

M-KOPA 600 TV

MKOPA600B
M-KOPA Solar

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

Verify online:

<https://data.verasol.org/products/sek/mk-mk600TV>

Valid until: February 28, 2023



Meets the Lighting Global Solar Home System Kit Quality Standards



Mobile charging

PAYG

Pay-As-You-Go option available

3

Light point(s)



Plug-and-play



WARRANTY INFORMATION

3-year warranty covering manufacturing defects in the system, including the control box, TV, bulbs, and solar panel. 1-year warranty for the phone charging cable and custom charging cable.

PERFORMANCE DETAILS

			Run time after a typical day of solar charging (assuming 5kWh/m ² /day)		
		Appliance ^a	Description	Used alone ^b	Used in combination ^c
included in kit	Main lighting unit	Two bulbs and one tubelight on high, totaling 420 lumens and 3.4 W power		21.5 hours	8.8 hours
	Television	24" diagonal (7.4 W power consumption while in-use)		12.7 hours	4.4 hours
sold separately	Mobile phone	Basic phone (3.7 Wh battery)		17.2 full charge(s)	2.2 full charge(s)
	Portable Radio	Portable radio with rechargeable 1800 mAh Li-ion 3.7 V battery and 0.2 W power		239 hours	6.6 hours
	Torch	1 light point with rechargeable 1800 mAh Li-ion 3.7 V battery on bright totaling 94 lumens and 1.4 W power		52.4 hours	8.9 hours

Available daily electrical energy^c (Wh/day) 87

Performance measure	Brightness setting: high
Lighting full battery run time ^d for main unit (hours)	21.5
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	9030

^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	2	2	High	120	110	82	6500	Wide	99%
Tubelight	1	2	High	180	130	84	6500	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		
1	USB 2.0 type A	 <p>Mobile phones can be charged. An adapter is included.</p>
7	Barrel jack	 <p>Four 6.5 V light ports, one 12 V port for powering a TV, a 6.5 V port for charging M-KOPA radio and torch (sold separately), and a 12 V DC output port.</p>
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Strain relief test, Physical ingress protection.
Level of water protection	Main Unit	Has protection from occasional rain; met with appropriate warning label
	PV module	Has protection from permanent outdoor exposure
	Bulb	Has protection from occasional rain; met with appropriate warning label
	Tubelight	Has protection from occasional rain; met with appropriate warning label
	24" TV	Has protection from occasional rain; met with appropriate warning label
	TV remote control	Water ingress protection not tested, meant for indoor use only.
	Portable radio	Has protection from occasional rain; met with appropriate warning label
	Torch	Has protection from occasional rain; met with appropriate warning label
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		28 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		26650
Battery capacity		9.9 Ah
Battery nominal voltage		9.6 V
Battery status indication		The main control unit has one screen that displays the battery charge, network connectivity, and PAYGO credits.
PRODUCT DETAILS		
Manufacturer name		M-KOPA Solar
Product name		M-KOPA 600 TV
Product model / ID number		MKOPA600B
Contact information		manish.sharma@m-kopa.com
Website		www.m-kopa.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		n/a
SSS INFORMATION		
Specs sheet expiration date		February 28, 2023
Quality standards framework version		2020
Revision		2020.08