

LUMN L500

L500  
Omnivoltaic Energy Solutions Co. Ltd. / Omnivoltaic (Shenzhen) Co. Ltd.

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

Verify online:  
<https://data.verasol.org/products/sek/omni-l500>  
Valid until: August 31, 2025



Meets the requirements in IEC TS 62257-9-8:2020 for Size A Kits



Mobile charging

PAYG

Pay-As-You-Go option available

1

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)	
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	1 light point on (high) totaling 500 lumens and 3.4 W power	7.1 hours	3.7 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	4.4 full charge(s)	--
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	2.8 full charge(s)	0.91 full charge(s)
no	not included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V) with rated power consumption of 0.39 W.	34 hours	2.8 hours
no	not included	Torch	46 lumens torch, (LiFePO4 battery: 0.5 Ah, 3.2 V)	55 hours	3.7 hours

Available daily electrical energy <sup>c</sup> (Wh/day)	21
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Performance measure	Brightness setting: Super
Lighting full battery run time <sup>d</sup> for main unit (hours)	9.1
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3550

<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	500	150	82	5050	Wide	99%
			Normal	--	--	82	5000	Omnidirectional	--

<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		Mobile phones can be charged. Adapters are included.
3	Barrel jack		Three 7.2 V Barrel ports available to power light points
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		Has protection from occasional rain; met with appropriate warning label
	PV module		Has protection from permanent outdoor exposure
SOLAR DETAILS			
PV module type			Polycrystalline silicon
PV maximum power			5.7 watts
MAIN UNIT BATTERY DETAILS			
Battery replaceability			Not easily replaceable with common tools.
Battery chemistry			Lithium-ion
Specific Li-ion battery chemistry			lithium nickel manganese cobalt oxide
Battery package type			2 X (2 X 18650)
Battery capacity			4.9 Ah
Battery nominal voltage			7.2 V
Battery status/ other indicator lights			Three indicators for battery state-of-charge
PRODUCT DETAILS			
Manufacturer name			Omnivoltaic Energy Solutions Co. Ltd. / Omnivoltaic (Shenzhen) Co. Ltd.
Product name			LUMN L500
Product model / ID number			L500
Contact information			team_sales@omnivoltaic.com
Website			www.omnivoltaic.com
Dimensions (entire product in package)			Multiple packages. Contact manufacturer for more information.
Mass			n/a
SSS INFORMATION			
Specs sheet expiration date			August 31, 2025
Revision			2025.04