bPower20 Solar Home System
PW-A01 (main control unit)
Bboxx Ltd
Results based on test procedures detailed in
IEC 62257-9-5 v.4

Verify online:
https://data.verasol.org/products/sek/bb-power20
Valid until: October 31, 2022

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

Mobile charging

PAYG **Pay-As-You-Go option available**

4 **Light point(s)**

▶ **Plug-and-play**

WARRANTY INFORMATION

A minimum of three years warranty for the main control unit, solar panel and lights; one year warranty for all accessories.

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 light points on totaling 420 lumens and 3.6 W power	13 hours	7.9 hours
	Torch	150 lumens torch, Li-ion battery: 2.5 Ah, 3.7 V)	34 hours	8.1 hours
	Radio	portable Li-ion battery: 2.2 Ah, 3.7 V, with a power consumption of 0.66 W while in-use	70 hours	6.1 hours
sold separately	Mobile phone	Smart phone (5.7 Wh battery)	8.4 full charge(s)	2 full charge(s)

Available daily electrical energy[c] (Wh/day)	56

Performance measure	Brightness setting: On
Lighting full battery run time[d] for main unit (hours)	13
Lighting full battery run time of the torch powered by torch battery (hours)	6.4
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	5900

[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]
Bulb	3	1	On	140	130	83	6300	Wide	100%
Torch	1	3	High	150	110	83	6400	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

PORTS				
2	**USB 2.0 type A**			Mobile phones, torch and radios can be charged. Adapters are included.
2	**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, Drop 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
	Torch	Has protection from occasional rain; met with appropriate warning label
	Radio	Has protection from occasional rain; met with appropriate warning label

SOLAR DETAILS	
PV module type	Polycrystalline silicon
PV maximum power	20 watts

MAIN UNIT BATTERY DETAILS	
Battery replaceability	Not easily replaceable with common tools.
Battery chemistry	Lithium iron phosphate
Battery package type	26650 x 6
Battery capacity	9.9 Ah
Battery nominal voltage	6.4 V
Battery status indication	Screen displays the battery level and credit status.

PRODUCT DETAILS	
Manufacturer name	Bboxx Ltd
Product name	bPower20 Solar Home System
Product model / ID number	PW-A01 (main control unit)
Contact information	c.baker-brian@bboxx.co.uk
Website	www.bboxx.com
Dimensions (entire product in package)	Multiple packages. Contact manufacturer for more information.
Mass	4200 g

SSS INFORMATION	
Specs sheet expiration date	October 31, 2022
Quality standards framework version	2020
Revision	2020.10