



Wind & Solar Street Lighting Solutions



We've been specialising in energy efficiency for some time now and have a heap of experience and information that will make this a simple and painless purchase on your part. Our experience in lighting solutions for years. Working with us will mean you're going to avoid all the hassles people often have when embarking on a project like yours.





Utilising both Wind and Solar for power generation, we can guarantee a continuous three (3) night illumination even if no wind or solar activity within the previous days due to our sophisticated energy management system and battery storage system.

Our vertical access wind turbines ensure maximum power generation from minimum local wind speeds. With turbine start-up wind speed of only 1.5m/sec, power availability is quickly established through t 'Generator'. If local winds rotate the wind turbine greater than 130rpm, the inbuilt braking system via its aerodynamics, ensure no over speed of the turbine.

We use Monocrystalline Photovoltaic Modules which features:

- High cell efficiency with quality silicon material for long term output stability and reliability
- High transmittance, low iron tempered glass with enhanced stiffness and impact resistance
- Unique frame design with high mechanical strength for easy installation
- Advanced encapsulation material with multi-layer sheet lamination for efficient protection from the most severe environmental conditions
- Outstanding electrical performance under high temperature and low irradiance conditions
- 36 monocrystalline high-efficiency solar cells



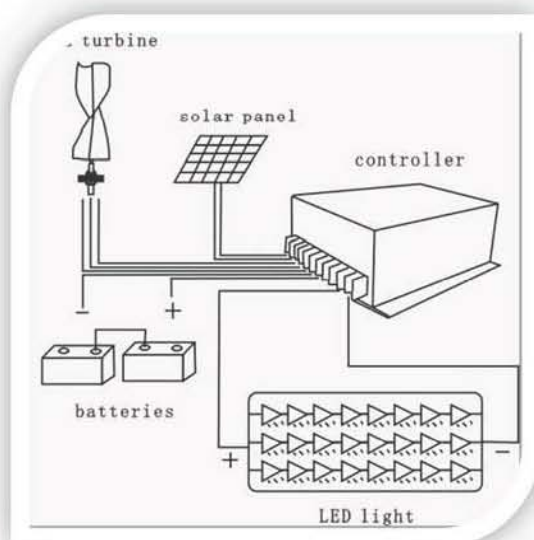
Our own LED head unit has a professional encapsulation of materials which utilises an American BridgeLux LED chip, making the LED light source obtain excellent protection of optical attenuation and heat conduction ratio. Also utilising world leading MeanWell LED Drivers, this ensures great luminaire stability, lifespan & optimal performance status. The use of the good thermal grease combining MCPCB and the aluminium radiator closely, keeps every LED obtaining optimal effects of heat dissipation. Light attenuation of LEDs under safe control with adequate heat sinking area and excellent air flow design.

The brain behind our hybrid street lighting solution is the intelligent Wind/Solar Hybrid MPPT Power Management Controller, a wind energy & solar senior energy manager. Internally it integrates a high efficient LED driver, wind MPPT tracking system and solar MPPT tracking system. The new design concept and the open user-level application configuration extend the controller's application, giving precise control of energy input and output.



Main features of our controller are:-

- Provide wind generators Maximum Power Point Tracking (MPPT) channel
 - Provide solar input Maximum Power Point Tracking (MPPT) channel
 - Provide LED driver with 120W output, maximum efficiency up to 95%
 - High brightness 3-digital display, setting parameters
 - Fan/solar input channel reverse connect, protect from over current, overloading and lightning
 - Output channel protection (open circuit, short circuit, overloading, opposite connect, lightning)
 - Battery input opposite connect
 - Battery over charge/discharge protection, safe charge management can repair battery during charging period, extends the battery lifetime greatly
 - Fan auto/manual unloading function, the unique unloading control technology ensures fan's smooth braking, to avoid large inertia change, and improve the mechanical life of fan
 - Provide electricity switching function as needed. When the battery runs down, switch to electricity automatically; keep the output stable and effective
 - Reserved RS232 communication interface can provide communication management function
- Make the expanding of wire/wireless telecommunications possible



Welcome be user of Sunlaite wind power, an ecological and safe energy source! our wind power equipment are durable and have a long life span, the design and construction made to function as independent units in harsh and difficult conditions. Sunlaite turbine starts producing energy even at winds of 1.5 m/s, so it can take advantage of even the lowest wind speeds, which is essential when considering continuous power production, Sunlaite hybrid controller is the world first intelligent Wind/Solar Hybrid MPPT Power Management Controller is a wind energy & solar senior energy manager. Internally integrates a high efficient LED driver, wind MPPT tracking system; solar MPPT tracking system. The new design concept and the open user-level application configuration extend the controller's application, precise control of energy input and output. The maximum extension of continuous output time ultimate plays especially in the current wind/solar hybrid street light engineering application.