

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.

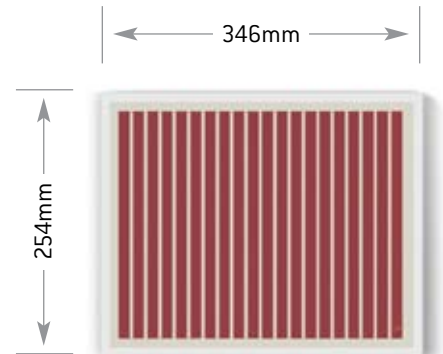
Material Characteristics

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.

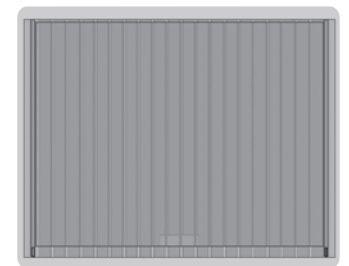
Power Plastic reacts with both indoor and outdoor light, greatly expanding its potential applications. By integrating Power Plastic into everyday products, devices can produce their own low-cost source of renewable energy.

Construction Characteristics

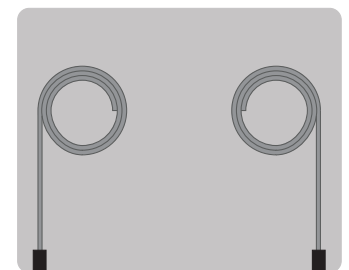
- **Material thickness:**
0.5mm+/-0.05mm
- **Operating temperature range:**
-20°C to 65°C [-4°F to 149°F]
- **Weatherproof materials**
- **By-pass/blocking diode optional**
- **User friendly design:**
Easily integrated
- **Laminate encapsulation:**
High light transmissive polymer
- **Power terminals:**
Option 1: Solderable leads
Option 2 and 3: Pre-wired and available with felt backing for easy product integration



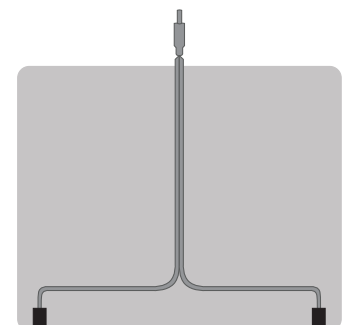
Front



Back—Option 1
Laser Ablation



Back—Option 2
Solderable wires



Back—Option 3
Barrel connector

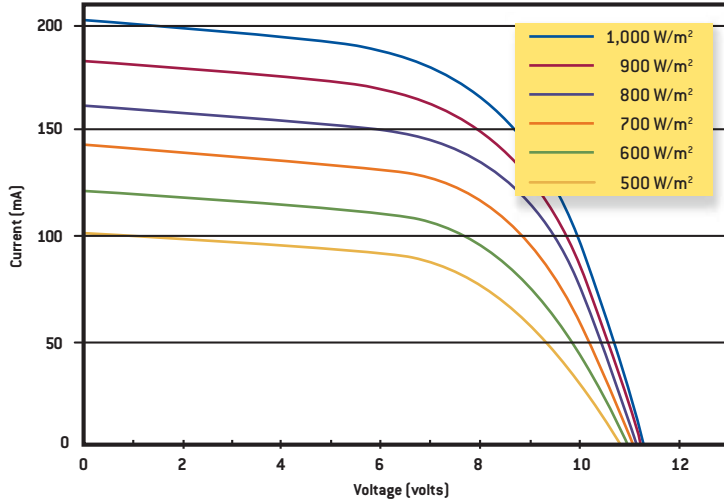
Energy Independence

Power Plastic gives you the freedom to charge your portable devices anywhere.

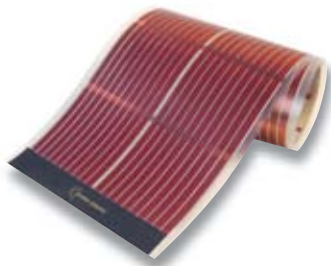
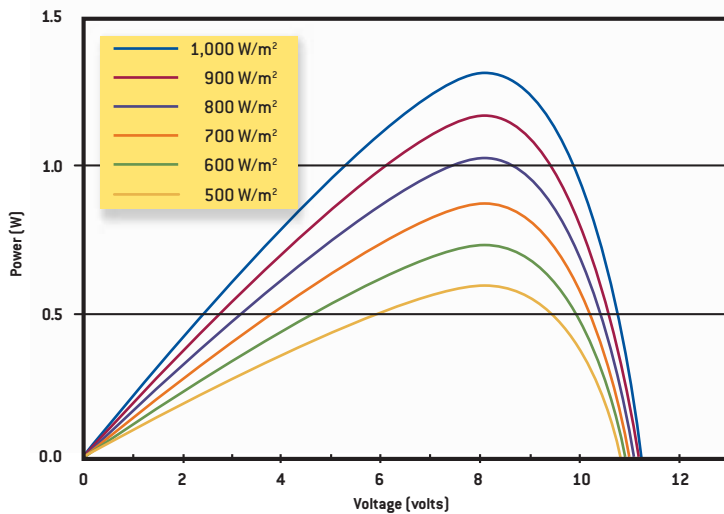


Konarka Power Plastic® Solar Bag Panel

Power Plastic Solar Bag Panel: IV Curves



Power Plastic Solar Bag Panel: Power Curves



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 for later use.



Outdoor Performance

Electrical Data	Units	1 Sun	1/2 Sun
Pmax	W	1.3	0.6
Impp	mA	164	82
Vmpp	V	7.9	7.6
Voc	V	11.3	10.9
Isc	mA	202	101

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)

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
or call +1-978-569-1400