Solar street lighting

The sun is an in-exhaustive, reliable, non-polluting source of power. Concerns over global climatic change, local air pollution and resource scarcity make photovoltaic (PV) an increasingly attractive energy supply technology. Using solar energy with LEDs instead of CFL provides a very efficient solution. Solar powered outdoor lighting products are ideal for lighting the area in remote locations where the electricity is unavailable or erratic. Even in urban areas, these find great usage to reduce dependency on conventional power and contribute towards green energy. Reliable and long life makes this solution effective in fulfilling our present and future lighting requirements.

Minigreen 21W

Nominal wattage of 21W LED luminiare

Alpha 13W

Nominal wattage of 13W LED luminaire

Moon

Nominal wattage of 8W LED luminaire

Benefits

- No line voltage, trenching, or metering
- No power outages
- Battery backup for cloudy or rainy days
- Independent power and light source- no two systems are connected, hence no single point of failure.
- Easy to install
- No maintenance except for the battery
- No cost of transformers or meters to be added for electric service
- Qualify for savings from various state taxes and incentives
- No monthly electric bills
- Controlled charging to prolong battery service life
- Long-life PV modules with more than 25 years of power generation capacity
- Environment friendly - 100% powered by the sun, solar panels reduce fossil fuel consumption, eliminating pollution
- IP 65 Luminaire ensures long lasting and consistent high performance
- Self-contained solution - Light on/off controlled by automatic daylight sensing
- No running cost
- Better and long life light source - LED lights feature white light without flickering and instant on.
- Safe 12 volt circuit, no risk of electric shock.

Added Philips solution benefits

	Philips Solution	Advantage
Luminaire	Aluminium housing LEDs for light source Optics	Strong and safe Excellent heat dissipation IP65 protection High brightness and high efficacy of more than 100lm/W new age LEDs Individual peanut optical lenses for uniform light distribution
	High efficiency driver & MPPT charge controller	Low power consumption
Solar panel	Polycrystalline solar cells	Mature technology Improving Efficiency More Rugged Ease of availability
Battery	Tubular construction	Low discharge rate Ideal for Tropical conditions Low Maintenance Long Life
	75% Depth of Discharge	Long Life
	Galvanised battery box	Weather-proof
	3 days autonomy	Long back-up Ideal for cloudy conditions
Pole	Galvanised pole	Rigid and safe Corrosion free
System	Integrated approach for system design extracting best performance from each part – • Top quality optics • optimum thermal management and heat sink design • microprocessor based charge controller and led driver maximizes the performance of panel & battery	All the components are optimized for maximum energy efficiency with lowest cost

System constituents

	Model No.	System (W)	System lumen O/P	Battery (AH)	Panel (WP)	Pole (m)
Moon	BRP 202	8	700	40@12V	40	4
Alpha series	BRP 302	13	1100	60@12V	60	4
Minigreen Series	BRP 402	21	1800	100@12V	100	5/6

- BRP202 meets MNRE requirements.
- Battery box available as top/bottom mounted option
- Ordering data on request

Applications

- Street Lighting
- Roadway Lighting
- Pathway Lighting
- Ramp Lighting
- Sidewalk Lighting
- Private Road Lighting
- Farm Lighting
- Wildlife Area Lighting
- Perimeter Security Lighting
- Park Lighting
- Gate Lighting
- Railway Yard Lighting
- Fence Lighting
- Campus Lighting
- Ship Dock Lighting
- Remote Area Lighting
- Military Base Lighting
- Jogging Path Lighting

Only A-brand quality mono- and poly- crystalline silicon solar panels with high efficiency and long lifetime are used.

High Lumen LED modules for maximum efficacy. Dedicated designed low-voltage solar controller technology with dimming capabilities for power-save management. Lifetime > 50,000 hrs and CRI > 80.

Highly efficient MPPT controller to charge your batteries and intelligent microprocessor controlled algorithms for light management ensure maximum uptime.

Specific deep discharge batteries are used to store the energy, provide energy for immediate requirements, and enable a back-up for days when there is little or no sun.

Microprocessor managed algorithms autonomously determine sunrise and sunset.