

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: February 28, 2023



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

			Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
			Used alone ^b	Used in combination ^c
	Appliance ^a	Description		
included in kit	Main lighting unit	3 light points on totaling 420 lumens and 3.6 W power	16 hours	8.1 hours
	Torch	150 lumens torch, Li-ion battery: 2.5 Ah, 3.7 V)	35 hours	8.3 hours
	Radio	portable Li-ion battery: 2.2 Ah, 3.7 V, with a power consumption of 0.66 W while in-use	76 hours	6.2 hours
sold separately	Mobile phone	Smart phone (5.7 Wh battery)	8.5 full charge(s)	2.1 full charge(s)

Available daily electrical energy^c (Wh/day) 58

Performance measure

Brightness setting: On

Lighting full battery run time^a for main unit (hours)

16

Lighting full battery run time of the torch powered by torch battery (hours)

6.4

Total lighting service (lumen-hours/solar-day)

6840

(includes the both main lighting unit and any lights with internal batteries included with the product)

^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 ^a (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%

^a 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.bbboxx.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		4200 g
SSS INFORMATION		
Specs sheet expiration date		February 28, 2023
Quality standards framework version		2020
Revision		2021.09