

## Konarka Power Plastic® 320 Solar Charger Product Specifications

The Konarka Power Plastic 320 Solar Charger is ideal for charging batteries for portable electronic devices. Connect in series for increased voltage, and remote power applications.

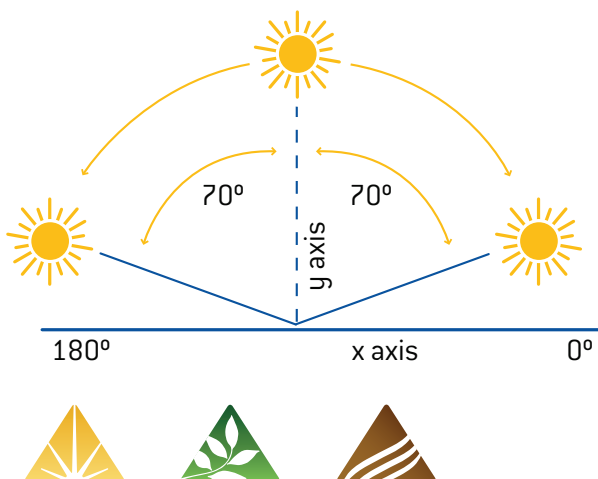
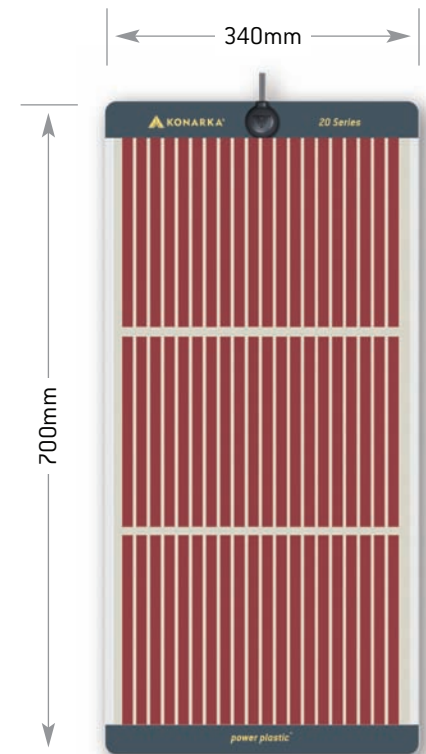
### Material Characteristics

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

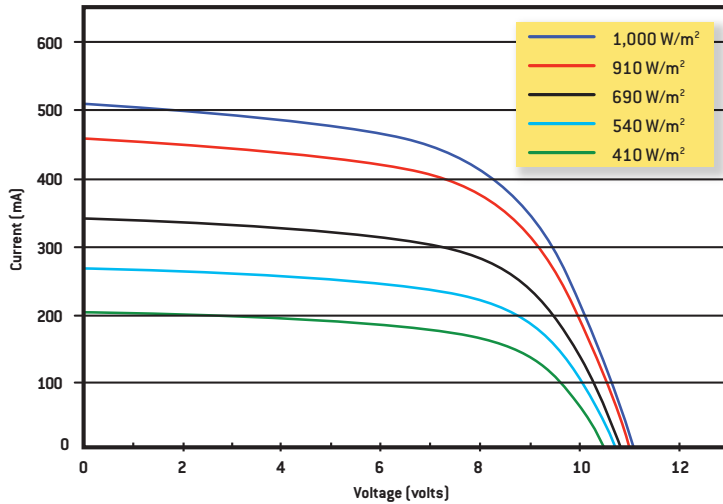
- **Dimensions:**  
Refer to chart on reverse side.
- **Material thickness:**  
0.5mm+/-0.05mm
- **Operating temperature range:**  
-20°C to 65°C (-4°F to 149°F)
- **Weatherproof materials**
- **By-pass/blocking diode optional**
- **User friendly design:**  
Easily mountable
- **Laminate encapsulation:**  
High light transmissive polymer
- **Power terminals:**  
*Option 1:* Solderable leads  
*Option 2:* Junction box with barrel connector
- **Available with side grommets**  
Width increases to 376mm



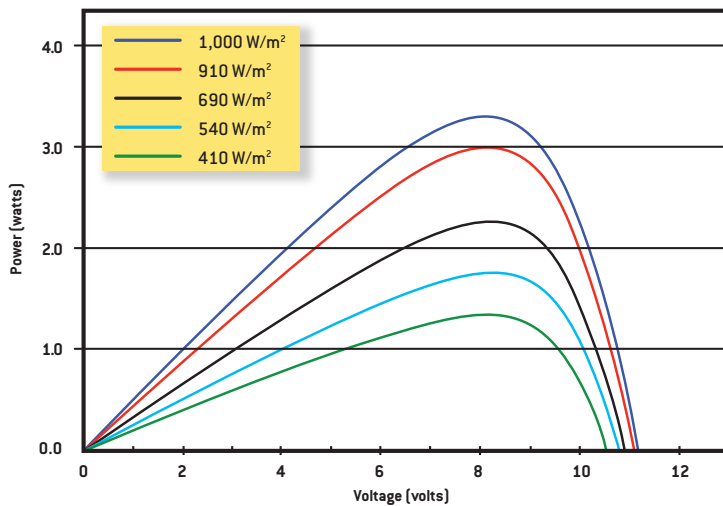
◀ Konarka Power Plastic collects energy at up to 70° off-axis from nearly sunrise to sunset. Can even be used on vertical surfaces.

## Konarka Power Plastic® 320 Solar Charger

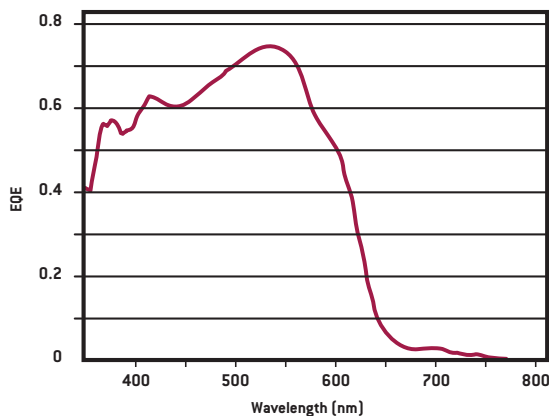
Power Plastic 320 Solar Charger: IV Curves



Power Plastic 320 Solar Charger: 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

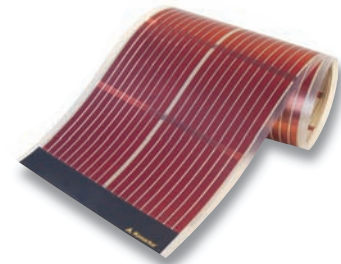
Electrical Data	Units	1 Sun	1/2 Sun
Pmax	W	3.3	1.6
Impp	mA	405	200
Vmpp	V	8.0	8.2
Voc	V	11.1	10.8
Isc	mA	508	246

### Temperature Range

<b>Operating Temperature</b>	-20°C to 65°C [-4°F to 149°F]
<b>Storage Temperature</b>	-40°C to 75°C [-40°F to 167°F]

### Temperature Coefficients

<b>Pmax</b>	+0.05% / °C (based on air temperature)
<b>Vmpp</b>	-0.27% / °C (based on air temperature)
<b>Voc</b>	-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](http://www.konarka.com)  
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