

# Solar Lantern

P7

Qingdao Sunshine New Energy Co., Ltd

Verify online:

<https://data.verasol.org/products/sek/sc-p7>

Valid until: April 30, 2025

Results based on test procedures detailed in IEC TS 62257-9-5 and IEC TS 62257-9-8



Meets the requirements in IEC TS 62257-9-8:2020 for Size A Kits



Mobile charging

2

Light point(s)



Plug-and-play



## WARRANTY INFORMATION

A 2-year warranty (3-year warranty in Rwanda) covering manufacturing defects in the system.

## PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance <sup>a</sup>	Description	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>
yes	included	Main lighting unit	2 light points (Main unit integrated light on "Brightest" and Hanging light on "On") totaling 355 lumens and 2.7 W power	5.9 hours	3.7 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	2.6 full charge(s)	0.9 full charge(s)

Available daily electrical energy <sup>c</sup> (Wh/day)	14
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Performance measure	Brightness setting: One main unit light on "Brightest", one hanging bulb on "On"
Lighting full battery run time <sup>d</sup> for main unit (hours)	6.8
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	2120

<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>e</sup> (lm/W)	CRI <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
Main light (main unit)	1	3	Brightest	220	120	85	8600	Wide	100%
Hanging bulb	1	1	On	130	150	88	8000	Wide	100%
Reading light (main unit)	1	1	On	74	110	87	9100	Wide	100%
Focus light (main unit)	1	1	On	100	77	76	9400	Narrow	99%

<sup>e</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

PORTS		
1	USB 2.0 type A	 Mobile phones can be charged. Adapters are included.
1	Barrel jack	 3.2 V port available to power a light point.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop test, Strain relief test, Physical ingress protection, PV durability tests
Level of water protection	Main Unit	Has protection from occasional rain; met with appropriate warning label
	PV module	Has protection from permanent outdoor exposure
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		5.1 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Easily replaceable with common tools; however, the warranty is void if product is opened.
Battery chemistry		Lithium iron phosphate
Battery package type		32700
Battery capacity		5.9 Ah
Battery nominal voltage		3.2 V
Battery status/ other indicator lights		Four indicators for battery level and charging.
PRODUCT DETAILS		
Manufacturer name		Qingdao Sunshine New Energy Co., Ltd
Product name		Solar Lantern
Product model / ID number		P7
Contact information		steven@solarchange.com.cn
Website		www.solarchange.com.cn
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		n/a
SSS INFORMATION		
Specs sheet expiration date		April 30, 2025
Revision		2023.04