



EGA 20W SOLAR KIT

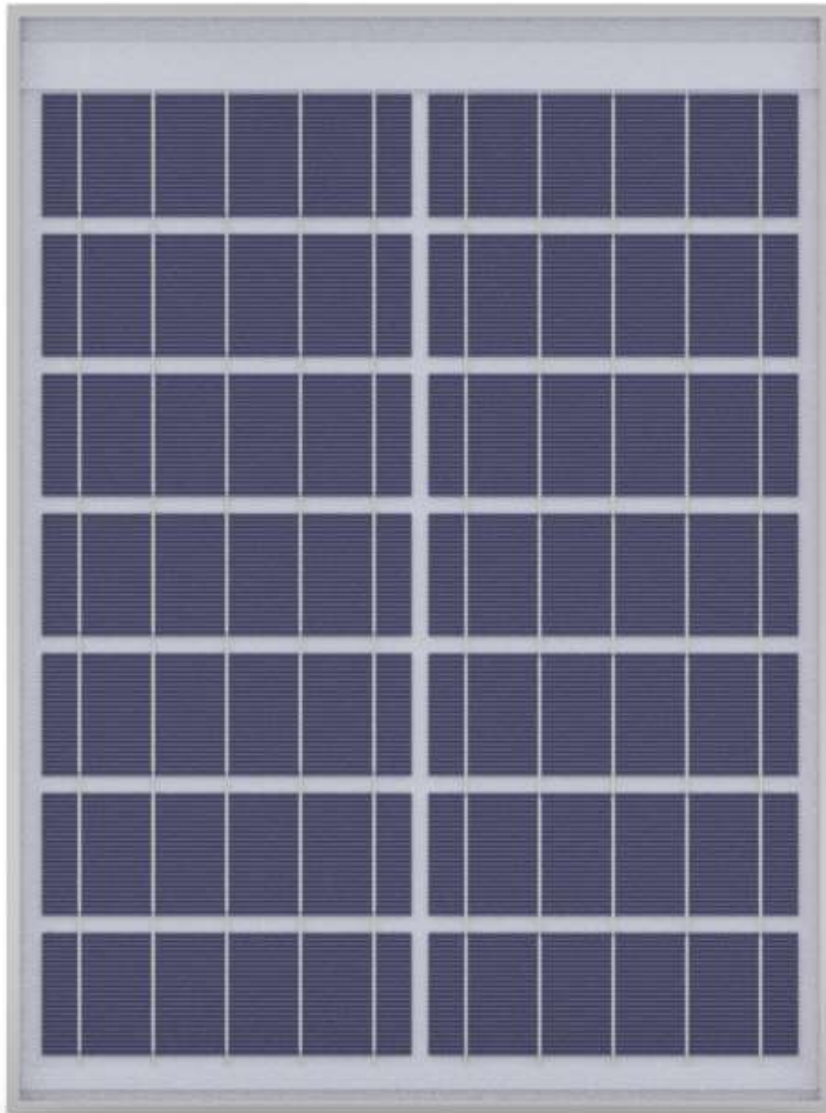
-DATA SHEET-

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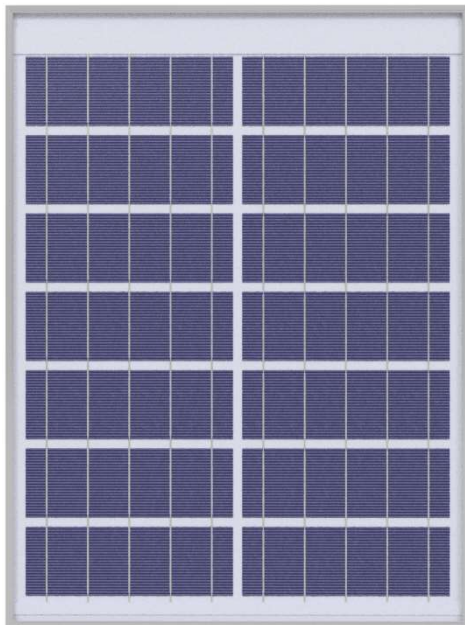
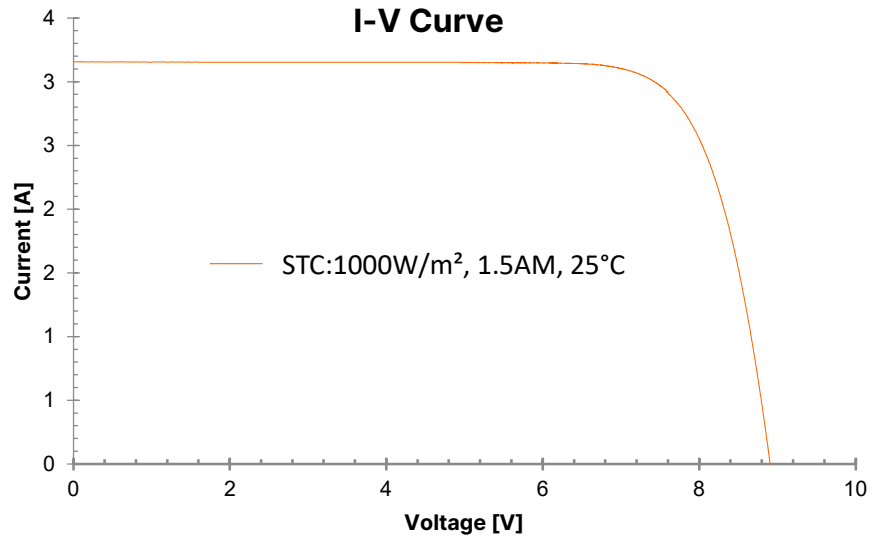
What's included inside the box:

- 1 x 20-Watt Solar Panel
- 1 x 10 000mAh Solar Power Bank with Micro USB Charging Cable
- 2 x LED Bulbs with USB Connector Cables



**20W SOLAR PANEL**

ELECTRICAL CHARACTERISTICS	
Tested at PI Photovoltaik-Institut Berlin AG	
Max Power (P_{max})	22.29W
Max Power Voltage (V_{mp})	7.46V
Max Power Current (I_{mp})	2.99A
Open Circuit Voltage (V_{oc})	8.91V
Short Circuit Current (I_{sc})	3.16A
Power Tolerance	+10%
Cell Efficiency	18%
Max System Voltage	400V
TEMPERATURE CO-EFFICIENTS	
Tested at PI Photovoltaik-Institut Berlin AG	
Temperature Co-Efficient of P_{max}	-0.450%/°C
Temperature Co-Efficient of V_{oc}	-0.327%/°C
Temperature Co-Efficient of I_{sc}	0.046%/°C
MECHANICAL CHARACTERISTICS	
Dimensions	350mm x 470mm x 17mm
Weight	1.8kg
Solar Cells	5BB Multi-Crystalline Silicon 156.75mm x 52.25mm
Cell Arrangement	14 (2 x 7)
Construction	Low Iron, AR Coated Tempered Solar Glass
Frame	Anodized Aluminium
OUTPUT CHARACTERISTICS	
Junction Box	2 x USB Type A
Output	5V, 2000mA max





SOLAR POWER BANK

CELL CHARACTERISTICS		
Capacity		≥10 000mAh
Type		Lithium-Ion Polymer
Nominal Voltage		3.7V
INPUT/CHARGE CHARACTERISTICS		
Input Type		MicroUSB/USB Type-C
Input Current		5V, 1.9±0.1
Charging Cut-off Current		≤200mA
Fully Charged Cell Voltage		4.20±0.05V
OUTPUT/DISCHARGE CHARACTERISTICS		
USB 1	No-load Output Voltage	5V±0.25V
	Full Load Output Voltage	5V±0.25V @ 2.0A
	Maximum Output Current	2.4A
USB 2	No-load Output Voltage	5V±0.25V
	Full Load Output Voltage	5V±0.25V @ 1.0A
	Maximum Output Current	1.0A
Minimum Load Detection		≤100mA
Standby Power Consumption		≤100mA (@ 3.7V Cell Voltage)
OPERATING CONDITIONS		
Operating Temperature	Charging	0°C to +45°C
	Discharging	-20°C to +60°C
Storage Temperature		-20°C to +40°C; Relative Humidity: ≤75%RH
MECHANICAL CHARACTERISTICS		
Dimensions (L x W x H)		146mm x 69mm x16mm
Weight		218g
PROTECTION		
	Overcharge Protection	
	Over-discharge Protection	
	Over-temperature Protection	
	Short-circuit Protection	



Charging Instructions

When you plug the solar panel, using the charger, into the solar power bank, the power bank will automatically enter charging mode. In this mode, the LED indicators will display the current charging status, allowing you to monitor the power bank's charging progress. As the power bank charges, the LED indicators will change according to the charging status shown below:

- 25% or less charge, LED1 flashes.
- 25%-50% charge, LED1 is always on, LED2 flashes.
- 50%-75% charge, LED1 and LED2 are always on, LED3 flashes.
- 75%-100% charge, LED1, LED2, and LED3 are always on, LED4 flashes.
- 100% full charge, LED1, LED2, LED3, and LED4 are always on.

Discharge Instructions

To discharge the solar power bank, plug in the device that you want to charge. The discharge function will automatically turn on, and power will be supplied to your device.

If the discharge function does not automatically turn on when you plug in your device, simply short press the power button on the power bank. This will manually turn on the output, allowing your device to start charging.

The LED indicators will display the current charge level, allowing you to monitor the solar power bank's remaining capacity during the discharge process.

- 100%-75% charge, LED1, LED2, LED3, LED4 light on.
- 75%-50% charge, LED1, LED2, LED3 light on.
- 50%-25% charge, LED1, LED2 light on.
- 25%-5% charge, LED1 light on.
- Less than 5% charge, LED1 flashes.

When the solar power bank is empty, the LEDs will light up for 40 seconds \pm 2 seconds before turning off automatically.

Power Button Functions

- When in standby, short press the power button to turn on the output.
- When the output is on, press the key twice in a row to turn off the output.

Storage Instructions

- If not in use for an extended period, charge the solar power bank to a 2-3 LED level for storage.
- Store the product in a clean, well-ventilated room at an ambient temperature of -20°C to 40°C.
- Avoid contact with corrosive substances and keep away from fire and heat sources.
- Charge the power bank once every 6 months during storage.

Warnings

- Do not place the solar power bank into fire or heat it; avoid storing it at high temperatures.
- Do not hit the solar power bank with hard objects.
- Do not dispose of the product improperly or alter its structure.
- Do not submerge the solar power bank in water or other solvents.
- Only use compatible equipment for charging and discharging.





LED BULB

ELECTRICAL CHARACTERISTICS		
Input Voltage		5.2V
Input Current		34mA
Nominal Power		1.8W
Colour Temperature		6500K
MECHANICAL CHARACTERISTICS		
Bulb	Material	ABS Plastic
	Weight	35g
	Dimensions	Ø60mm x 95mm
Cable	USB to Barrel Connector Cable	5m, with Switch
	Weight	102g

