

SolarChange Solar Lighting System

SC-810
Qingdao Sunshine New Energy Co., Ltd

Verify online:
<https://data.verasol.org/products/sek/sc-ssl>
Valid until: November 30, 2025

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



Meets the Requirements in IEC TS 62257-9-8:2020 for Size A kits



Mobile charging

7

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty covering manufacturing defects for the entire product. A 3-year warranty covering manufacturing defects for the entire product in Rwanda.

PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance ^a	Description	Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
				Used alone ^b	Used in combination ^c
yes	included	Main lighting unit	4 light points on 'on' totaling 564 lumens and 4.8 W power	6.5 hours	3.7 hours
yes	included	Torch	120 lm torch LiFePO4 battery: 0.61 Ah, 3.70 V	24 hours	3.7 hours
yes	included	Radio	Portable radio Li-Ion battery: 2 Ah, 4.25 V, with a power consumption of 0.42 W while in use	60 hours	2.8 hours
no	not included	Smart Phone	Smart phone (5.7 Wh battery)	3.9 full charge(s)	0.93 full charge(s)

Available daily electrical energy ^e (Wh/day)	30
---	----

Performance measure	Brightness setting: high
Lighting full battery run time ^d for main unit (hours)	5.6
Lighting full battery run time of the Torch powered by Torch battery (hours)	2
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3310

^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	Light output (lm)	Lumen efficacy ^e (lm/W)	CRI ^f	CCT ^g	Distribution type	Lumen maintenance ^h
1.2 W bulb	4	1	on	140	110	87	6400	Narrow	100%
Torch	1	3	high	83	87	91	4200	Wide	99%

^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 degrees 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		
2	USB 2.0 type A	 Mobile phones, torches, and radios can be charged. Adapters are included.
4	Other	6.4 V lamp ports available to power light points
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	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
	Torch	Has protection from frequent rain; met IPX3
	Radio	Has protection from occasional rain; met IPX1
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		10 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
Specific Li-ion battery chemistry		lithium iron phosphate
Battery package type		32700
Battery capacity		6.1 Ah
Battery nominal voltage		6.4 V
Battery status/ other indicator lights		four indicators for charging and battery level
PRODUCT DETAILS		
Manufacturer name		Qingdao Sunshine New Energy Co., Ltd
Product name		SolarChange Solar Lighting System
Product model / ID number		SC-810
Contact information		steven@solarchange.com.cn
Website		https://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		November 30, 2025
Revision		2023.11