Spark Solar Home System

Spark 10 Angaza PAYG

Fosera Group

Results based on test procedures detailed in IEC 62257-9-5 v.4

Verify online:
https://data.verasol.org/products/sek/fs-spark10
Valid until February 28, 2022

Meets the Lighting Global Pico-PV Quality Standards

Mobile charging

PAYG **Pay-As-You-Go enabled**

2 **Light point(s)**

Plug-and-play

WARRANTY INFORMATION

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

PERFORMANCE DETAILS

			Run time after a typical day of solar charging (assuming 5kWh/m^2/day)	
	Appliance[a]	**Description**	**Used alone[b]**	**Used in combination[c]**
included in kit	LED lamps	Two light points on high totaling 190 lumens and 1.4 W power	8.5 hours	2.5 hours
sold separately	Radio	portable radio (3.7 Wh battery, 3.7 V nominal voltage) with rated power consumption of 2.3 W while in-use	3.9 hours	1.9 hours
	Mobile phone	Basic phone (3.7 Wh battery)	2.4 full charge(s)	0.6 full charge(s)

Available daily electrical energy[c] (Wh/day)	11

Performance measure	**Brightness setting: High**
Lighting full battery run time[d] for main unit (hours)	8.5
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any auxiliary lights included with the product)	800

[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 vieiwing 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.
Level of water protection	Main Lighting 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

BATTERY DETAILS	
Battery replaceability	Not easily replaceable with common tools.
Battery chemistry	Lithium iron phosphate
Battery package type	Other cylindrical
Battery capacity	3.8 Ah
Battery nominal voltage	3.2 V
Battery status indication	Main unit has one indicator for charging status, battery state of charge, low energy mode, and error state

PRODUCT DETAILS	
Manufacturer name	Fosera Group
Product name	Spark Solar Home System
Product model / ID number	Spark 10 Angaza PAYG
Contact information	info@fosera.com
Website	http://www.fosera.com/
Co-brand of	Spark Solar Home System Spark 10
Dimensions (entire product in package)	8 x 27.5 x 20 cm
Mass	1080 g

SSS INFORMATION	
Specs sheet expiration date	February 28, 2022
Quality standards framework version	2020
Revision	2021.09