

# SolarHome 620-R+

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

Verify online:

<https://data.verasol.org/products/sek/bio-sh620rplus>

Valid until: May 31, 2023

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



Meets the Lighting Global Pico-PV Quality Standards



Mobile charging

PAYG

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 <sup>a</sup>	Description	Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)	
				Used alone <sup>b</sup>	Used in combination <sup>c</sup>
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<sup>e</sup> (Wh/day)

17

## Performance measure

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

Lighting full battery run time<sup>d</sup> 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

<sup>a</sup> Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

<sup>b</sup> Without any other loads used during the run time

<sup>c</sup> Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.

<sup>d</sup> 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 <sup>e</sup> (lm/W)	CRI <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
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%

<sup>e</sup> Lumen efficacy is the power consumption at a light point during the light output test.

<sup>f</sup> Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

<sup>g</sup> Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

<sup>h</sup> Percent of the original light output that remains after 2,000 hours of run time

## PORTS

1

USB 2.0 type A



Mobile phones can be charged. Adapters are included.



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
	PV module
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	<a href="http://bioliteglobal.com/">http://bioliteglobal.com/</a>
Dimensions (entire product in package)	20.5 x 29.5 x 18 cm
Mass	2405 g
SSS INFORMATION	
Specs sheet expiration date	May 31, 2023
Quality standards framework version	2020
Revision	2023.02