

Konarka Power Plastic® Solar Bag Panel Product Specifications

The Konarka Power Plastic Solar Bag Panel (1.3W/8V) is ideal for charging batteries for portable electronic devices. Integrate into products such as luggage, backpacks, bags, and accessories.

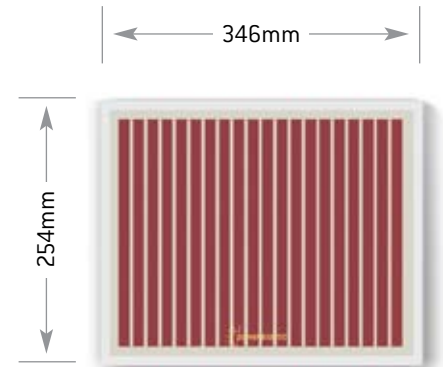
Material Characteristics

Power Plastic is a lightweight, thin-film photovoltaic material that is much more versatile in application than traditional solar panels. Konarka's unique technology is based on patented photo-reactive materials made from conductive polymers and organic nano-engineered materials. These materials can be printed or coated onto flexible plastic using an inexpensive, energy-efficient manufacturing process.

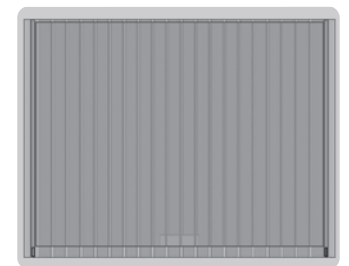
Power Plastic reacts with both indoor and outdoor light, greatly expanding its potential applications. By integrating Power Plastic into everyday products, devices can produce their own low-cost source of renewable energy.

Construction Characteristics

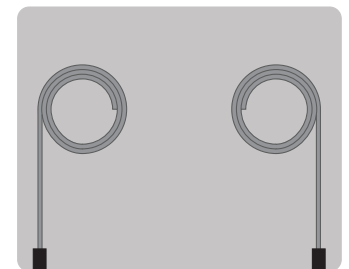
- **Material thickness:**
0.5mm+/-0.05mm
- **Operating temperature range:**
-20°C to 65°C [-4°F to 149°F]
- **Weatherproof materials**
- **By-pass/blocking diode optional**
- **User friendly design:**
Easily integrated
- **Laminate encapsulation:**
High light transmissive polymer
- **Power terminals:**
Option A: Solderable leads
Option B and C: Pre-wired and available with felt backing for easy product integration



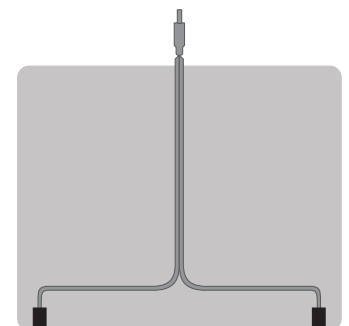
Front



Back—Option A
Laser Ablation



Back—Option B
Solderable wires

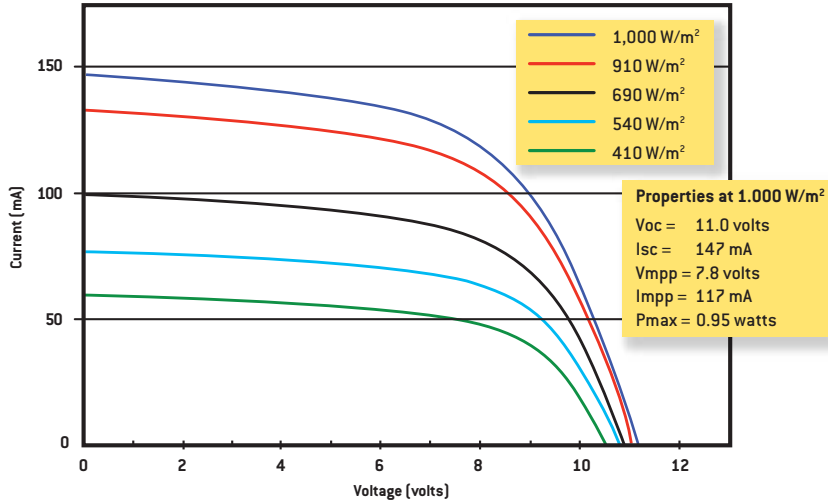


Back—Option C
Barrel connector



Konarka Power Plastic® Solar Bag Panel

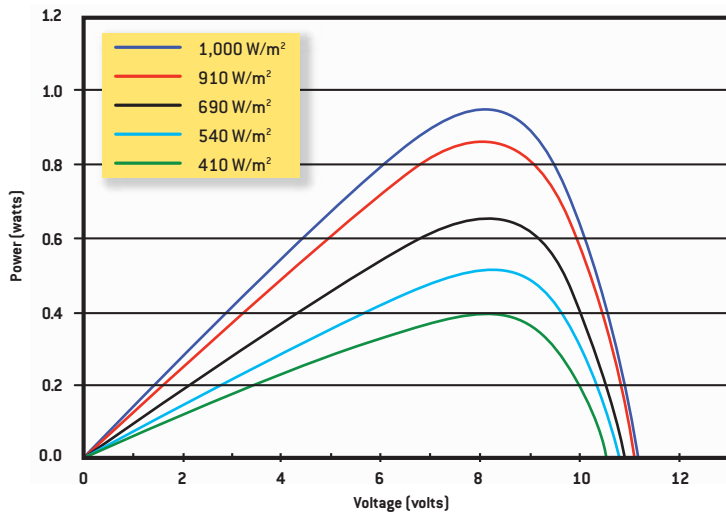
Power Plastic Solar Bag Panel: IV Curves



Outdoor Performance

Electrical Data	Units	1 Sun	1/2 Sun
Pmax	W	0.95	0.47
Impp	mA	117	58
Vmpp	V	7.8	7.8
Voc	V	11.0	10.8
Isc	mA	147	71

Power Plastic Solar Bag Panel: Power Curves



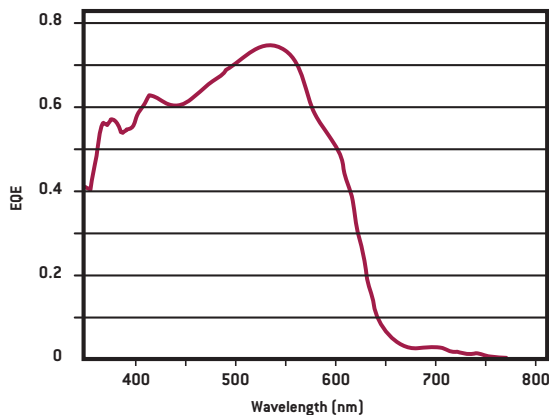
Temperature Range

Operating Temperature	-20°C to 65°C (-4°F to 149°F)
Storage Temperature	-40°C to 75°C (-40°F to 167°F)

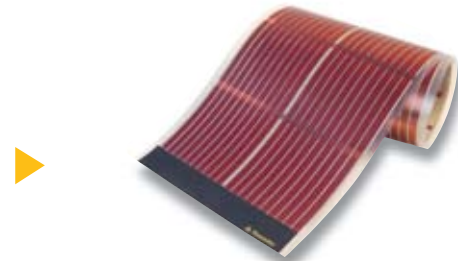
Temperature Coefficients

Pmax	+0.05% / °C (based on air temperature)
Vmpp	-0.27% / °C (based on air temperature)
Voc	-0.21% / °C (based on air temperature)

Power Plastic EQE



Konarka Power Plastic takes light in and delivers power out. When integrated into products, this direct current (DC) electrical energy can be used immediately, or stored in a battery for later use.



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Learn more at www.konarka.com
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