10 W Solar Home System

TCSH-010
Wuxi Taichang Electronic Co., Ltd.

Verify online:
https://data.verasol.org/products/sek/wt-10wshs

Results based on test procedures detailed in IEC TS 62257-9-5 and IEC TS 62257-9-8
Valid until: May 31, 2026

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

Mobile charging

3 Light point(s)

Plug-and-play

WARRANTY INFORMATION

A 3-year warranty covering manufacturing defects in the system and a 1-year warranty for the the optional accessories.

PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance[a]	Description	Run time after a typical day of solar charging (assuming 5kWh/m^2/day)	
				Used alone[b]	Used in combination[c]
yes	included	Main lighting unit	3 light points on "On" totaling 640 lumens and 5.4 W power	6.4 hours	2.2 hours
no	not included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V) with power consumption of 0.5 W while in use	46 hours	1.7 hours
no	not included	Torch	Torch (0.3 W power, 2 Wh battery)	77 hours	2.3 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	6.2 full charge(s)	--
no	not included	Smartphone	Smart phone (5.7 Wh battery)	4 full charge(s)	0.58 full Charge(s)
no	not included	Fan	USB fan (5 W power, 3.7 Wh battery)	6.3 hours	2.8 hours
no	not included	Smartwatch	Smartwatch (0.07 W power, 1.2 Wh battery)	350 hours	--
no	not included	Tablet	Tablet computer (15 Wh battery)	1.5 full charge(s)	--
no	not included	Camera	Camera (0.5 W power, 4.5 Wh battery)	46 hours	--

Available daily electrical energy[c] (Wh/day)	31

Performance measure	Brightness setting: On
Lighting full battery run time[d] for main unit (hours)	8.5
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	4100

[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]
LED lamp	3	1	On	210	120	80	6800	Wide	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			
2	**USB 2.0 type A**		Mobile phones, torches, and other non-lighting appliances can be charged. Adapters included.
4	**Barrel jack**		12.8 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	Has protection from permanent outdoor exposure. PV Module connector meets IP65.
	Lamp	Water ingress protection not tested, meant for indoor use only.

SOLAR DETAILS	
PV module type	Monocrystalline silicon
PV maximum power	9 watts

MAIN UNIT BATTERY DETAILS	
Battery replaceability	Easily replaceable with common tools; however, the warranty is void if product is opened.
Battery chemistry	Lithium iron phosphate
Battery package type	4x 26700
Battery capacity	3.9 Ah
Battery nominal voltage	12.8 V
Battery status/ other indicator lights	Three indicators for battery level.

PRODUCT DETAILS	
Manufacturer name	Wuxi Taichang Electronic Co., Ltd.
Product name	10 W Solar Home System
Product model / ID number	TCSH-010
Contact information	chenguoying@tcpowertec.com
Website	www.zeitdas.com
Dimensions (entire product in package)	31.5 x 22.2 x 8.9 cm
Mass	2335 g

SSS INFORMATION	
Specs sheet expiration date	May 31, 2026
Revision	2024.05