

SolarHome 620-R+

SH620R+ (kit); includes SHB-007/011 (hanging light) and SHB-008/012 (security light)
BioLite, Inc.

Results based on test procedures detailed in IEC TS 62257-9-5

Verify online:

<https://data.verasol.org/products/sek/bio-sh620rplus>
Valid until: December 31, 2021



Meets the Lighting Global Pico-PV Quality Standards



Mobile charging



Pay-As-You-Go option available

4

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty covering defects in workmanship and materials

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	4 light points on (high) [1 integrated light, 2 hanging lights, 1 security light] totaling 420 lumens and 2.4 W power	5.8 hours	4.1 hours
yes	included	Radio	integrated battery with a power consumption of 0.17 W while in-use	130 hours	3.1 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	3.8 full charge(s)	1 full charge(s)

Available daily electrical energy^d (Wh/day)

17

Brightness setting:
One integrated light - high
Two hanging lights - high
One security light - high

Performance measure	
Lighting full battery run time ^d for main unit (hours)	5.9
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	2450

^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
Integrated light	1	3	High	30	80	80	5000	Wide	99%
Hanging light	2	3	High	130	160	81	5000	Wide	99%
Security light	1	3	High	130	150	81	5000	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

PORTS		
1	USB 2.0 type A	
2	Barrel jack	
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 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		2x 26650 2S1P
Battery capacity		3.6 Ah
Battery nominal voltage		6.4 (measured typical battery discharge voltage 6.5 V) V
Battery status indication		There is a LCD panel showing the status (e.g. battery level, sun light level, PAYG code, etc.) of the unit.
MARKS AND CERTIFICATIONS		
Factory certification		ISO 9001:2015; ISO14001:2015
PRODUCT DETAILS		
Manufacturer name		BioLite, Inc.
Product name		SolarHome 620-R+
Product model / ID number		SH620R+ (kit); includes SHB-007/011 (hanging light) and SHB-008/012 (security light)
Contact information		Ethan@bioliteenergy.com
Website		http://bioliteglobal.com/
Dimensions (entire product in package)		20.5 x 29.5 x 18 cm
Mass		2405 g
SSS INFORMATION		
Specs sheet expiration date		December 31, 2021
Quality standards framework version		2020
Revision		2021.03