




# LUMN Home Series Solar Lighting System


SHS40\_12W\_T4\_L2\_S2  
Brand name: Omnivoltaic

Results based on test procedures detailed in IEC TS 62257-9-5:2024

Verify online:  
<https://data.verasol.org/products/sek/omni-lmnhome>  
Valid until: July 31, 2028



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Meets the Requirements in IEC TS 62257-9-8:2025 for Size B kits

Mobile charging

Pay-As-You-Go option available

Light point(s)

Plug-and-play



## WARRANTY INFORMATION

A 2-year warranty covering manufacturing defects in the system.

## PERFORMANCE DETAILS

				Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)	
VeraSol Certified?	Included in kit?	Appliance <sup>a</sup>	Description	Used alone <sup>b</sup>	Used in combination <sup>c</sup>
yes	included	Main lighting unit	3 light points on high totaling 770 lumens and 4 W power	8.2 hours	3.3 hours
yes	not included	Torch	38 lm torch (LiFePO4 battery: 0.64 Ah, 3.2 V)	110 hours	--
no	not included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V), with a power consumption of 0.35 W while in use	67 hours	2.5 hours
no	not included	Smart phone	Smart phone (15 Wh battery)	1.5 full charge(s)	0.83 full charge(s)

Available daily electrical energy [Wh/day]	32
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Performance measure	Brightness setting: Three lights on high
Lighting full battery run time for main unit [hours]	8.2
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	6310

<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 name	Light output [lm]	Power Consumption [W]	Lumen efficacy <sup>e</sup> [lm/W]	CRI <sup>f</sup>	CCT <sup>g</sup>	Lumen maintenance <sup>h</sup>
LED Tube	1	3	high	370	2.1	180	70	5200	98
LED lamp	1	3	high	200	1.1	190	69	5200	97
Security light	1	1	on	200	1.2	180	69	5200	97

<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 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 1,000 hours of run time.

PORTS			
1	USB 2.0 type A		Mobile phones, torches, and radios can be charged. Adapters are included.
2	Barrel jack		12 V ports available to power light points.
DURABILITY			
Overall durability and workmanship			Pass
Durability tests passed			Switch 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	Permanent rooftop installation for PV modules	
	LED tube, LED lamp, and Security light	Water ingress protection not tested, meant for indoor use only.	
SOLAR DETAILS			
PV Module Type			Polycrystalline silicon
PV Maximum Power			12 W
PV Rated Power			12 W
PV Open-Circuit Voltage (V <sub>OC</sub> )			21.6 V
MAIN UNIT BATTERY DETAILS			
Battery Replaceability			Not easily replaceable with common tools.
Battery Chemistry			Lithium iron phosphate
Battery Package Type			32700
Battery Capacity (tested)			12 Ah
Battery Capacity (rated)			12 Ah
Battery Nominal Voltage			3.3 V
Battery status / other indicator lights			Display indicates battery level, charging, and remaining credit
PRODUCT DETAILS			
Company Name (full)			OmniVoltaic Energy Solutions Company Limited / Omnivoltaic (Shenzhen) Co., Ltd.
Company Name ("brand")			Omnivoltaic
Product Name			LUMN Home Series Solar Lighting System
Product Model or ID Number			SHS40_12W_T4_L2_S2
Company Contact Information			team_sales@omnivoltaic.com
Company Website			www.omnivoltaic.com
Mass			n/a
SSS INFORMATION			
Expiration Date			July 31, 2028
Revision			2025.11