

Corso STREET

Solar Powered LED Streetlight
30W LED + 120W solar panel

Installation & User Manual



Corso STREET - Solar Streetlight

Corso STREET is an advanced, patented “All-In-One” lighting system that integrates a highly efficient solar panel, compact Lithium LIFEP04 batteries and a smart power management system into a compact, easy to install product.

Importantly, the “All-In-One” design eliminates the need for external wiring to remote battery packs and does not require an electrical tradesman to set up. All wiring is simply done by IP67 multi-connect cabling that interconnect the high output LED luminaire directly to the power management system without requiring tools.

Tigerlight thanks you for purchasing a product that will help preserve our environment and provide years of high quality and reliable performance.

Technical Data

120W solar panel - 30W LED	
LED	
LED, OSRAM OSOLON SSL 150	30W
Luminous Flux (Max).	2400 lm
Light Efficiency	80 lm/W
Beam spread	Batwing
Colour Temperature (typ.)	6000K
IP Rating	IP65
Net Weight	4.2 kg
Solar Panel	
Net Weight, PV & Battery (kg)	29.6
Monocrystalline Silicon PV Module	100W
PV Bracket Tilt Angles	25° / 35° / 45° / 60°
Battery & Operating Time	
LiFePO4 Battery Module	25.6V 30AH
Working Charging temp. °C	0°C~+60°C
Discharging temp. °C	-20°C~+60°C
Storage Temperature	-20°C~+60°C
Light Pole	
Total Height Range	7 Meters
Recommended height of light head	6 Meters
Distance of poles range	25 Meters

Battery Information

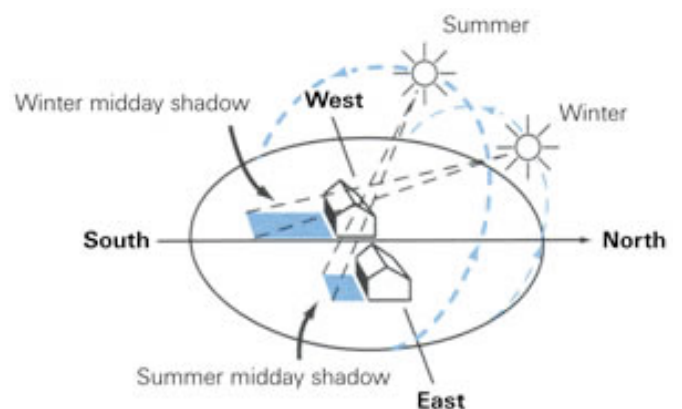
Corso STREET uses new-generation, high quality Lithium LifeP04 batteries manufactured for high power applications and longevity. Key benefits include enhanced safety, strong thermal stability, tolerance to abuse, a high current rating and a 1500 cycle life (the highest available for this kind of battery).

The batteries are charged for maximum efficiency using an integrated charging circuit that constantly monitors the state of the batteries to optimise the charging levels while protecting them against overload, over-charge, over-discharge and accidental short circuit.

The charging temperature range is between 0~+60°C and the discharging temperature range is between -20~+60°C. The charging and monitoring circuit will automatically regulate the charging & discharging cycles of the battery to protect it against extreme temperatures. Please make sure the temperature range of the location selected for installing this product is within the limitations as mentioned above.

Before Installation

It is important to pick the best site for installing the Corso STREET solar light in order to maximise the most free power offered by the sun. To get the most power, they need maximum exposure to direct sunlight for the longest possible time. Solar energy usually has its greatest strength in the middle of the day and often the greatest cloud cover is in the mornings and evenings so it is important to make sure the solar panel has minimal shading during the mid day time block.



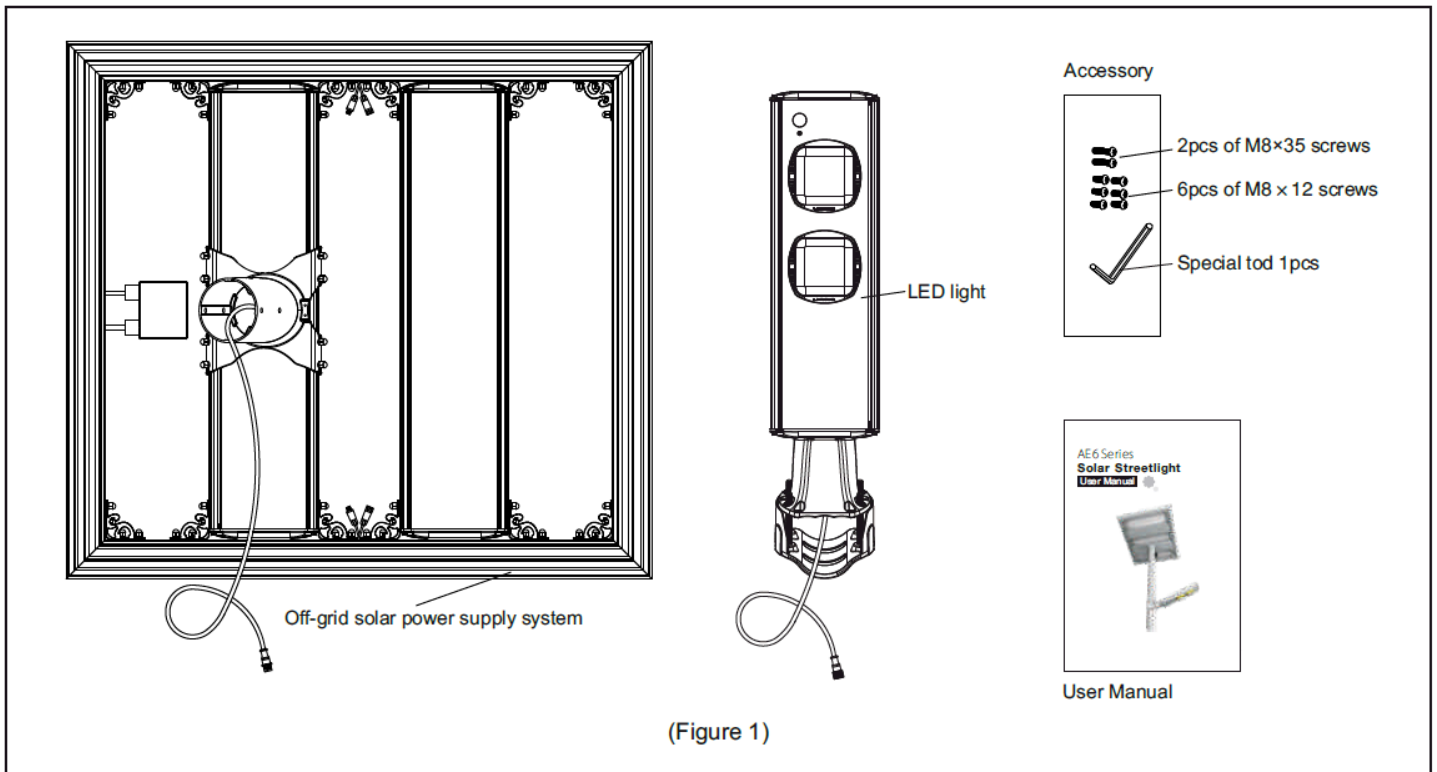
The Corso STREET fitting should be installed on a suitably sized galvanised steel lighting column which is capable of withstanding strong wind loadings. Tigerlight does not take responsibility nor guarantee against improper sizing of the lighting column or footing system.

Customers should consult with a qualified structural and civil engineer for computations before deciding upon a suitable foundation and lighting column design. Tigerlight can provide access to a range of fixed and lowerable type lighting columns designed suitable for the Corso STREET fitting.

Getting Started

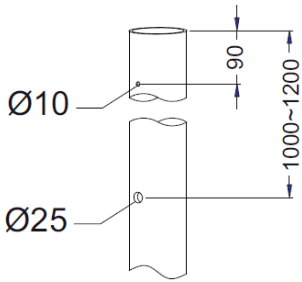


Please open the package and confirm that all parts were received in good order prior to installation. Refer to figure 1:

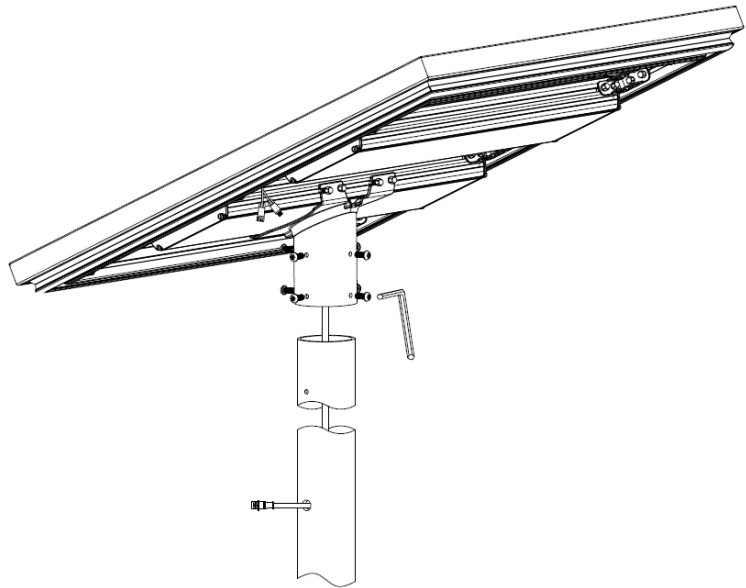


(Figure 1)

1. Make note of the best orientation of both the 'All-In-One' P.V module and the LED light fitting, then mark the centre locations on the pole of where a fixing hole on the stainless steel mounting neck should align to and the centred position of the LED light fitting.
Note: The distance between PV module and LED light should be 0.5m~1.2m. Refer to figure 2.
2. Drill a 10mm hole through the pole that should be 90mm from top of pole to align with a fixing screw hole at the back of the mounting neck. Refer to figures 2&3
3. Drill a 25~32mm hole on the pole that should be 1~1.2m from top of pole where you want to affix the LED light fitting.
4. Begin mounting the PV module on the top of the pole spigot. At the same time, run the cable coming out of the mounting neck through the pole and pull it out of the 25~32mm hole where the LED light fitting will be fixed at.
5. Fix 1-M8x35 screw through the fixing hole of the mounting neck in to the 10mm hole that was pre drilled into the pole, fix the remaining 6-M8x12 screws through the remaining mounting neck holes to lock the P.V module securely onto the top of the pole. Refer to figure 3.

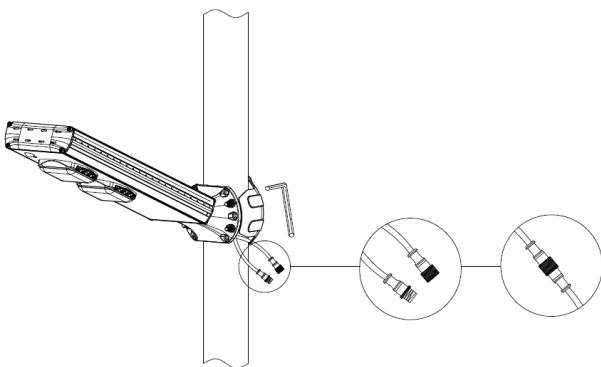


(Figure 2)

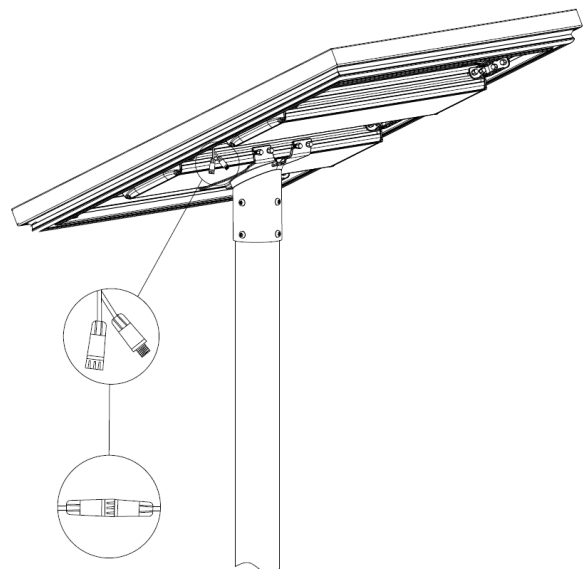


(Figure 3)

6. Remove the bracket of the LED light fitting and then loosely install the fitting onto the pole at the location of the 25~32mm hole. Connect the cables between PV module and LED light fitting and then push the cabling back into the pole.
7. Fix the LED light head securely to the pole by using the special tool. Refer to figure 4.
8. Connect the 2 multi-connect cables located within the PV module, the cables connect the battery and main controller modules together. Refer to figure 5.
9. Cover the PV module to test the installation. If all steps are carried out correctly then the LED light should turn on.



(Figure 4)



(Figure 5)

Maintenance

Corso STREET solar lights are designed for low maintenance. The only maintenance required is the need to periodically clean the surface to remove any residue or bird droppings on the PV module.

When cleaning the solar panel also check for any scratches or damage that may have resulted from nearby trees or other objects. Simply clean the surface as per the following procedure.

1. Clean leaves, pollen and dust off the top of the solar panel once every 6 – 18 months. Use a soft brush to seep dirt and debris away.
2. Remove stubborn stains using water and mild detergent or any biodegradable household cleaner. Apply the cleaner with a soft brush then rinse the P.V panel with clean water until all soap and debris is removed.
3. Maintain the mounting brackets and supports. Clean these items by also using a mild detergent and water, at the same time check that all connections are solid and tight.

