

# 50W TV300-32 Solar Home System

Azuri Technologies, Ltd.

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

Verify online:

[www.lightingglobal.org/products/az-TV300](http://www.lightingglobal.org/products/az-TV300)

Valid until October 31, 2020



Meets the Lighting Global Solar Home System Kit Quality Standards



Mobile charging

PAYG

Pay-As-You-Go

5

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 radio, torch, TV and phone charging cable.

## PERFORMANCE DETAILS

|                 |                                    |   | Run time after a typical day of solar charging<br>(assuming 5kWh/m <sup>2</sup> /day) |                                  |
|-----------------|------------------------------------|---|---|----------------------------------|
|                 |                                    |   | Used alone <sup>b</sup>   | Used in combination <sup>c</sup> |
|                 | Appliance <sup>a</sup>             | Description   |   |                                  |
| included in kit | Main Lighting on Brightest Setting | 4 light points on highest setting totaling 850 lumens and 6.6 W power                               | 18 hours  | 8.4 hours                        |
|                 | G3 Torch                           | 2000 mAh, 100 lumens torch, 3.7 V nominal voltage   | 88 hours  | 8.6 hours                        |
|                 | 32" TV                             | 32" diagonal (13.8 W power consumption while in-use)  | 10 hours  | 4.2 hours                        |
|                 | A5 radio                           | Portable (1000 mAh battery, 3.7 V nominal voltage), with a power consumption of 0.26 W while in-use | 410 hours   | 6.4 hours                        |
| sold separately | Smart phone                        | Smart phone (5.7 Wh battery)  | 18 full charge(s)   | 2.1 full charge(s)               |

Available daily electrical energy<sup>c</sup> (Wh/day) 140

\*(Additional energy may be available for daytime use of appliances.)

## Performance measure

Brightness setting: brightest

Lighting full battery run time<sup>d</sup> for main unit (hours)

18

Lighting full battery run time torch (hours)

80

Total lighting service (lumen-hours/solar-day)

16000

(includes the both main lighting unit and any auxiliary lights included with the product)

<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> |
|--------------|-----------------|--------------------|-----------|-------------------|------------------------------------|------------------|------------------|-------------------|--------------------------------|
| G6 LED light | 2               | 3                  | brightest | 140               | 130                                | 82               | 4100             | Wide              | 96%                            |
| K1 tubelight | 2               |                    |           | 280               |                                    | 83               |                  |                   | 98%                            |
| G3 Torch     | 1               | 2                  | high      | 100               | 100                                | 71               | 5800             | Narrow            | 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

| SPECIAL FEATURES                       |  |  |
|--|--|--|
| Pay-as-you-go (PAYG)                   | ★ Keypad for entering PAYG authorisation code  |  |
| PORTS                                  |  |  |
| 2                                      | USB 2.0 type A  Mobile and smart phones, torches, and radios can be charged   |  |
| 4                                      | Barrel jack  12 V lighting ports  |  |
| 2                                      | 3 pole Barrel jack  12 V accessory port, can be used for powering TVs   |  |
| DURABILITY                             |  |  |
| Overall durability and workmanship     | Pass   |  |
| Durability tests passed                | Switch test, Drop test, Strain relief test, physical ingress protection.   |  |
| Level of water protection              | Main Lighting Unit   | Water ingress protection not tested, meant for indoor use only.          |
|  | PV module  | Has protection from permanent outdoor exposure .                         |
|  | Torch  | Has protection from frequent rain; met IPX3.                             |
|  | Radio  | Has protection from occasional rain; met with appropriate warning label. |
|  | 32" TV   | Water ingress protection not tested, meant for indoor use only.          |
| SOLAR DETAILS                          |  |  |
| PV module type                         | Polycrystalline silicon  |  |
| PV maximum power                       | 51 watts   |  |
| BATTERY DETAILS                        |  |  |
| Battery replaceability                 | Not easily replaceable with common tools.  |  |
| Battery chemistry                      | Lithium iron phosphate   |  |
| Battery package type                   | 22650 x 2P x 4S  |  |
| Battery capacity                       | 9.9 Ah   |  |
| Battery nominal voltage                | 12.8 V   |  |
| Battery status indication              | Four indicators for function buttons, one indicator for credit and low battery status, one screen for credit, battery state of charge, PV charging intensity and protection status.                                |  |
| MARKS AND CERTIFICATIONS               |  |  |
| Factory certification                  | ISO 9001:2015 (Radio, Control unit, Lights, Torch, PV Module); ISO 14001:2015 (Radio, Control Unit, PV Module)   |  |
| PRODUCT DETAILS                        |  |  |
| Manufacturer name                      | Azuri Technologies, Ltd.   |  |
| Product name                           | 50W TV300-32 Solar Home System   |  |
| Product model / ID number              | AZ-002574 (kit) comprising: AZ001705 (PV Module); AZ002439 (Control Unit); AZ002421 (K1 tubelight); AZ002470 (G6 LED lamp); AZ002388 (32" TV); AZ002370 (Torch); AZ002477 (radio); AZ002199 (phone charging cable) |  |
| Contact information                    | info@azuri-technologies.com  |  |
| Website                                | www.azuri-technologies.com   |  |
| Dimensions (entire product in package) | Multiple packages. Contact manufacturer for more information.  |  |
| Mass                                   | Multiple packages. Contact manufacturer for more information.  |  |
| SSS INFORMATION                        |  |  |
| Specs sheet expiration date            | October 31, 2020   |  |
| Quality standards framework version    | 2020   |  |
| Revision                               | 2020.01  |  |