

# Ecomatters Solar Lantern

EC-RF64-S  
Guangdong Jinyuan Solar Energy Co., Ltd  
Results based on test procedures detailed in  
IEC 62257-9-5 v.4

Verify online:  
<https://data.verasol.org/products/sek/jinyuan-ecos/>  
Valid until: February 28, 2023



Meets the Lighting Global Pico-PV Quality Standards

Mobile charging

Light point(s)

Plug-and-play



## WARRANTY INFORMATION

The company warrants the product to be free from defects in material and workmanship, under normal use and operation, for a period of 2 years after the date of sale/handover to consumer

## PERFORMANCE DETAILS

			Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)	
			Used alone <sup>b</sup>	Used in combination <sup>c</sup>
	Appliance <sup>a</sup>	Description		
included in kit	Main lighting unit	1 integrated side lamp on (high) totaling 150 lumens and 1.2 W power	5.5 hours	2.2 hours
	Mobile phone	Smart phone (5.7 Wh battery)	0.83 full charge(s)	0.54 full charge(s)
	Main lighting unit	1 integrated front lamp on (on) totaling 86 lumens and 1.0 W power	6.6 hours	--

Available daily electrical energy<sup>e</sup> (Wh/day) 6

Performance measure	Brightness setting: High
Lighting full battery run time <sup>d</sup> for main unit (hours)	5.5
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	830

<sup>a</sup> Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

<sup>b</sup> Without any other loads used during the run time

<sup>c</sup> Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.

<sup>d</sup> Lighting full battery run time estimates do not account for mobile phone charging or other auxiliary loads; the run time is defined as the time until the output is 70% of the initial, stabilized output.

## LIGHTING DETAILS


Lamp name	Number of lamps	Number of settings	Setting	Light output (lm)	Lumen efficacy <sup>a</sup> (lm/W)	CR <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
Integrated Side Lamp	1	6	High	150	120	72	5500	Omnidirectional	100%
Integrated Front Lamp	1	1	On	86	84	73	9500	Narrow	99%

<sup>a</sup> Lumen efficacy is the power consumption at a light point during the light output test.

<sup>f</sup> Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

<sup>g</sup> Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

<sup>h</sup> Percent of the original light output that remains after 2,000 hours of run time

SPECIAL FEATURES		
Multi-mode	★ The lantern can be used as flashlight, ambient light, SOS light, warning light and party light.	
PORTS		
1	USB 2.0 type A  Mobile phones can be charged. A 4-in-1 USB charger is included.	
DURABILITY		
Overall durability and workmanship	Pass	
Durability tests passed	Switch test, Drop test, Strain relief test, Physical ingress protection.	
Level of water protection	Main Unit	Has protection from occasional rain; met with IPX1 and an appropriate warning label
	PV module	Has protection from permanent outdoor exposure.
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	2.3 watts	
MAIN UNIT BATTERY DETAILS		
Battery replaceability	Not easily replaceable with common tools.	
Battery chemistry	Lithium-ion	
Battery package type	18650	
Battery capacity	2.5 Ah	
Battery nominal voltage	3.7 V	
Battery status indication	Two indicators for the PV charging and phone charging	
MARKS AND CERTIFICATIONS		
Factory certification	ISO 9001:2015, ISO 14001:2015	
PRODUCT DETAILS		
Manufacturer name	Guangdong Jinyuan Solar Energy Co., Ltd	
Product name	Ecomatters Solar Lantern	
Product model / ID number	EC-RF64-S	
Contact information	Bobby@jinyuanlighting.com	
Website	www.ecomatters-solar.com	
Dimensions (entire product in package)	15.4 x 18.2 x 11 cm	
Mass	600 g	
SSS INFORMATION		
Specs sheet expiration date	February 28, 2023	
Quality standards framework version	2021	
Revision	2021.02	