

# LUMN M600 Series Solar Light and Phone Charger

M600

Omnivoltaic Energy Solutions Co., Ltd.

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

Verify online:

<https://data.verasol.org/products/sek/omni-m600>

Valid until: May 31, 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 2-year warranty covering manufacturing defects.

## PERFORMANCE DETAILS

			Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)		
		Appliance <sup>a</sup>	Description	Used alone <sup>b</sup>	Used in combination <sup>c</sup>
included in kit	Main Lamp		1 light point on Super totaling 320 lumens and 2 W power	15 hours	4.9 hours
	Secondary Lamp (3x)		3 light points on Super totaling 300 lumens and 3.3 W power	11 hours	4.9 hours
sold separately	Radio		Portable (Li-ion battery: 0.8 Ah, 3.7 V), with a power consumption of 0.4 W while in-use	64 hours	4.2 hours
	Mobile phone		Basic phone (3.7 Wh battery)	8.5 full charge(s)	--
	Mobile phone		Smart phone (5.7 Wh battery)	5.4 full charge(s)	1.4 full charge(s)
	Torch (front light on)		33 lumens torch, (LiFePO4 battery: 0.5 Ah, 3.2 V) with a power consumption of 0.3 W while in use	78 hours	5.5 hours

Available daily electrical energy (Wh/day)<sup>c</sup> 35

Performance measure	Brightness setting: Super
Lighting full battery run time (hours)	6.3
Lighting full battery run time <sup>d</sup> for main unit (hours)	6.3
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	4100

<sup>a</sup> Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

<sup>b</sup> Without any other loads used during the run time

<sup>c</sup> Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.

<sup>d</sup> 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 <sup>e</sup> (lm/W)	CRI <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
Main Lamp	1	3	Super	320	160	82	5072	Wide	99%
Secondary Lamp	3	3	Super	110	160	82	5072	Wide	99%

<sup>e</sup> Lumen efficacy is the power consumption at a light point during the light output test.

<sup>f</sup> Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

<sup>g</sup> Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

<sup>h</sup> Percent of the original light output that remains after 2,000 hours of run time

PORTS		
1	USB 2.0 type A	 One USB port for charging mobile phones, radio and appliances. Adapters are included.
3	Barrel jack	 3 ports for charging and power appliances, these ports are used for light points only.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop test (PAYG Keypad), Strain relief test, Physical ingress protection.
Level of water protection	Main Unit	Has protection from occasional rain; met IPX1
	12 W PV module	Has protection from permanent outdoor exposure
	PAYG Keypad	Has protection from occasional rain; met IPX1
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		12 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium-ion
Battery package type		2 X (2 X 18650)
Battery capacity		4.9 Ah
Battery nominal voltage		7.2 V
Battery status indication		Three indicators for battery state of charge.
PRODUCT DETAILS		
Manufacturer name		Omnivoltaic Energy Solutions Co., Ltd.
Product name		LUMN M600 Series Solar Light and Phone Charger
Product model / ID number		M600
Contact information		sales@omnivoltaic.com
Website		www.omnivoltaic.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		2150 g
SSS INFORMATION		
Specs sheet expiration date		May 31, 2023
Quality standards framework version		2021
Revision		2021.01