

E-20-06_LP112 Solar Home System

E-20-06_LP112

Shenzhen Poweroak Newener Co., Ltd

Verify online:

<https://data.verasol.org/products/sek/po-e20>

Valid until: September 30, 2023

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

3

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2- year warranty covering defects in materials and workmanship for battery, PV module, and lights and a 1-year warranty for all other included electrical 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	Main lighting unit	3 light points on high totaling 650 lumens and 5 W	2.6 hours	2.6 hours
yes	not included	Radio	portable radio (Li-ion battery: 1 Ah, 3.7 V) with rated power consumption of 0.32 W while in use.	44 hours	2.1 hours
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	2.5 full charge(s)	0.71 full charge(s)

Available daily electrical energy ^e (Wh/day)	17
---	----

Performance measure	Brightness setting: Both 1.2 W lamps and 2.5 W lamp on high
Lighting full battery run time ^d for main unit (hours)	2.6
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	1700

^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
1.2 W	2	3	High	150	150	70	6500	Wide	100%
2.5 W	1	3	High	350	350	81	5700	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		
PAYG	★	Pay-As-You-Go enabled
PORTS		
2	USB 2.0 type A	 Mobile phones and radios can be charged. Phone adapter is included.
4	Barrel jack	 12 V ports available to charge devices and power appliances and light points.
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		6.8 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Specific Li-ion battery chemistry		lithium iron phosphate
Battery package type		18650
Battery capacity		3 Ah
Battery nominal voltage		6.4 V
Battery status indication		Two indicators for battery status.
MARKS AND CERTIFICATIONS		
Factory certification		ISO 14001:2015, ISO 45001:2018, ISO 9001:2015
PRODUCT DETAILS		
Manufacturer name		Shenzhen Poweroak Newener Co., Ltd
Product name		E-20-06_LP112 Solar Home System
Product model / ID number		E-20-06_LP112
Contact information		Jack_Sun@poweroak.net
Website		http://www.poweroak.solar/eb150
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		n/a
SSS INFORMATION		
Specs sheet expiration date		September 30, 2023
Revision		2021.09