

# Spark Start

Spark

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

Verify online:

<https://data.verasol.org/products/sek/rs-ss>

Valid until: April 30, 2024



Meets the requirements in IEC TS 62257-9-8 for Size B Kits



Mobile charging

PAYG

Pay-As-You-Go option available

4

Light point(s)



Plug-and-play



## WARRANTY INFORMATION

A 2-year warranty covering manufacturing defects and protection from early component failure.

## 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	4 light points on maximum totaling 690 lumens and 5.6 W power	6 hours	1.3 hours
yes	included	Radio	Portable Li-ion battery: 0.76 Ah, 3.7 V, with a power consumption of 1.0 W while in-use	84 hours	1.1 hours
yes	not included	Torch	Li-ion battery: 1.9 Ah, 3.7 V	19 hours	1.4 hours
no	not included	Television	32" diagonal (11 W power consumption while in-use)	3 hours	0.68 hours
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	4.1 full charge(s)	0.35 full charge(s)
no	not included	Fan	16" table fan (7.8 W power)	4.4 hours	1.7 hours

Available daily electrical energy<sup>c</sup> (Wh/day) 36

Performance measure	Brightness setting: Maximum
Lighting full battery run time <sup>d</sup> for main unit (hours)	6.9
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3110

<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>
LED light	4	3	Maximum	170 (210 without reflector)	120 (150 without reflector)	81	4200	Wide	100%

<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		
2	USB 2.0 type A	 Mobile phones and radios can be charged. Adapters are included.
3	Barrel jack	 3 ports for charging and powering appliances. 1 of these ports is used for lamp port only.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop test (torch and radio), Strain relief test, Physical ingress protection, PV durability tests
Level of water protection	Main Unit and LED lights	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure.
	Torch	Has protection from occasional rain; met IPX1
	Radio	Has protection from occasional rain; met with appropriate warning label
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		10 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery capacity		3.5 Ah
Battery nominal voltage		12.8 V
Battery status/ other indicator lights		Multiple packages. Contact manufacturer for more information.
PRODUCT DETAILS		
Manufacturer name		Spark
Product name		Spark Start
Contact information		shagun@sparkenergy.io
Website		www.sparkenergy.io
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
SSS INFORMATION		
Specs sheet expiration date		April 30, 2024
Revision		2024.03