

Spark Solar Home System

Spark 10

Fosera Solar Systems GmbH & Co.KGaA

Verify online:

<https://data.verasol.org/products/sek/fs-spark10>

Valid until: February 28, 2024

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

PAYG

Pay-As-You-Go option available

2

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 3-year warranty covering manufacturing defects in the system.

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	LED lamps	Two light points on high totaling 190 lumens and 1.4 W power	8.4 hours	3.2 hours
no	not included	Radio	portable radio (3.7 Wh battery, 3.7 V nominal voltage) with rated power consumption of 2.3 W while in-use	17 hours	2.4 hours
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	1.5 full charge(s)	0.81 full charge(s)

Available daily electrical energy ^c (Wh/day)	11
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Performance measure	Brightness setting: High
Lighting full battery run time ^d for main unit (hours)	8.4
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	790

^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
LED lamp	2	3	High	94	140	83	5100	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

SPECIAL FEATURES		
PAYG		Pay-As-You-Go enabled
PORTS		
1	USB 2.0 type A	 One USB port is available to charge a mobile phone or power a radio. Adapters are not included.
2	Barrel jack	 Two 3.2 V barrel jacks are used for light points only.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Strain relief test, Physical ingress protection, PV durability tests
Level of water protection	Main Unit	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		3.8 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery capacity		3.8 Ah
Battery nominal voltage		3.2 V
Battery status/ other indicator lights		Main unit has one indicator for charging status, battery state of charge, low energy mode, and error state
PRODUCT DETAILS		
Manufacturer name		Fosera Solar Systems GmbH & Co.KGaA
Product name		Spark Solar Home System
Product model / ID number		Spark 10
Contact information		info@fosera.com
Website		http://www.fosera.com/
Dimensions (entire product in package)		8 x 27.5 x 20 cm
Mass		1080 g
SSS INFORMATION		
Specs sheet expiration date		February 28, 2024
Revision		2022.09