

Konarka Power Plastic® 10 Series Product Specifications

Konarka Power Plastic 10 Series panels are 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.

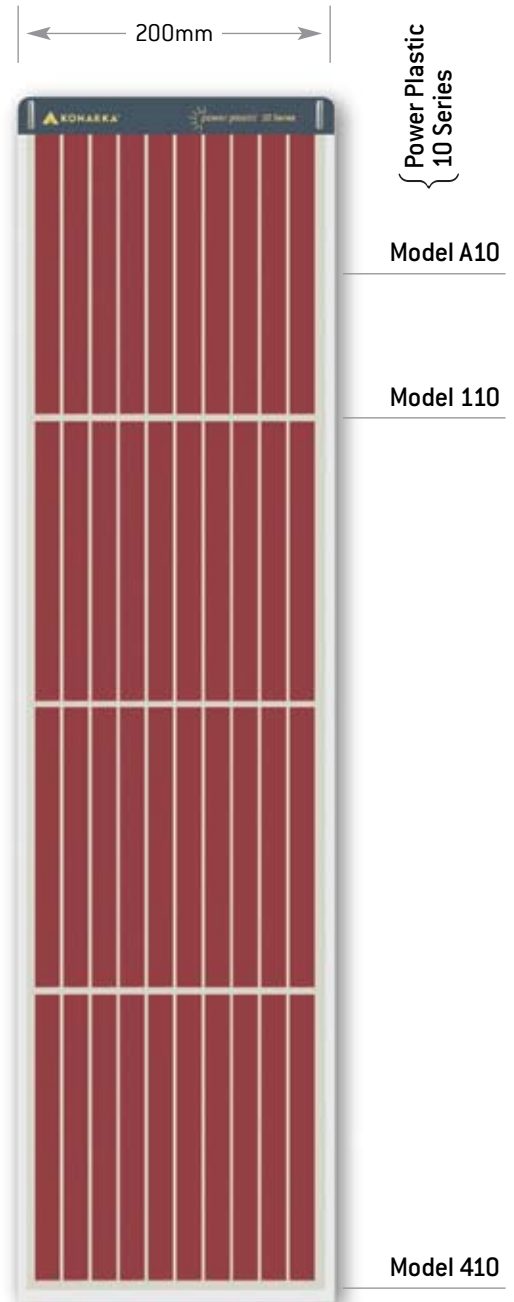
Power Plastic reacts with both indoor and outdoor light, greatly expanding its potential applications. By integrating Power Plastic into everyday products, devices can produce their own low-cost source of renewable energy.

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 integrated
- **Laminate encapsulation:**
High light transmissive polymer
- **Power terminals:**
Solderable leads

Panel Dimensions

| | length (mm) | width (mm) |
|-------------------|-------------|------------|
| Power Plastic A10 | 113 | 200 |
| Power Plastic 110 | 186 | 200 |
| Power Plastic 410 | 645 | 200 |



Outdoor Performance

| Electrical Data | | Units | 1 Sun | | | 1/2 Sun | | |
|-----------------|------------------------------------|-------|------------------|-----------------|-------|------------------|-----------------|-----|
| All 10 Series | V _{mpp} | V | 4.0 | | | 4.1 | | |
| | V _{oc} | V | 5.6 | | | 5.4 | | |
| | I _{mpp} / I _{sc} | mA | I _{mpp} | I _{sc} | mW | I _{mpp} | I _{sc} | mW |
| | Power Plastic A10 | | 58 | 72 | 233 | 28 | 35 | 116 |
| | Power Plastic 110 | | 115 | 144 | 466 | 57 | 70 | 233 |
| | Power Plastic 410 | | 461 | 578 | 1,866 | 227 | 280 | 931 |



Scalable Energy Independence

The Power Plastic 10 Series is available in 3 standard sizes, and can be built to any length for custom applications.