

P-100-55_LP2255 Solar Home System

P-100-55_LP2255

Shenzhen Poweroak Newener Co., Ltd

Verify online:

<https://data.verasol.org/products/sek/po-p100>

Valid until: October 31, 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 for Size B Kits



Mobile charging

PAYG

Pay-As-You-Go option available

4

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty covering manufacturing/workmanship defects for the battery, solar panel, and lights and a 1-year warranty for 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	Two 2.5 W and two 5.7 W lamps on high, totalling 2350 lm and 16 W	4.9 hours	2.2 hours
yes	included	Stand fan	16" diameter table fan (14 W power on high)	9.2 hours	3.4 hours
no	not included	Smart phone	Smart phone (5.7 Wh battery)	13 full charge(s)	0.81 full charge(s)
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.	170 hours	2.4 hours
yes	not included	32" TV	32" diagonal (15 W power consumption while in-use)	8.5 hours	1.4 hours

Available daily electrical energy ^f (Wh/day)	110
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Performance measure	Brightness setting: All lights on high
Lighting full battery run time ^d for main unit (hours)	4.9
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	11600

^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
2.5 W lamp	2	3	High	370	150	80	5800	Wide	100%
5.7 W lamp	2	3	High	810	140	80	5800	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		
4	USB 2.0 type A	 Mobile phones and radios can be charged. Adapters are included.
10	Barrel jack	 12 V ports are available to 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
	Stand fan	Water ingress protection not tested, meant for indoor use only.
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		51 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium-ion
Specific Li-ion battery chemistry		lithium iron phosphate
Battery package type		8-28*26700
Battery capacity		8.10 Ah
Battery nominal voltage		12.8 V
Battery status indication		One indicator showing charge-to-full time, remaining capacity, and discharge-to-empty time.
MARKS AND CERTIFICATIONS		
Factory certification		ISO 9001:2015, ISO 14001:2015, ISO 45001:2018
PRODUCT DETAILS		
Manufacturer name		Shenzhen Poweroak Newener Co., Ltd
Product name		P-100-55_LP2255 Solar Home System
Product model / ID number		P-100-55_LP2255
Contact information		Jack_Sun@poweroak.net
Website		www.poweroak.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		n/a
SSS INFORMATION		
Specs sheet expiration date		October 31, 2023
Revision		2021.09