

## Konarka Power Plastic® 320 Solar Charger Product Specifications

The Konarka Power Plastic 320 Solar Charger (3.3W/8V) is ideal for charging batteries for portable electronic devices. Connect in series for increased voltage, and remote power applications.

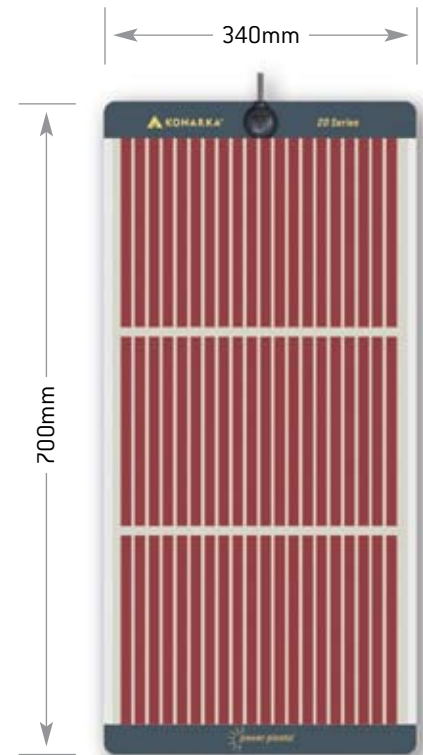
### Material Characteristics

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, greatly expanding its potential applications. By integrating Power Plastic into everyday products, devices can produce their own low-cost source of renewable energy.

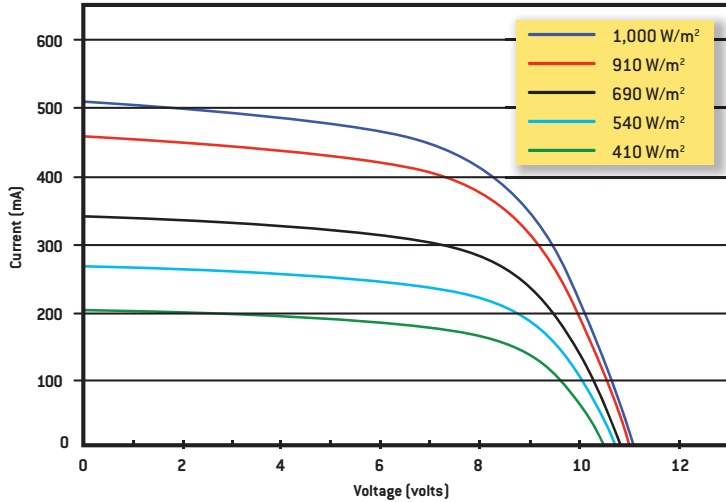
### Construction Characteristics

- **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 mountable
- **Laminate encapsulation:**  
High light transmissive polymer
- **Power terminals:**  
*Option 1:* Solderable leads  
*Option 2:* Junction box with barrel connector
- **Available with corner grommets**

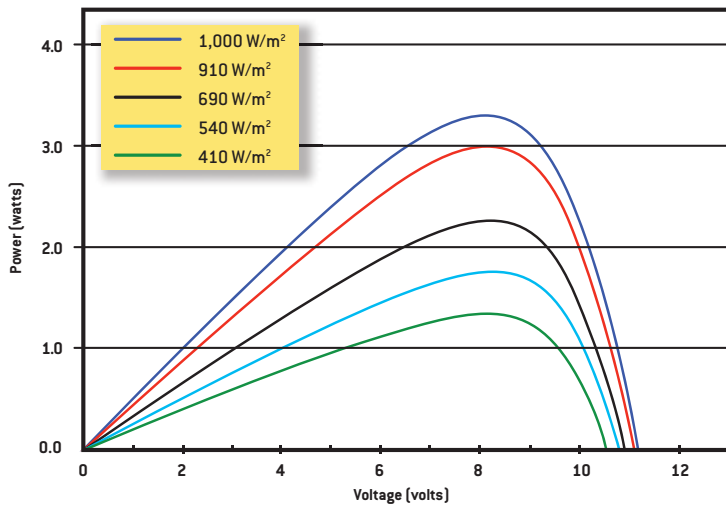


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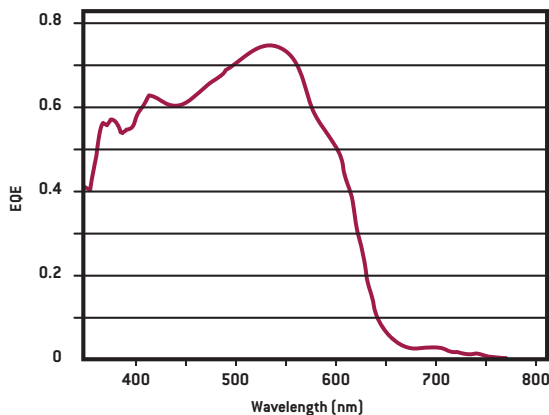
Power Plastic 320 Solar Charger: IV Curves



Power Plastic 320 Solar Charger: Power Curves



Power Plastic EQE



### 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

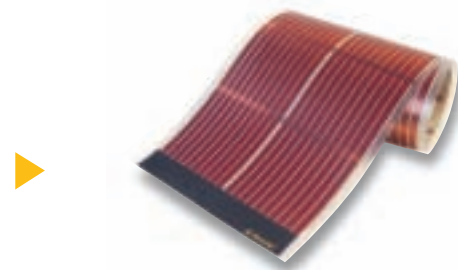
### Temperature Range

<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)

**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.



**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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