USER MANUAL

- LED Street Light & LED Flood Light





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Important Safety Information

Save These Instructions

This manual contains important safety, installation and operating instructions.

The following symbols are used in this manual to indicate potentially dangerous con-ditions or mark tant safety instruction.

4

WARNING: Indicates a potentially dangerous condition.

Use extreme caution when performing this task.

 \triangle

CAUTION :

Indicates a critical procedure for safe and proper

operation of the controller.

F

NOTE :

Indicates a procedure or function that is important

for safe and proper operation of the controller

General Safety Information

Read all of the instructions and cautions in the manual before installation.

Do not disassemble or attempt to repair it.

Disconnect the solar module to unmount the light if required.

Onnector connections must remain tight to avoid excessive heat ling from a loose connection.

Packaging Details (Only when provided as full set)

LED Light
 Solar Panel
 1 piece in 1 Box
 1 piece in 1 Box

3. Light Arm4. Adapter Bracket5 6 set with screws in 1 box6 set with screws in 1 box

5. Light Pole with Anchor Bolts : poles with anchor bolts in 1 Pack

Technical Speficication - Solar LED Street / Flood Light

| 1 | Light Design | Solar 4G LED Street Light is the 4th generation of all in one series with increased efficiency and advanced technology. With individual solar panel, it allows customer to increase or descrease panel power based on different project. The light comes with an inbuilt lithium battery bank and MPPT charge controller. The light has better output with more longer battery backup than the normal all in one solar lights. | | |
|----------------|---|--|--|--|
| 2 | Material | Die cast aluminum body with powder coating | | |
| 3 | Rated Power | 10 Watts ~ 60 Watts | | |
| 4 | CRI | >82 | | |
| 5 | LED Source | Philips 3030, 1watt * 72 nos / SMD2835 224 nos 140 Lumen/watt | | |
| 6 | Light Output | 140*70Degree (With 3030 LED) / 120 degree (2835 LED) | | |
| 7 | Optics | T5L1 Lens, 140*70 degree beam angle | | |
| 8 | Operation- Working Mode | 12 hours 100% brightness, dusk to dawn working automatically Lights ON at PV Voltage <5 volts at dusk and OFFat PV voltage ≥ 6 Volts | | |
| 9 | Luminous Lux | 140 Lumen/watt | | |
| 10 | CCT | 2700K~6500K optional | | |
| 11 | Operational Conditions (IP Certificate) | IP 67, Wind resistance :160 Km/H· | | |
| 12 | Battery Type | Lithium (NiCoMn)O2 battery or / LifePO4 battery | | |
| 13 | Solar Panel | 40W~180W optional 18V MONO Crystalline cell | | |
| 14 | Weight | 7.5~10.50KG (depends on model of light luminaire) | | |
| 15 | Volume of Light box | 680*200*355mm | | |
| 1 ₆ | Life Span | Minimum 50000 hours for LEDchip, 1000 cycles for the Li(NiCoMn) O2 battery, 2000Cycles for LifePO4 battery. | | |
| 17 | Warranty | 2years replacement warranty | | |
| 18 | Certifications | RoHS, CE, FCC, IC, LM79, LM82, TUV (Solar panel) | | |
| 19 | Working Temperature | -10°C to 55°C | | |
| 20 | Pole System | Material: Hot-dip galvanized & powder coated | | |
| 21 | Accessories | Solar panel, bracket for mounting structure with screws, light pole with light arm and anchor bolts, (upon customer's requirements) | | |

Installation Instruction of solar street Light --- Set Up

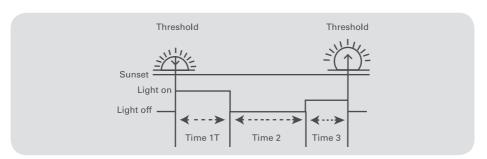


Installation Instruction of Street Light

Installation Steps

- 1. Mounting- (1) Solar Panel to -(2) bracket with screws tightly
- 2. Let -(7) MC4 cables go through- (10) plate of -(4) spigot
- 3. Fix -(4) spigot to -(2) bracket of -(1) solar panel with screws
- 4. Insert- (7) MC4 cables of- (1) solar panel into the pole from (5) pole top
- 5. Put -(4) spigot on -(5) pole top and tight -(3) screws of -(4) spigot
- 6. Pull out -(7) MC4 cable of -(1) solar panel from -(6) pole support.
- 7. Connect -(7) MC4 plug of -(1) solar panel and light.properly
- Insert the -(7) MC4 plugs into -(6) pole support.
- 9. Fix -(9) light head on -(6) pole support and tight it with screws ws.
- 10. Check every parts are connected and fixed properly.

Working Mode & ON and OFF Time



The light turned on at dusk with a pre-programmed setting function and work continues till dawn. The ON and OFF functions are controlled automatically by the built in charge controller with light sensitive timings. At sunset NTTV (Night Time Threshold Voltage) goes less than 7 Volts from the solar panel, the lights will turn ON. In the morning the DTTV (Day Time Threshold Voltage) from the panel reaches 7 Volts the lights will turn OFF.

The system also comes with a manual switch for manual operation for testing purposes.



Operation Method







Solar LED Street Light

Solar LED Flood Light

Power Button

- 1. Once the installation is complete, plug the MC4 connectors in the Light to the solar panel.
- 2. Press the power button on the light fixture to the ON position to make the light turn on automatically after sunset (Lighting mode is set to dusk to dawn mode as default by factory before delivery).
- 3. The smart solar led light is now ready for use.
- 4. You can also use the remote control to change the lighting modes or brightness incase required. The lighting time can be selected easily by the remote controller.
- 5. Presst he power button to the OFF position to turn OFF the light, the light will stop working, for the maintenance and transport.
- 6. Do not remove or dismantle the MC4 Connectors or try to plug in the light as the polarity can go wrong IN CASE OF DAMAGE OF LIGHT.
- 7. Do not open the light fixture by unauthorized persons, can affect the IP rating of the fixture and void the warranty.



- .. There is a ONE minute delay for ON / OFF functions.
- .. The light will trun off after one minute once the panel is disconnected or at sunset.
- .. The light will trun on only after one minute once the power on button is pressed.

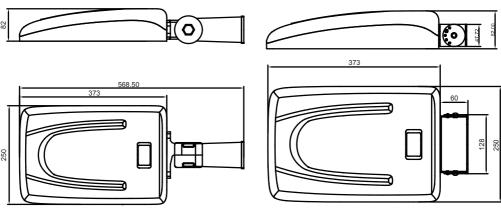
Any further questions, please contact us

| Technical Spefication of 18V Mono - Crystalline Solar Module ☐ 40W ☐ 60W ☐ 80W ☐ 100W ☐ 110W ☐W | | | | |
|--|--|--|--|--|
| CE MCS | | | | |
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| Not provided | | | | |
| by manufacturer | | | | |
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Pole Light Dimension

Not provided by manufacturer

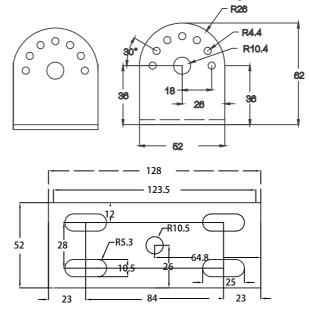
Light Fixture Dimension



Bracket Dimension of Solar Panel (if provided)



Bracket Dimension of Solar LED Flood Light



Solar Panel Maintenance Instructions (Part A)

Safety First – CAUTION NOT TO SCRATCH THE PANEL SURFACE AND ALSO NOT TO DAMAGE THE CABLE AND THE CONNECTOR

Materials Required

A good quality soft brush Squeegee with a plastic blade Cleaning Agent – Liquid Soap



Use a hose with a suitable nozzle to allow the stream of water to reach the panels if a water source is possible to get at the location or use the normal pressure sprayer



Cleaning Process

Running Water or Wet the Surface Remove the dust with the soft brush. Once the dust is removed, you can apply water on the panel surface. If you have a pressure sprayer, it will be an easy option or a running water source to wash the panel surface.



Apply Soap water ONLY if Caked Stains

Apply Soap water gently if there is caked stains or bird droppings on the panel surface. IF THERE IS NO Caked stains, just running water is enough and go to the next step.

Wipe of the soap and excess water



Wipe of the soap and excess water

Wipe of the soap and excess water using a rubber/ plastic soft Squeegee or wiper with a plastic blade and leave it for dry.

Solar Panel Maintenance Instructions (Part B)

Tips for cleaning solar panel glass

For safety reasons, it's also wise to clean your panels from the ground if possible. A good quality soft brush and a squeegee with a plastic blade on one side and a cloth covered sponge on the other coupled with a long extension can make for the perfect tools allowing you to stay on the ground.

Options



A long extension pipe is a perfect tool allowing you to stay on the ground.



Use a hose with a suitable nozzle to allow the stream of water to reach the panels.

- ☐ Clean your panels on an overcast day, early in the morning or in the evening. If the sun is beating down on the panels, any water used can quickly evaporate and dirt will become smeared.
- Early morning can be a particularly good time for cleaning as dew that has settled on the panels overnight will likely have softened grime; meaning you'll need to use less water and less energy to clean your solar panels.
- If the panels are dry, before tackling the modules with water, brush off any loose materials

 □ rst − this will make cleaning easier and faster.

DONT'S

Don't use metal objects or harsh abrasive products for removing caked on materials – scratching the glass a solar panel can affect its performance as scratches will cast shadows



- Avoid using detergents if possible as these may streak the glass of the panel. Use of abrasive powders also risks scratching the panels.
- Given the nature of good quality solar panel glass, clean watger and a little scrubbing with a coarse cloth covered sponge or sofe brush should remove the most stubbom grime.

Cleaning Interval

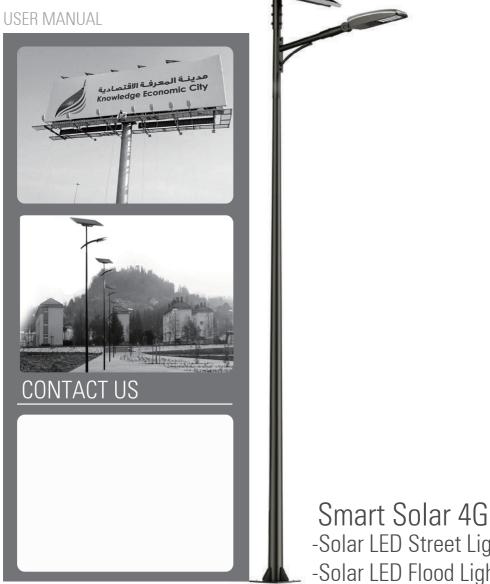
The cleaning interval is recommended once in two months at nor mal weather conditions.

USER MANUAL

Maintenance

| Symptom | Problem Cause | Solutions |
|-------------------|--|---|
| | Light source is damaged | Replace it with the same light source |
| | The battery has run down | Charging the battery |
| Lamp doesn't work | Light doesn't work in day time | Changing the light setting with remote control |
| | Positive & negative of solar panel are connected conversely. | Connect the positive & negative of solar panel to a correct position. |
| | Positive & negative of the solar panel are connected conversely. | Connect the positive & negative of solar panel to a correct position. |

| Remote Controller Manual (If provided) | | | | |
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-Solar LED Street Light -Solar LED Flood Light