

Flex 3e Solar Home Systems

Flex 3e
Roofstar Technology Company Limited

Verify online:
<https://data.verasol.org/products/sek/me-flex3e>
Valid until: September 30, 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 for Size B Kits



Mobile charging

4

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty for the main unit and kit, and a 1-year warranty for optional appliances.

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 Lantern	3 light points on High totaling 480 lumens and 4.8 W power	22 hours	14 hours (all three lamps used together)
yes	included	Torch	30 lumen torch (LiFePO4 battery: 400 mAh, 3.3 V)	22 hours	5.5 hours
yes	included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V) with power consumption of 0.5 W while in use	24 hours	0.93 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	1.8 full charge(s)	3.8 full charge(s)

Available daily electrical energy^c (Wh/day)

29

Performance measure

Brightness setting: High

Lighting full battery run time^d for main unit (hours)

5.4

Lighting full battery run time of the torch powered by torch battery (hours)

6.4

Total lighting service (lumen-hours/solar-day)

2920

(includes the both main lighting unit and any lights with internal batteries included with the product)

^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 Lantern	3	2	High Mode	160	100	78	7800	Wide	98%
Torch	1	1	On	30	100	81	6800	Wide	100%

^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		
Remote	 Torch acts as a wireless remote control to turn lamps On and Off	
PORTS		
1	USB 2.0 type A  USB output port on each LED Lantern. Mobile phones and radios can be charged. Adapters are included.	
DURABILITY		
Overall durability and workmanship	Pass	
Durability tests passed	Switch test, Drop test, Strain relief test, Physical ingress protection, PV durability tests	
Level of water protection	LED Lantern	Has protection from frequent rain; met IPX4
	PV module	Has protection from permanent outdoor exposure
	Torch	Has protection from occasional rain; met with appropriate warning label
	Radio	Has protection from occasional rain; met with appropriate warning label
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	11 watts (one 3 W and one 8 W PV module)	
MAIN UNIT BATTERY DETAILS		
Battery replaceability	Easily replaceable with common tools; however, the warranty is void if product is opened.	
Battery chemistry	Lithium iron phosphate	
Battery package type	26650	
Battery capacity	10.2 Ah	
Battery nominal voltage	3.2 V	
Battery status/ other indicator lights	Four LEDs indicate different battery capacity levels on the LED Lanterns; Three LED indicators show the working status of the Torch.	
PRODUCT DETAILS		
Manufacturer name	Roofstar Technology Company Limited	
Product name	Flex 3e Solar Home Systems	
Product model / ID number	Flex 3e	
Contact information	zelalem@roofstartechnology.com	
Website	www.roofstartechnology.com	
Dimensions (entire product in package)	37 x 19 x 14 cm	
Mass	2790 g	
SSS INFORMATION		
Specs sheet expiration date	September 30, 2024	
Revision	2024.07	