

Rural Spark Energy Kit

Rural Spark B.V.

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

Verify online:

<https://data.verasol.org/products/sek/RS-energykit>

Valid until: August 31, 2022



Meets the Lighting Global Solar Home System Kit Quality Standards



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 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	Main lighting unit	3 light points on high totaling 600 lumens and 4.8 W	20 hours	5.4 hours
	Portable Lamp	83 lumens portable lantern, (LiFePO4 battery: 1000 mAh, 3.2 V)	120 hours	5.4 hours
	Television	24" diagonal (11 W power consumption while in-use)	11 hours	2.7 hours
sold separately	Mobile phone	Basic phone (3.7 Wh battery)	22 full charge(s)	1.4 full charge(s)
	Radio	portable radio with 3 Wh battery and a power consumption of 0.34 W while in use	255 hours	4.1 hours
	Fan	16" inch table fan (7.8 W power)	16 hours	6.8 hours

*Note, the run time values are for the router connected to 5 cubes

Available daily electrical energy ^c (Wh/day)	119
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Performance measure	Brightness setting: 3 lights on high
Lighting full battery run time ^d for main unit (hours)	20
Lighting full battery run time of the Portable lamp powered by Portable lamp battery (hours)	3.9
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	13500

^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. The run time value for the main unit is for the router connected to 5 cubes and 3 lights.

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
Hanging Lamp	3	2	High	200	120	84	6900	Wide	100%
Portable Lamp	1	3	Super Bright	83	130	84	5500	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		
switchable outputs	★ The portable lamp and hanging lamps have their own switch.	
bi-directional flow	★ The energy can flow bi-directionally inside the router.	
multi-source	★ The TV can be played via VGA, HDMI, AV, USB, ATV and DTV	
five cubes	★ The battery capacity of the system may be increased by adding up to four additional cubes for a total of 5.	
PORTS		
16	USB 2.0 type A  Mobile phones can be charged. Adapters are not included. There are 16 USB output ports on the router and two on each cube. When the 5 cubes are plugged in to the router, a total of 16 USB ports are available for charging devices.	
2	Banana jack  There are two 12 V ports on the router (each port has a separate positive and negative jack)	
DURABILITY		
Overall durability and workmanship	Pass	
Durability tests passed	Switch test, Drop test, Strain relief test, Physical ingress protection.	
Level of water protection	Cube	Has protection from occasional rain; met IPX1
	PV module	Has protection from permanent outdoor exposure
	Router	Water ingress protection not tested, meant for indoor use only.
	Hanging Lamp	Water ingress protection not tested, meant for indoor use only.
	Portable Lamp	Has protection from occasional rain; met with appropriate warning label
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	42 watts	
MAIN UNIT BATTERY DETAILS		
Battery replaceability	Not easily replaceable with common tools.	
Battery chemistry	Lithium iron phosphate	
Battery package type	26650	
Battery capacity*	3.3 Ah*	
Battery nominal voltage	6.4 V	
Battery status indication	3 indicators for battery state of charge	
* Note that the battery capacity listed is for one cube. The system can add up to five cubes total, which would increase the systems' battery capacity to 16.5 Ah.		
MARKS AND CERTIFICATIONS		
Factory certification	ISO 9001:2015, OHSAS ISO 18001-2007, ISO 14001-2015, EN 9100:2018	
Other certification	IEC 61215:2005	
PRODUCT DETAILS		
Manufacturer name	Rural Spark B.V.	
Product name	Rural Spark Energy Kit	
Product model / ID number	--	
Contact information	shagun@ruralspark.com	
Website	www.ruralspark.com	
Dimensions (entire product in package)	Multiple packages. Contact manufacturer for more information.	
Mass	Multiple packages. Contact manufacturer for more information.	
SSS INFORMATION		
Specs sheet expiration date	August 31, 2022	
Quality standards framework version	2020	
Revision	2020.08	