

Konarka Power Plastic[®] Solar Bag Panel Product Specifications

The Konarka Power Plastic Solar Bag Panel is ideal for charging batteries for portable electronic devices. Integrate into products such as luggage, backpacks, bags, and accessories.

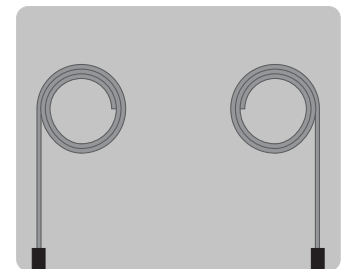
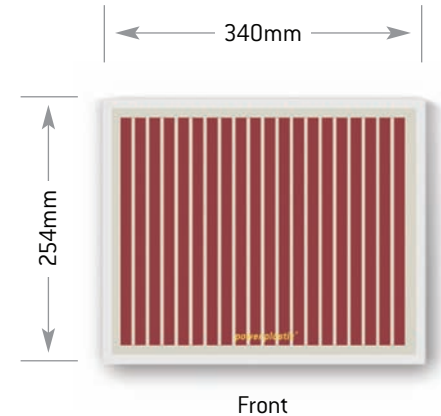
Material Characteristics

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.

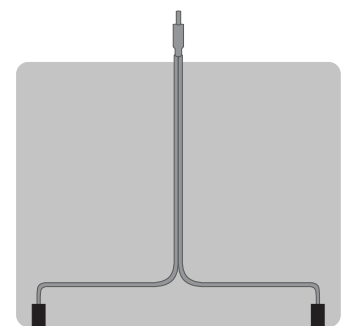
Power Plastic reacts with both indoor and outdoor light, and performs well on cloudy days, greatly expanding its potential applications. By integrating Power Plastic into everyday products, devices can produce their own low-cost source of renewable energy.

Construction Characteristics

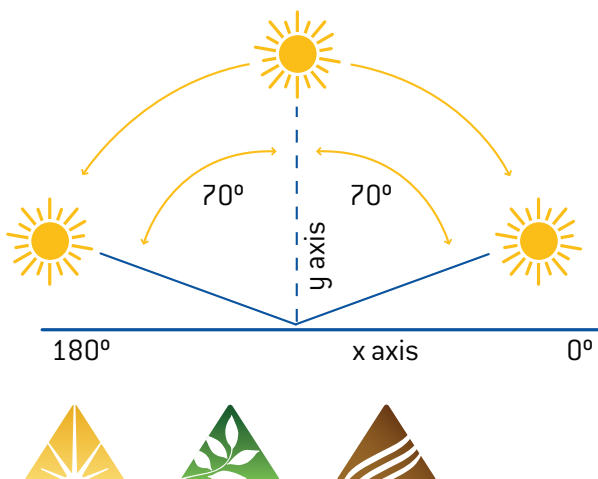
- **Dimensions:**
Refer to chart on reverse side.
- **Material thickness:**
0.5mm+/-0.05mm
- **Operating temperature range:**
-20°C to 65°C (-4°F to 149°F)
- **Weatherproof materials**
- **By-pass/blocking diode optional**
- **User friendly design:**
Easily integrated
- **Laminate encapsulation:**
High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



Back—Option B
Solderable wires



Back—Option C
Barrel connector

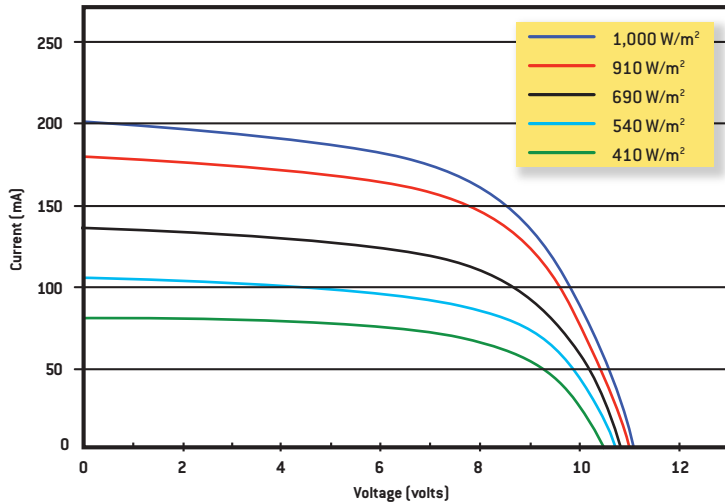


◀ Konarka Power Plastic collects energy at up to 70° off-axis from nearly sunrise to sunset. Can even be used on vertical surfaces.

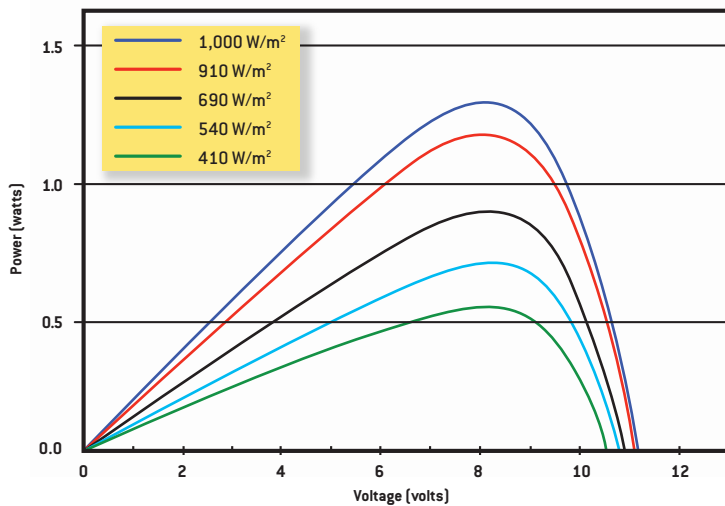


Konarka Power Plastic® Solar Bag Panel

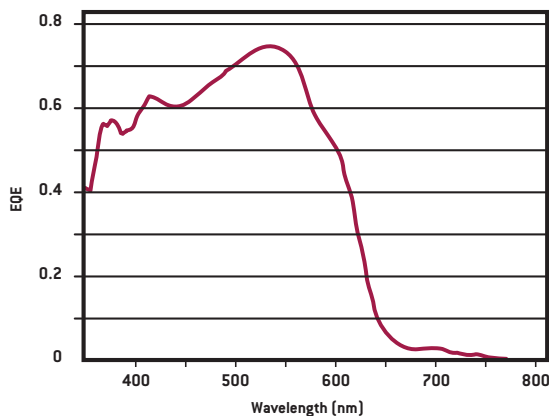
Power Plastic Solar Bag Panel: IV Curves



Power Plastic Solar Bag Panel: Power Curves



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.



Outdoor Performance

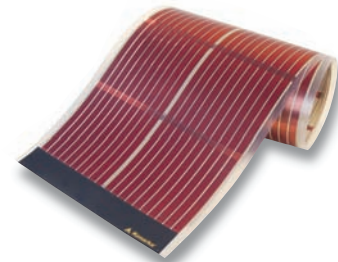
Electrical Data	Units	1 Sun	1/2 Sun
Pmax	W	1.3	0.6
Imp	mA	158	78
Vmp	V	8.0	8.2
Voc	V	11.1	10.8
Isc	mA	199	96

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)
Vmp	-0.27% / °C (based on air temperature)
Voc	-0.21% / °C (based on air temperature)



Headquarters: Lowell, MA, USA
Manufacturing: New Bedford, MA, USA
R&D Facilities: Lowell, MA, USA; Linz, Austria; Nurnberg, Germany

Learn more at www.konarka.com
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