

Solar Home Lighting System



SPARKLE - Solar Home Lighting System

Su-Kam's Sparkle, the worlds smalles hybrid inverter has built-in batteries which works both with solar and grid. The external switch enables user to select bright or dim light. This Solar Home Lighting System with LED Bulbs is a cost effective lighting system that charges with both solar and main power and provides emergency backup via Lithium Ion Battery to power your needs.

Features

- Portable and lightweight
- Long life solar panel
- Hanging switch for convenient on/off function
- Wall/ceiling mountable for room light as well as fixes in table/reading lamp
- 2 brightness levels providing backup of 2.5 hours and 6 hours
- Fast AC grid charging- 3hours full charge
- Solar + Grid charging – 2 hours full charge in full sun
- Automatically converts to backup mode on power outage when light is on
- Red LED light indicator stays on during charging

Light Source

- High Efficiency LED: 120lm/W @ 120degree angle
- Cool white LEDs gives similar light as CFLs

Battery

- Integrated rechargeable, NO maintenance 3.7V, 0.55Ah lithium ion battery
- Overcharge and deep discharge protection on battery
- Low idle current (10 A) allows light to be kept in unused state for weeks without going into deep discharge

Environmental

- ABS plastic body makes it shock and vibration proof
- Lightweight: 290gms
- Packing Box Size (mm): 130X75X75

Applications

- Security Room
- Resorts
- Garden
- Study

TECHNICAL SPECIFICATION

Parameter	Units	Typical
Light output	Lux	5.2
Light output (battery @4.2V)	Lux	4.4
LED power consumption	W	0.8
LED Forward voltage	V	3
LED Forward Current	mA	40
LED Luminous Intensity	Lumen	14.5
LED Directivity	degree (2θ/2)	120
Solar Panels (Pm)	W	0.48
Solar Panel (Vm)	V	4.8
Solar Panel (Im)	mA	100
Solar charging - full sunlight	Hrs	7
Grid charging	Hrs	3
Solar + Grid charging - full sunlight	Hrs	2
Battery upper cutoff voltage (after stabilization)	V	4.25
Battery lower cutoff voltage (after stabilization)	V	3
Runtime (hrs) - hgih/normal	Hrs	2.5/ 6
idle current	μA	10
Dimension	mm	108 70 (I D)
Weight	gms	290
Power Supply Inout	Voltage	90 VAC-270VAC
Frequency	47Hz - 53Hz	47Hz - 53Hz
Inrush Current	50A Max	50A Max
Power supply output	Voltage	6V
Current	300mA	300mA
Protections	Max O/p Power (w)	1.8W