

Solar Lantern

P7

Brand name: SolarChange

Results based on test procedures detailed in IEC TS 62257-9-5:2024

Verify online:

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

Valid until:

June 30, 2028



Meets the Requirements in IEC TS 62257-9-8:2025 for Size A kits



Mobile charging

4

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

				Run time after a typical day of solar charging	
				(assuming 5kWh/m ² /day)	
VeraSol Certified?	Included in kit?	Appliance ^a	Description	Used alone ^b	Used in combination ^c
yes	included	Main lighting unit	2 light points (main unit integrated light on "Brightest", Hanging bulb on "On") totaling 350 lumens and 2.7 W power	5.1 hours	1.4 hours
no	not included	Smart phone	Smart phone (15 Wh battery)	0.48 full charge(s)	0.35 full charge(s)

Available daily electrical energy [Wh/day]	11
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Performance measure	Brightness setting: Integrated light (main unit) on "Brightest" Hanging bulb on "On"
Lighting full battery run time for main unit [hours]	6.7
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	1790

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




^b Without any other loads used during the run time

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

^d 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 name	Light output [lm]	Power Consumption [W]	Lumen efficacy ^e [lm/W]	CRI ^f	CCT ^g	Lumen maintenance ^h
Main light (main unit)	1	3	Brightest	220	2	130	81	6900	98
Hanging bulb	1	1	On	130	0.86	140	83	6700	99
Focus light (main unit)	1	1	On	100	1.5	64	68	7900	100
Reading light (main unit)	1	1	On	74	0.64	100	80	10000	97

^e Lumen efficacy is the power consumption at a light point during the light output test.
^f Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.
^g Correlated Color Temperature in Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K).
^h 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		12 V ports available to power light points.
1	USB type C		Mobile phones can be charged. Adapters are not included.

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 W
PV Rated Power	5 W
PV Open-Circuit Voltage (V _{OC})	6.06 V

MAIN UNIT BATTERY DETAILS	
Battery Replaceability	Easily replaceable with common tools; however, the warranty is void if product is opened.
Specific Li-ion Battery Chemistry	lithium iron phosphate
Battery Capacity (tested)	6.2 Ah
Battery Capacity (rated)	6 Ah
Battery Nominal Voltage	3.5 V
Battery status / other indicator lights	One indicator for battery level.

PRODUCT DETAILS	
Company Name (full)	Qingdao Sunshine New Energy Co., Ltd
Company Name ("brand")	SolarChange
Product Name	Solar Lantern
Product Model or ID Number	P7
Company Contact Information	steven@solarchange.com.cn
Company Website	www.solarchange.com.cn
Mass	1325 g

SSS INFORMATION	
Expiration Date	June 30, 2028
Revision	2025.07