers automatic convenient, safe energy saving, functions.



Long Lifetime

Using superb quality battery with long lifetime. deep cycles. Working well in low and high temperatures at -20°C~+65°C. Maintenance free for years without extra cost.



MPPT Solar Controller

Smart solar charge controller with LED driver inbuilt with multi-period control, charging and discharge efficiency more than 97%. IP67 waterproof and high-temp resistant.



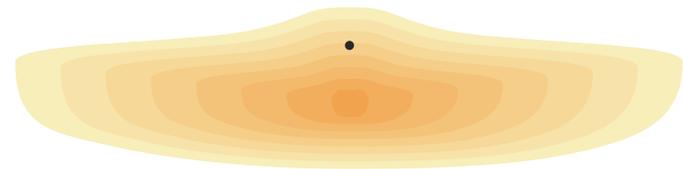
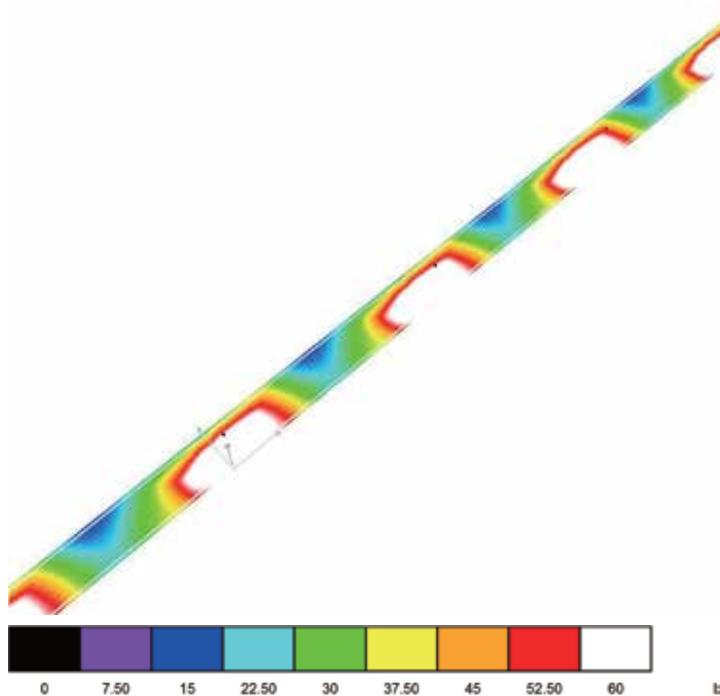
Lighting without Blackout

The system is well balanced between the power generation and consumption with the smart control system. The led power is automatically adjustable according to the battery voltage and the seasons changes all the year round ensuring all lighting service without blackout.

Ultra Slim LED Optic

Optics is a very important component of the whole solar street luminaire while it is always neglected. LEDil optic is adopted for all models of our solar street light. The suitable optic will be determined according to the project conditions which are related to the road width, the steel pole height, and distance between poles, etc

MILIO is equipped with specially designed LED optics which is to illuminate the main road without wasting light out of road. It use a very narrow but very long lighting distribution pattern which ensures there is no black dot between the poles. With high brightness output and super narrow lighting distribution, it deliver a very smooth and uniform performance on the road, meanwell with the help of longer lighting distance, there will be less quantity of poles which reduce the project cost a lot.



Lighting Distribution Pattern

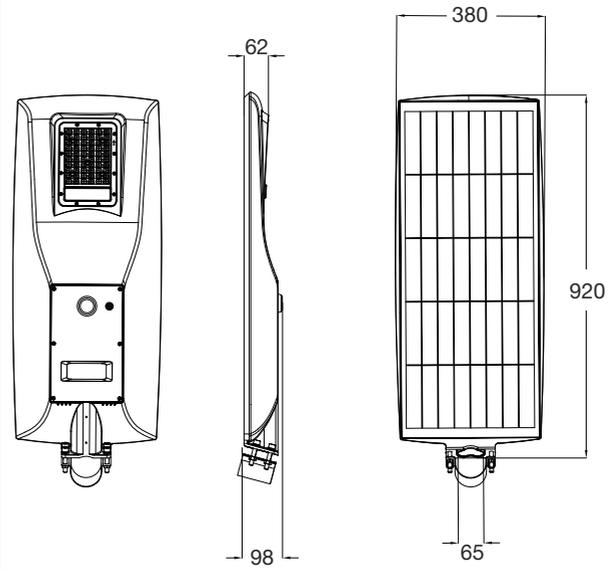
Grid: 10 x 3 Points
 Observer Position: (-60.000 m, 1.850 m, 1.500 m)
 tarmac R3, q0: 0.070

| | L_{av} [cd/m ²] | U0 | UI | TI [%] |
|--|-------------------------------|-------------|-------------|-----------|
| Calculated values: | 2.47 | 0.57 | 0.73 | 5 |
| Required values according to class ME4a: | ≥ 0.75 | ≥ 0.40 | ≥ 0.60 | ≤ 15 |
| Fulfilled/Not fulfilled: | ✓ | ✓ | ✓ | ✓ |

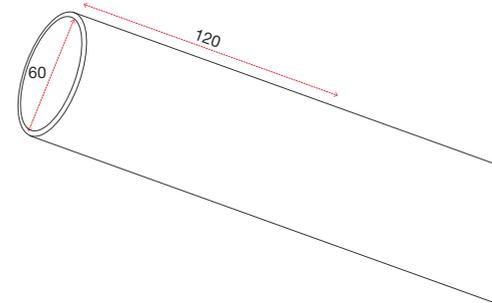
Key Components



Product Size



Pole Size of Plug-in Installation



Unit : mm



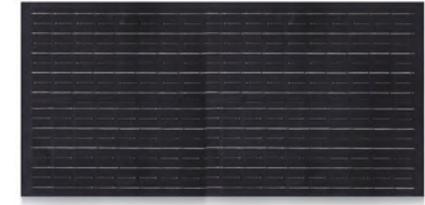
MPPT Solar Controller

| | |
|----------------------|------------------|
| Item Number | : MES-60W |
| System Voltage | : 12V |
| Output Current Range | : 50~3000mA |
| Max. PV Power | : 140W/18V |
| Tracking Efficiency | : 98% |
| Load Output Voltage | : <60V |
| Max Load Power | : 60W max |
| Motion Sensor | : Microwave |
| Working Temp. | : 35°C ~ +65°C |
| IP Rate | : IP68 |
| Warranty | : 5 Years |



LiFePO4 Battery

| | |
|-----------------------|---------------------|
| Battery Spec | : 12.8V-30AH |
| Nominal Capacity | : 12.8V 384WH |
| Dimension (L*W*H) | : 290*210*36mm |
| Battery Cell | : 32700 3.2V 6AH |
| Charge Mode | : C.C + C.V |
| Charge Cut-off Vol | : 14.6±0.05V |
| Discharge Cut-off Vol | : 11±0.05V |
| Storage Temp. | : 5°C~35°C |
| Operating Temp. | : -20°C~65°C |
| Lifetime (D.OD.50%) | : 4,000 cycles |
| Warranty | : 5 Years |



Solar Panel

| | |
|-----------------------|---------------------|
| Model number | : MSD-60W |
| Peak Power | : 18.0V |
| Max. Power Voltage | : 4.45A |
| Solar Cell Efficiency | : >22.5% |
| Quality Grade | : A grade |
| Solar Cell | : Mono |
| Operating Temp. | : -40°C- +85°C |
| Lifetime | : 25 years > 80% |
| Warranty | : 5 years |
| IP rate | : IP65 |
| Certifications | : CE, ROHS IEC61215 |