

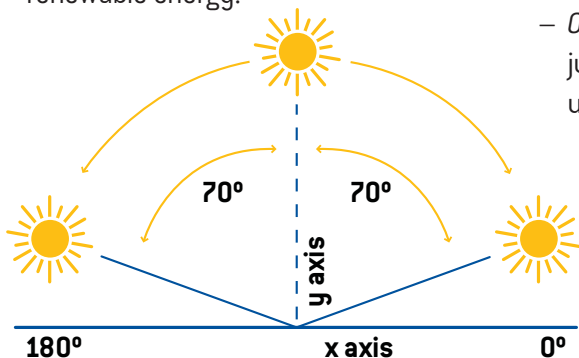
## Konarka Power Plastic® Solar Panel Product Specifications

Konarka's KT 800 (8 Watt–8 Volt) panel, which measures 1530mm x 352mm (60.2" x 13.8") is ideal for charging batteries for portable mobile phone-sized electronic devices. Connect two panels in series for charging 12-volt batteries to power laptop-sized devices.

### Material Characteristics

Power Plastic is a lightweight, thin-film photovoltaic material that is much more versatile in application than traditional silicon-based solar cells. Konarka's unique technology is based on patented photo-reactive materials made from conducting 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.

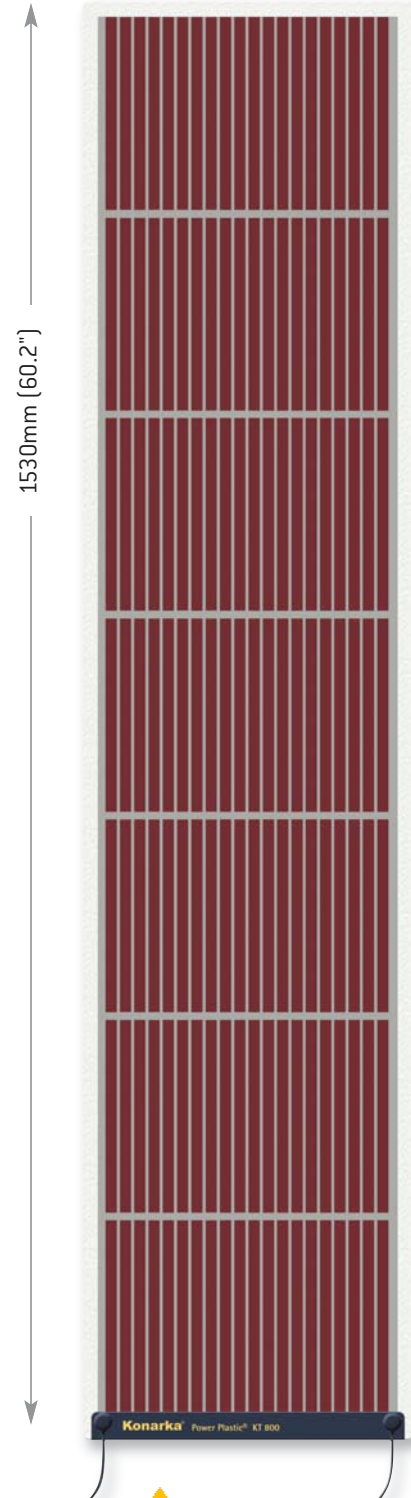


Konarka's Power Plastic collects energy at up to 70° off-axis from nearly sunrise to sunset. Can even be used on vertical surfaces.

### Construction Characteristics

- **Dimensions:**  
Length: 1530mm (60.2"),  
Width: 352mm (13.8"),  
Depth: 0.5mm (.020")
- **Weight:** 482g (17oz)
- **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
- **Output cables:** variety of solderable leads & connectors
- **Power terminals:**
  - *Option 1:* Direct bussing from PV module
  - *Option 2:* Konarka junction box with universal connection

← 352mm (13.8") →



### Energy Independence

Power Plastic provides power for electronic devices and lighting in remote locations.



## Konarka Power Plastic® Solar Panel

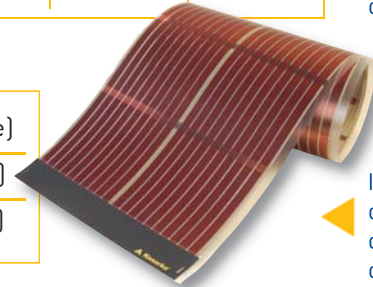
### Outdoor Performance

Electrical Data	Units	1 Sun	1/2 Sun
(Pmax)	W	8.3	4.2
Impp	mA	1,027.1	506.4
Vmpp	V	8.0	8.2
Voc	V	11.1	10.8
Isc	mA	1,287.6	643.8

### Indoor Performance (Fluorescent Light)

Electrical Data	Units	1,000 Lux	500 Lux
(Pmax)	mW	61.0	29.0
Impp	mA	10.1	5.0
Vmpp	V	6.0	5.7
Voc	V	8.0	7.8
Isc	mA	13.2	6.6

Konarka's PowerPlastic takes light in and delivers power out. When integrated into products, this direct current (DC) electrical energy can be used immediately, stored for later use, or converted to other forms of energy.



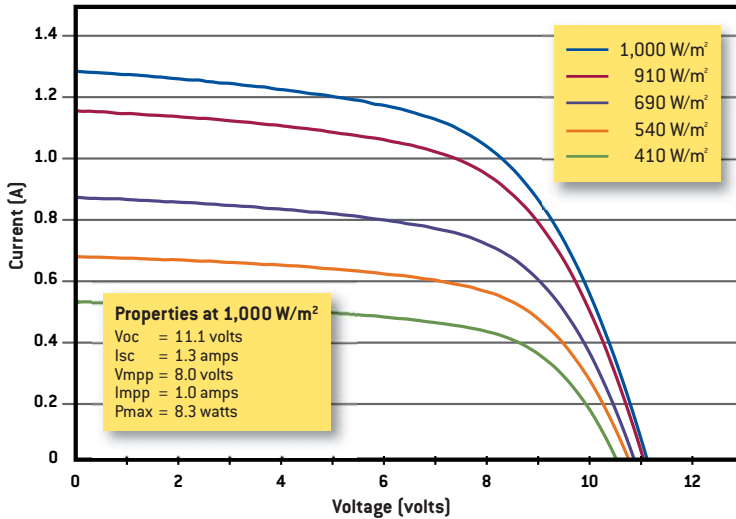
### Temperature Range

<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)

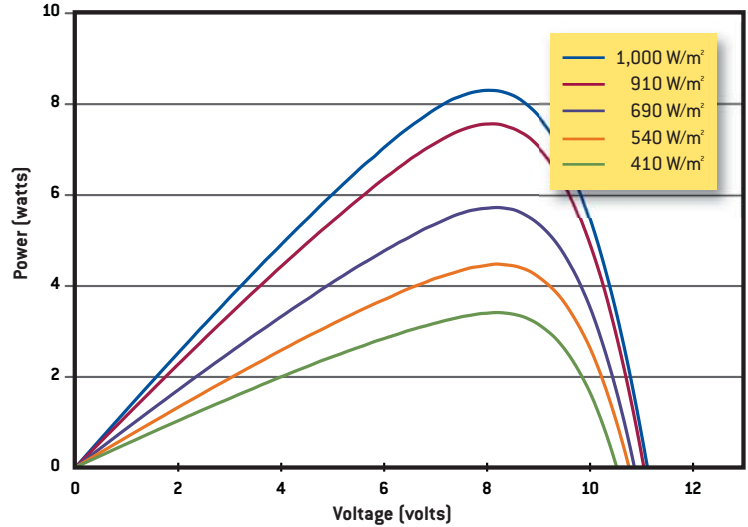
### Temperature Coefficients

<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)

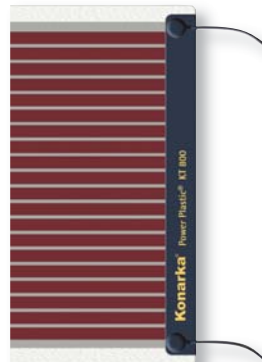
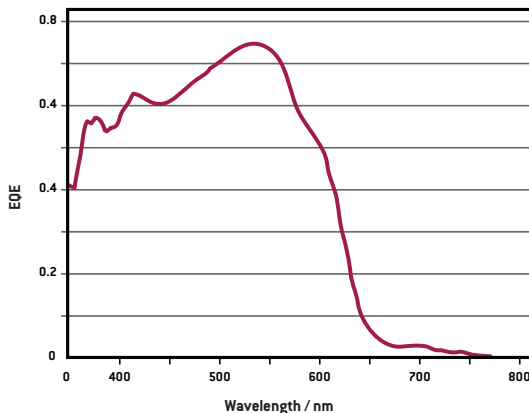
### KT 8W – 8V Panel: IV Curves



### KT 8W – 8V Panel: Power Curves



### Power Plastic EQE



Power Plastic is available with weatherproof end caps, and a variety of connectors.

**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)  
 Or call +1-978-569-1400

