



TRANQUIL

SUSTAINABLE ENERGY



FOR ALL





The idea is intended to enhance the quality of life.

Our modest start in 2015 led to a lot of time, effort, and money spent on addressing our customers' problems related to energy solutions, power electronics, & renewable energy. Today we can't imagine life without electricity. We always strive to offer a solution to our clients which can bring brightness, happiness, and smiles to their life.

The company is the first to develop the product & market, raise customer awareness, and establish global brands, as well as make sustainable energy solutions and renewable energy businesses.



"With our innovative & sustainable solutions, we aim to improve people's lives every day. Sustainable Energy for All".

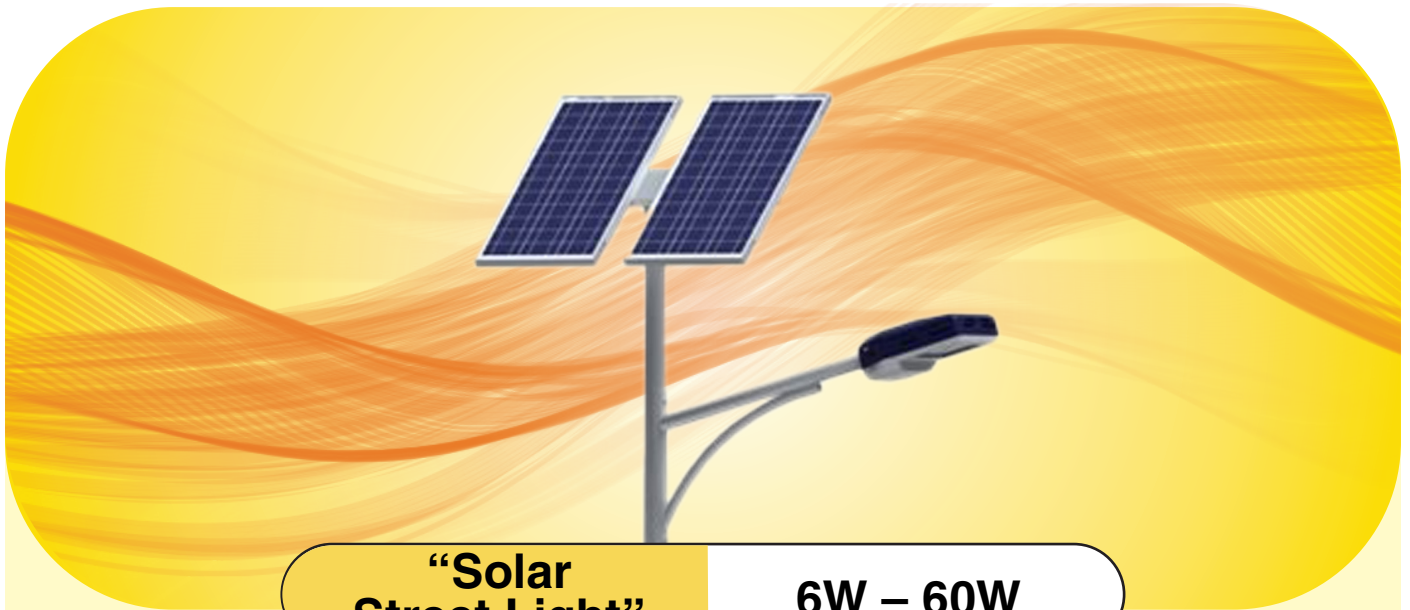
By providing our clients with value-added solutions that power their lives and society, we are passionate about being the preferred manufacturer, integrator of Power Electronics and Solar power systems worldwide.



Quality – Quality control is an important aspect of our work so that the longevity and reliability of our products and systems can be maximized. A team of industry experts designs, engineers, and manufactures our products and systems to deliver the best possible performance.

Competence – We are competent in more than one way. Our seasoned professionals, use of advanced technology, and experience in the industry enable us to deliver top-of-the-line solutions for our clients.

Customization – Customization is our specialty. We don't shy away from complex projects, working diligently to provide the perfect, engineered-to-order solution for our customers.



“Solar Street Light” **6W – 60W**

Tranquil Solar Street lighting system uses the photovoltaic technology to convert the sunlight into DC electricity through solar cells. The generated electricity stored in the inbuilt battery and is utilized for dusk-to-dawn lighting operations with automatic on/off sensor and overcharge / deep discharge prevention cut-off with LED indicators. Tranquil solar street lights are water-resistance and weatherproof and have a low glare and low insect attrition rate.



SCHOOL | COLLEGE | UNIVERSITY



VILLAGE



PARK AND PLAYGROUND



HIGHWAY AND ROADWAY



INDUSTRIAL

Technical Specification

| Model No. | 6W LED | 12W LED | 20W LED | 30W LED | 60W LED |
|---|--|--|--|--|--|
| Physical Parameters | | | | | |
| Power of PV Modules (W) | 25Wp | 40Wp | 60Wp | 75Wp | 150Wp |
| Lithium Battery capacity (1 Day) | Li-ion 11.1/6.6Ah Li-FePO4 12.8V/6Ah | Li-ion 11.1/13Ah Li-FePO4 12.8V/12Ah | Li-ion 11.1/24.2Ah Li-FePO4 12.8V/20Ah | Li-ion 11.1/32Ah Li-FePO4 12.8V/30Ah | Li-ion 11.1/63.8Ah Li-FePO4 12.8V/54Ah |
| Lithium Battery capacity (2 Days) | Li-ion 11.1/10.4Ah Li-FePO4 12.8V/12Ah | Li-ion 11.1/19.8Ah Li-FePO4 12.8V/18Ah | Li-ion 11.1/33Ah Li-FePO4 12.8V/30Ah | Li-ion 11.1/48.4Ah Li-FePO4 12.8V/42Ah | Li-ion 11.1/96.2Ah Li-FePO4 12.8V/81Ah |
| PIR Sensor | Provided | | | | |
| Dimensions of Products (mm) | 520(l)*340(w)*55(h) | 775(l)*340(w)*55(h) | 1060(l)*340(w)*55(h) | 1280(l)*340(w)*55(h) | 1710(l)*560(w)*43(h) |
| Driver parameter | | | | | |
| Charge Controller Type | PWM/MPPT | | | | |
| LED Driver Efficiency | >90% | | | | |
| LED Light Operating Voltage Range | Li-ion 9.6V - 12.6 v, Li-FePO4 11.1V-14.4V | | | | |
| Light Parameters | | | | | |
| Light Output (W) | 6W | 12W | 20W | 30W | 60W |
| Colour Temperature | 5500K-6500K | | | 5700K | |
| Typical Luminous Flux(Lm) | 600 | 1200 | 2000 | 3750 | 7500 |
| Mounting Recommendations | | | | | |
| Top of Pole or Tendon OD(mm) | 40mm-46mm | 70mm-76mm | | | |
| Recommended Installation Height (mtr) | 5mtr | | 5 mtr - 6 mtr | | 6 mtr - 8 mtr |
| Recommended Installation Distance (mtr) | 5mtr - 10mtr | | 15mtr - 20mtr | | 20mtr - 30mtr 30mtr - 40mtr |
| Protection Provided | | | | | |
| All in One Protections | Battery Deep Discharge Protection, Over Charge Protection, Load Open Protection, Charging & Battery Indication, ReverseCurrent Flow Protection, Temperature Compensation, Short-Circuit Protection | | | | |
| Operations | | | | | |
| All in One Operations | Full bright mode:First 4 hrs,afterwards light output will be 33% & motion sensation for etection of motion,if any motion is detected within 12M then light will glow with full brightness for 2 mins, afterwards power output will reduce to | | | | |
| Packing Parameters | | | | | |
| Dimension of Carton(LxWxH) | 600(L)x440(W)x110(H) | 920(L)x580(W) x150(H) | 1120(L)x640(W) x150(H) | 1240(L)x640(W) x150(H) | 1905(L)x650(W) x150(H) |
| Gross weight of product (Kg) | 7.5Kg | 13.5kg | 21kg | 25kg | 34.5kg |

EFFICIENT OPTICAL CONTROL

Luminosity is the light output from a lamp. A small lamp producing a lot of light results in grater brightness and consequent glare when looked at directly. Solar LED street lighting on the other hand consist of multiple light producing points thus reducing glare, also with the right type of secondary optics we can get precise distribution.

Unique peanut optics with bat wing profile ensures high efficiency & light uniformity across and along the road. Since all the light is directed downward, there is therefore no need to use reflectors to direct light downward. The consequent loss in light output due to limitations on reflector efficiency is avoided.



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