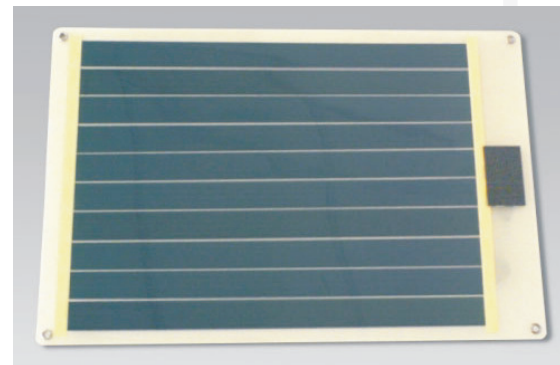


# Portable Solar Modules

- Power Ratings From 5W-10W**
- Virtually Unbreakable (No Glass)**
- Lightweight & Flexible**
- Durable**
- Shadow Tolerant**
- Excellent High Temperature Performance**

Portable Solar Modules are extremely rugged, and their unique design makes them easy to carry and deploy. The modules can be dropped, stepped on, packed and re-deployed while continuing to operate. They are designed to meet requirements for durability, performance and reliability.



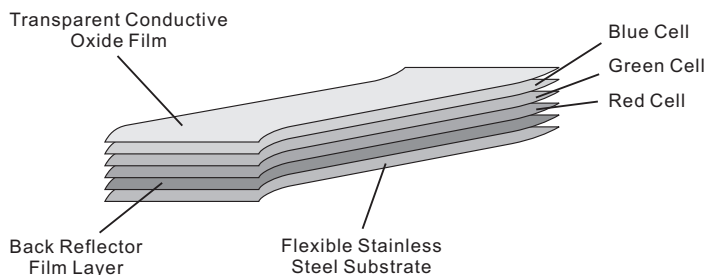
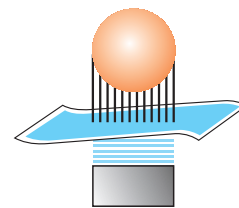
## ■ Why Do GP Solar Products Outperform Others?

All solar panels are rated in terms of peak power output (watts). At outdoors of normally under high ambient temperatures, performance of solar panel changes, depending on temperature, solar spectrum (light color), and related effects. Solar Portable Modules perform better at higher ambient temperatures and overcast condition than mono-crystalline and polycrystalline solar technology products. The result can be up to 20% more delivered energy.\*\*

\*\*Source Solfest, "Module Shoot Out"

## ■ Harnessing The Power Of The Sun

Portable Solar Modules convert sunlight directly into DC electricity, which is the same electric current available in batteries. Photons of light are transferred into the energy of electrons by the semi-conductor solar cell. The excited electrons are collected at the cell and conducted through wires to produce electricity. The solar generated current can be used to power DC loads directly, or it can be converted to AC power via an inverter. Very often the current is fed into a battery or other storage device for use at a later time.

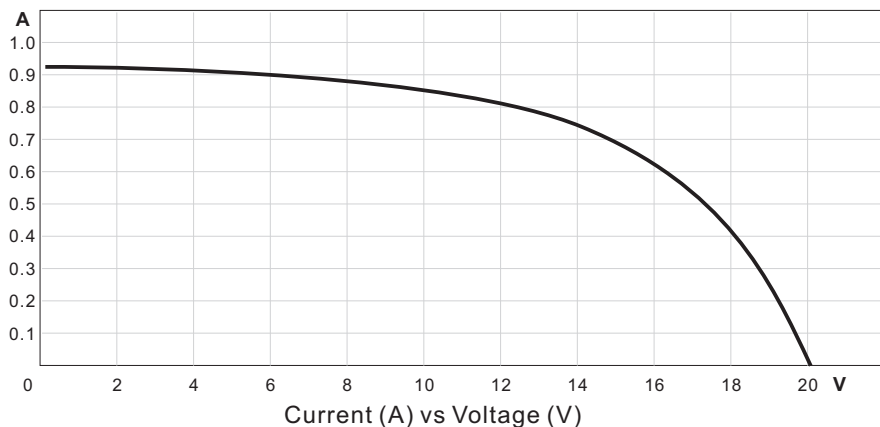


## ■ Performance Advantage

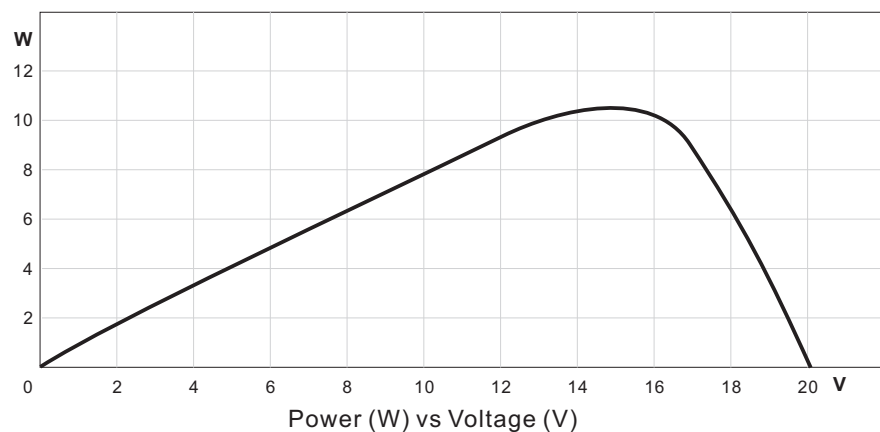
Triple-Junction and Triple-Layer technology offers more customer value than crystalline silicon wafer technologies. The solar material is deposited on tough, durable stainless steel sheet while feeding through a series of vacuum chambers. The solar cells are laminated in flexible weather-resistant polymers able to stand harsh climates.

# Portable Solar Modules

## ■ Curves at STC level of irradiance at 1000W/m<sup>2</sup>, Air Mass 1.5 and 25°C Cell Temperature



Ampere-Voltage performance of 10W module (GPP0100C140V01)



Power-Voltage performance of 10W module (GPP0100C140V01)

## ■ Specifications

Model	GPP0050C140V01	GPP0070C140V01	GPP0100C140V01
Rated Power P <sub>MAX</sub> (W)	5	7	10
Max Power Point V <sub>MPP</sub> (V)	14	14	14
Max Power Point I <sub>MPP</sub> (A)	0.36	0.5	0.72
Open Circuit Voltage (V)	20	20	20
Short Circuit Current I <sub>SC</sub> (A)	0.48	0.67	0.96

During the first 8-10 weeks of operation, electrical output exceeds specific ratings. Power output may be higher by 15%, opening voltage may be higher by 11% and operating current may be higher by 4%. Electrical specifications ( $\pm 10\%$ ) are based on measurements performed at standard test conditions of 1000 W/m<sup>2</sup> irradiance, Air Mass 1.5 and Cell Temperature of 25°C after long-term stabilization. Actual performance may vary up to 10% from rated power due to low temperature operation, spectral and other related effects. Specifications subject to change without notice.

### PV Master International Ltd.

No. 29, 6th Gaoxin Road, Zhongkai Gaoxin Industrial Zone, Huizhou, Guangdong, China  
 Tel: 86-752-2638698 Fax: 86-752-2638666 PostCode: 516006  
 Website: www.pvmaster.com E-mail: sales@pvmaster.com