

Home Mate H4G-220 Solar Energy System

H4G-220
JUA Energy Co. Ltd.

Results based on test procedures detailed in
IEC 62257-9-5 v.4

Verify online:

<https://data.verasol.org/products/sek/jua-h4g-220>

Valid until: September 30, 2022



Meets the Lighting Global Solar Home System Kit Quality Standards



Mobile charging

5

Light point(s)



Plug-and-play

PAYG

Pay-As-You-Go



WARRANTY INFORMATION

A 24-month warranty covering manufacturing defects in the system.

PERFORMANCE DETAILS

	Appliance ^a	Description	Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
			Used alone ^b	Used in combination ^c
included in kit	Main lighting unit	5 light points on high totaling 2030 lumens and 18.7 W power	12 hours	6.4 hours
	Television	24" diagonal (10.9 W power consumption while in-use)	26 hours	3.3 hours
	Fan	16" standing fan (10.1 W power)	28 hours	8.3 hours
sold separately	Radio	portable radio (Li-ion battery: 1 Ah, 3.7 V) with rated power consumption of 0.5 W.	310 hours	5.2 hours
	Smart phone	Smart phone (5.7 Wh battery)	29 full charge(s)	1.7 full charge(s)

Available daily electrical energy^c (Wh/day)

255

Performance measure

Brightness setting: high

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

12

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

24400

(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 ^e (lm/W)	CRI ^f	CCT ^g	Distribution type	Lumen maintenance ^h
300 lm lamp	3	2	high	310	110	77	7400	Wide	99%
500 lm lamp	2	2	high	550	110	76	8200	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		
2	USB 2.0 type A	 Mobile phones and radios can be charged. Adapters are included.
6	Barrel jack	 Six 12 V ports available to power light points and appliances.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop test (remote only), 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
	300 lm lamp	Water ingress protection not tested, meant for indoor use only.
	500 lm lamp	Water ingress protection not tested, meant for indoor use only.
	24" TV	Water ingress protection not tested, meant for indoor use only.
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		74 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		32700
Battery capacity		18 Ah
Battery nominal voltage		12.8 V
Battery status indication		Four indicators for battery state of charge, one indicator for PV charging, three indicators for PAYG credit status
MARKS AND CERTIFICATIONS		
Factory certification		ISO 9001:2015
PRODUCT DETAILS		
Manufacturer name		JUA Energy Co. Ltd.
Product name		Home Mate H4G-220 Solar Energy System
Product model / ID number		H4G-220
Contact information		hill.ren@juaenergy.com
Website		www.juaenergy.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		12300 g
SSS INFORMATION		
Specs sheet expiration date		September 30, 2022
Quality standards framework version		2020
Revision		2020.09