



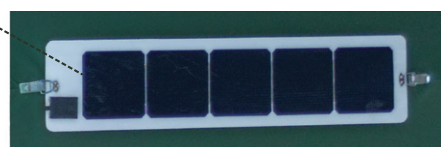
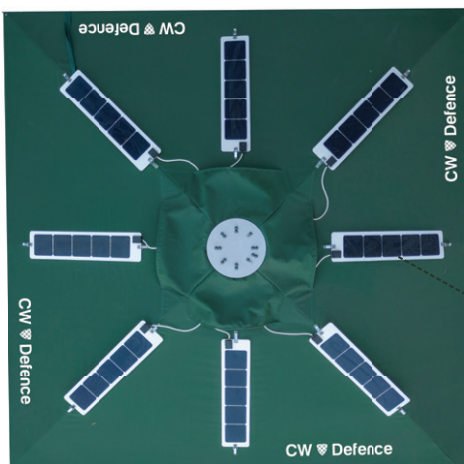
## SOLAR UMBRELLA

### CW DEFENCE 145Wp FLEXIBLE SOLAR UMBRELLA

Solar Umbrella, one of the innovative and practical products of CW DEFENCE, is designed as a functional product with the concept of making maximum use of solar energy. You can charge your mobile phone or tablet with the 2 USB and 1 TYPE C inputs on it, and at the same time, with the lithium batteries integrated into the body of the product that can be charged with solar energy, the environment can be illuminated when there is no sun, thanks to the long-lasting led lighting in the umbrella.

CW DEFENCE Solar Umbrella, which is designed by using Flexible Solar Panels, fits to any environment in terms of decoration with different colour options.

- ◆ Easy Opening and Closing Lever System
- ◆ Automatic Battery Protection in Closed Position
- ◆ 24 AH Lithium-Ion Battery
- ◆ Battery Level Indicator
- ◆ 1 pc. 3 AH, 1 pc. 2 AH USB and 1 pc. TYPE C Inputs
- ◆ Automatic Led Lighting
- ◆ 28 x 4° white 4000-5000K LEDs
- ◆ It can be manufactured in different sizes and fabric options.






Flexible Panel 18Wp

## SOLAR UMBRELLA

### WHAT CAN IT POWER?

With this system, which is easy to install, you can power your electronic devices with USB input such as tablet, ventilator and also meet your needs in terms of lighting and charging mobile phone.

HOW LONG CAN EACH DEVICE WORK WITH SOLAR UMBRELLA	 Tablet	 Ventilator	 Mobile Phone Mp3, Radio Player
	10 Hours	16 Hours	16 Hours

### SOLAR UMBRELLA

USED SOLAR PANEL	SYSTEM VOLTAGE (V)	AVERAGE ENERGY GENERATION PER DAY (Wh)	USED PANEL AREA (m <sup>2</sup> )	USED LITHIUM BATTERY (V/Ah)	ENERGY STORAGE CAPACITY (Wh)
Flexible 145Wp	12	580	0.975	12.8 / 24	307

**Not:** The usage times and generation values mentioned above have been calculated for informative purposes and by taking the annual average sunshine duration based on 4 hours per day. The generated energy and consumption times may vary depending on weather conditions and region.

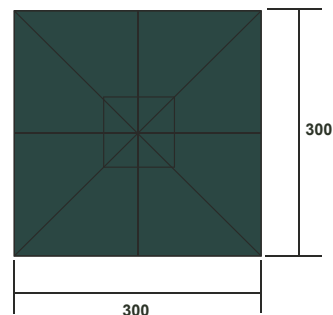
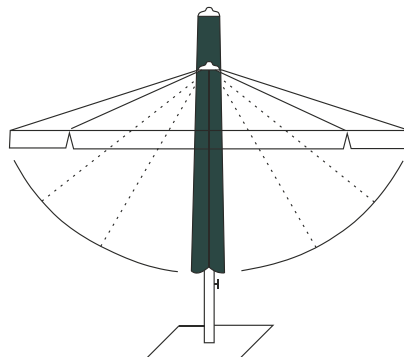
### SOLAR PANEL (18.13Wp x 8)

Peak Power (Pmax)	18.13
Open Circuit Voltage (Voc)	3.60
Short Circuit Current (Isc)	6.15
Cells per Module	5 (1x5)
Cell Dimensions (mm)	125x125
Panel Dimensions (mm)	155x670

### LITHIUM BATTERY 137 Wh (11.40x12)

Nominal Voltage	12.8 V
Capacity	24 AH
Battery Technology	LiFePO <sub>4</sub>
Number of Lithium Batteries	16 (4Sx4P)
Total Capacity	307Wh

### PHYSICAL CHARACTERISTICS



\* The specifications are obtained under the standard test conditions: 1000W/m<sup>2</sup> solar irradiance, 1.5 Air Mass and cell temperature of 25°C. Measurement uncertainty for all panels is 3 %. The actual transactions will be subject to the contracts. These parameters are for reference only and it is not a part of the contracts. The technical specifications in this document may vary. For more information, refer to the "Installation Manual".

\* CW DEFENCE reserves the right to change the specifications of the products without prior notice.

\* CW DEFENCE products are project-based products and can realize special projects upon your requests.

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