

10 W Solar Lighting System

TPS-612-GFS-10W-T
Shenzhen Topray Solar Co., Ltd

Verify online:
<https://data.verasol.org/products/sek/stsc-sls>
Valid until: December 31, 2025

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



Meets the Requirements in IEC TS 62257-9-8:2020 for Size A kits



Mobile charging

2

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A one-year warranty covering manufacturing defects

PERFORMANCE DETAILS

				Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
VeraSol Certified?	Included in Kit?	Appliance ^a	Description	Used alone ^b	Used in combination ^c
yes	included	500 lm integrated lamp	1 light point on high totaling 710 lumens and 6 W power	3.5 hours	3.4 hours
yes	included	300 lm integrated lamp	1 light point on high totaling 360 lumens and 2.9 W power	2.5 hours	2.5 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	5.6 full charge(s)	0.86 full charge(s)

Available daily electrical energy ^c (Wh/day)	31
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Performance measure	Brightness setting: high
Lighting full battery run time ^d for main unit (hours)	3.5
Lighting full battery run time of the 300 lm lamp powered by 300 lm lamp battery (hours)	2.5
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3310

^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
500 lm integrated lamp	1	3	high	710	120	75	6900	Omnidirectional	100%
300 lm integrated lamp	1	3	high	360	120	74	6900	Omnidirectional	100%

^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		Mobile Phones can be cgarged, adapters are not included
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	500 lm integrated lamp, 300 lm integrated lamp		Has protection from occasional rain; met IPX1	
	PV module		Has protection from permanent outdoor exposure	
SOLAR DETAILS				
PV module type			Polycrystalline silicon	
PV maximum power			10 watts	
MAIN UNIT BATTERY DETAILS				
Battery replaceability			Easily replaceable with common tools.	
Battery chemistry			Lithium-ion	
Specific Li-ion battery chemistry			lithium manganese oxide	
Battery package type			18650	
Battery capacity			5.4 Ah and 1.8 Ah	
Battery nominal voltage			3.7 V	
Battery status/ other indicator lights			Indicators for charging on each light	
PRODUCT DETAILS				
Manufacturer name			Shenzhen Topray Solar Co., Ltd	
Product name			10 W Solar Lighting System	
Product model / ID number			TPS-612-GFS-10W-T	
Contact information			joyce@topraysolar.com and rachel@topraysolar.com	
Website			topraysolar.com	
Dimensions (entire product in package)			Multiple packages. Contact manufacturer for more information.	
Mass			n/a	
SSS INFORMATION				
Specs sheet expiration date			December 31, 2025	
Revision			2025.10	