

Solar LED Lantern

Model: SLL-12

These lanterns are a viable solution to replace Kerosene Lamps. Kerosene lamps are costly, inefficient, and provide poor lighting. It can be charged by solar panel and is AC grid compatible for emergencies.

It is cost effective and long lasting as compared to earlier solar lighting systems. We have developed it in such a simple way that a village person can operate & maintain this after short training

Uses the world's most efficient LEDs when fully charged it will provide up to 12 hours of bright light. The lamp gives an even white light that is projected at wide angle - it is able to effectively illuminate a rural household with a room size of 4m x 4m.

It is 8 - 10 times brighter than a kerosene lantern and 30 - 50% more efficient than fluorescent lights. Though there is subsidy provided by the government on Kerosene still kerosene lamp is expensive as compared to the solar lighting system that we have developed. Based on our calculation we assure that the pay back period for the system is approx 1½ year.

Features

- Advance Japanese Circuit balancing an optimum high brightness with extended battery life
- Multi Chip High Power LED with 50,000 hours of life
- Powered by 6volts 4.5AH SMF Lead Acid battery easily available for future replacement
- Inbuilt Charge Controller for solar panel charging.
- 3watt Mono / Multi crystalline Solar Panel
- Optional AC charging recharges at very low voltage (range from 110v to 240v)
- Smart Battery Indicator that allows the user to manage his power effectively



MODEL: SLL-12

Technical Specifications:

Model No.	SLL - 12
General	
Application	Solar powered household Lanterns
Duty Cycle	8-10 hours on different modes
System Voltage	6 Volt DC
Number of Days of autonomy	1 day
SPV Module	
Module Type	Mono / Poly Crystalline Silicon
Module Power	3 watt panel
Open Circuit Voltage (Voc)	>/= 10.5 volt
Optimum Operating Voltage (Vmp)	8.6 volt
Battery	
Type	VRLA SMF Lead Acid
Battery Voltage	6 volt
Battery Capacity	4.5AH
LED Lamp	
Lamp Type	RoHS Compliant Solid State High Power LED
Rated Light output (Lumens)	70 Lumens at 350mA
Lamp Color Temperature	6500K Cool White
Rated Lamp average life	60,000 Hrs approx
Lamp Starting	Soft Start
LED Driver	
Type	Constant Current, Pulse Width Modulation (PWM) ,Buck Boost
Operating Voltage	6 – 15 Volt
Efficiency	Above 92% @ full load
Switching Frequency	1.6 MHz
Output	1000mA Constant Current
Operating Temperature	0 to 60 degree C
Protection	Low Power Shut Down, Broken / Open LED Protection, Thermal Shut Down, Reverse Polarity
Charge Controller	
Charge Controller Type	Electronically regulated
Self Power Consumption	4ma
Max Load Current	1A
Indication	Charging and Low battery
Protection	Overcharge, Deep Discharge, Over Load and Short Circuit at Load, Panel Surge Voltage, Wrong polarity at Panel or Battery

*specifications are subject to change without prior notice.