

bPower160 Solar Home System

PW-D03 Kit 01
Bboxx Ltd.

Verify online:

<https://data.verasol.org/products/sek/bb-bpower160>

Valid until: May 31, 2025

Results based on test procedures detailed in IEC TS 62257-9-5 and IEC TS 62257-9-8



Meets the requirements in IEC TS 62257-9-8 for Size B Kits



Mobile charging

PAYG

Pay-As-You-Go option available

5

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A minimum of 24 months for the main unit, solar panel and lights, and 12 months for all accessories.

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 totaling 740 lumens and 5.0 W power	31 hours	7.3 hours
yes	included	Torch	180 lumens torch, Li-ion battery: 2.5 Ah, 3.7 V)	94 hours	7.5 hours
yes	included	Television	32" diagonal (13 W power consumption while in-use)	16 hours	3.7 hours
yes	included	Radio	portable Li-ion battery: 2.4 Ah, 3.7 V, with a power consumption of 0.72 W while in-use	180 hours	5.6 hours
no	not included	Fan	16" stand fan (9 W power)	23 hours	9.3 hours
yes	not included	Mobile phone	Smart phone (5.7 Wh battery)	24 full charge(s)	1.9 full charge(s)

Available daily electrical energy^e (Wh/day)

190

(Additional energy may be available for daytime use of appliances.)

Performance measure	Brightness setting: Four dimmable lights on high and torch
Lighting full battery run time ^d for main unit (hours)	31
Lighting full battery run time of the Torch powered by Torch battery (hours)	6.9
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	22400

^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 ^g (lm/W)	CR ⁱ	CCT ^g	Distribution type	Lumen maintenance ^h
Dimmable Bulb	4	3	High	190	150	82	6000	Wide	99%
Torch	1	3	High	180	130	83	6200	Wide	98%

^g Lumen efficacy is the power consumption at a light point during the light output test.

ⁱ 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

SPECIAL FEATURES		
PAYG		Pay-As-You-Go enabled
PORTS		
2	USB 2.0 type A	 Mobile phones, torch and radios can be charged. Adapters are included.
4	Barrel jack	 12 V ports available to charge devices and power appliances and light points.
1	Other	 TV port (barrel with auxiliary data)
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop 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
	Torch	Has protection from occasional rain; met with appropriate warning label
	Radio	Has protection from occasional rain; met with appropriate warning label
	Television	Water ingress protection not tested, meant for indoor use only.
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		76 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
Specific Li-ion battery chemistry		lithium iron phosphate
Battery package type		22650x16
Battery capacity		13.7 Ah
Battery nominal voltage		12.8 V
Battery status/ other indicator lights		Screen on main unit provides battery status, payment status, and support.
PRODUCT DETAILS		
Manufacturer name		Bboxx Ltd.
Product name		bPower160 Solar Home System
Product model / ID number		PW-D03 Kit 01
Contact information		c.baker-brian@bboxx.co.uk
Website		https://www.bbboxx.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		12400 g
SSS INFORMATION		
Specs sheet expiration date		May 31, 2025
Revision		2023.05