Solar Home System

PL-100-H-LFP

Poly Solar Technologies (Beijing) Co., Ltd

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

✓ **Meets the Lighting Global Solar Home System Kit Quality Standards**

📱 **Mobile charging**

4 **Light point(s)**

▶ **Plug-and-play**

WARRANTY INFORMATION

3-year warranty. The warranty would be voided if the product has been tampered with.

PERFORMANCE DETAILS

| | Appliance[a] | Description | Run time after a typical day of solar charging (assuming 5kWh/m²/day) | |
			Used alone[b]	Used in combination[c]
included in kit	Main lighting unit	3 1.5 W bulbs and 1 5 W bulb on totaling 1180 lumens and 9.2 W power	39 hours	9.9 hours
sold separately	Mobile phone	Basic phone (3.7 Wh battery)	62 full charge(s)	--
sold separately	Smart phone	Smart phone (5.7 Wh battery)	40 full charge(s)	2.5 full charge(s)
sold separately	Television	24" diagonal (12 W power consumption while in-use)	30 hours	5 hours
sold separately	Fan	40 cm table fan (15 W power)	24 hours	13 hours

Available daily electrical energy[c] (Wh/day)	360

Performance measure	Brightness setting: 3 x 1.5 W bulbs and 1 x 5 W bulb on
Lighting full battery run time[d] for main unit (hours)	42
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	45900

[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]
1.5 W bulb	3	1	On	180	120	76	7800	Omnidirectional	99%
5 W bulb	1	1	On	630	130	84	6800	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 vieiwing 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

Individual switches ⭐ **The LED bulbs can be turned on individually by individual switch**

PORTS

4 **USB 2.0 type A** Mobile phones can be charged. Adapters are included.

4	Barrel jack		12 V ports available to charge devices and power appliances and light points.
1	Cigarette lighter		12 V port available to power appliances

DURABILITY

Overall durability and workmanship		Pass
Durability tests passed		Switch test, Strain relief test, Physical ingress protection.
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	98 watts

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	20 x 32700 cells
Battery capacity	31 Ah
Battery nominal voltage	12.8 V
Battery status indication	One green LED for showing the photovoltaic charging, four yellow LED for showing the battery capacity and one red LED for showing the load status.

MARKS AND CERTIFICATIONS

Factory certification	ISO 9001:2015

PRODUCT DETAILS

Manufacturer name	Poly Solar Technologies (Beijing) Co., Ltd
Product name	Solar Home System
Product model / ID number	PL-100-H-LFP
Contact information	penghaiyan@polysolar.cn
Website	www.polysolar.com.cn
Dimensions (entire product in package)	Multiple packages. Contact manufacturer for more information.
Mass	12500 g

SSS INFORMATION

Specs sheet expiration date	March 31, 2023
Quality standards framework version	2020
Revision	2023.01