

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



Pay-As-You-Go option available



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	
2	Banana 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