

# SM Solar

## SM20p



### Polycrystalline Solar Module

#### Warranty

3 year repair and workmanship warranty

10 year power output warranty

#### Typical Electrical Characteristics

Models	SM20P
Max. Power (Pmax)	20Wp
Optimum Operating Voltage (Vm)	17.3V
Optimum Operating Current (Im)	1.16A
Open-circuit Voltage (Voc)	21.7V
Short-circuit Current (Isc)	1.26A
Cells efficiency	14.0%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m<sup>2</sup>, Am 1.5, Cell Temperature 25 °C

Solar cell	Poly-crystalline 78×52mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	480×366×25mm
Weight	2.1Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	-----
Temperature cycling range	-40 °C ~ +85 °C
NOTC	47 °C
Temperature coefficients of Isc	(+0.06%/°C)
Temperature coefficients of Voc	(-0.35%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)

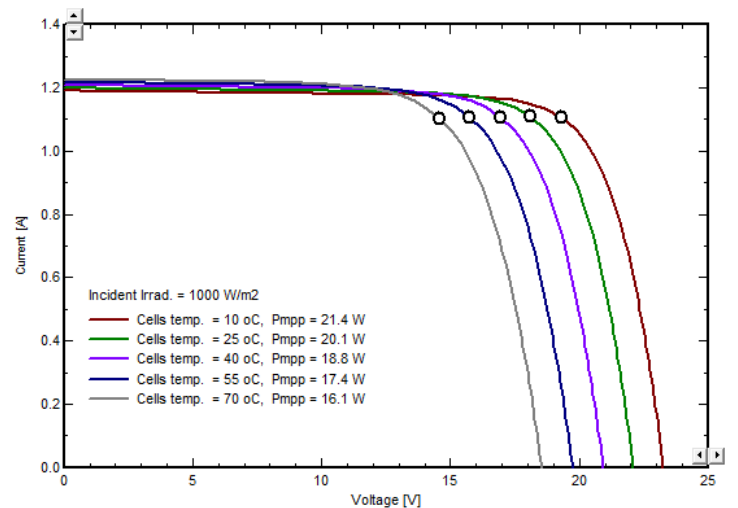
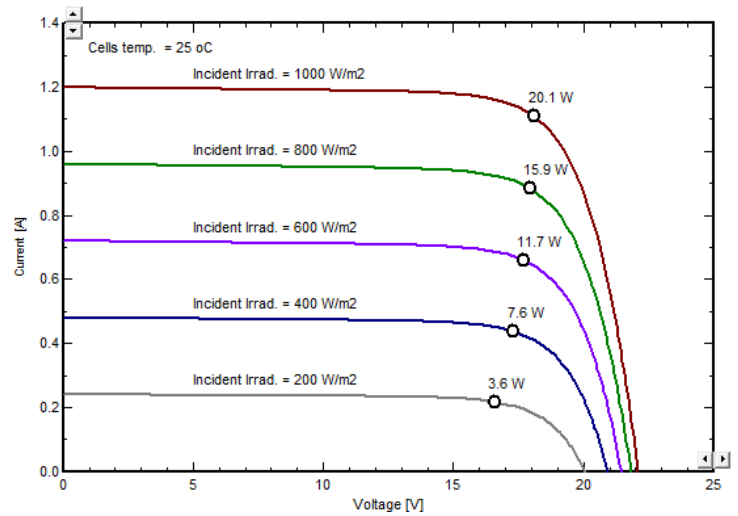
## Functional Features

- ◆ Applies to commercial, residential applications for off-grid applications.
- ◆ Produced with strict quality control standards and a worldwide certification program.
- ◆ Easily installed on the ground, roof, building face or tracking system.
- ◆ Reduces electricity cost and creates energy independently.
- ◆ Modular, no moving parts, fully scalable and easily installed.
- ◆ Reliable and virtually maintenance-free power generation.
- ◆ Helps environment by reducing air, water and land pollution.
- ◆ Provides clean, quiet and reliable electricity generation.

## Certification



## I-V CURVE



## The Structure of Solar Modules

### Cells

The hi-efficiency of mono and poly solar cells ensure adequate power for panels.

### Glass

Low-iron tempered glass, 3.2mm thickness with higher reflectivity.

### EVA

Higher transmission rate, antioxidant capacity and temperature resistance, no expansion or contraction.

### Back film

Increase efficiency of modules slightly and reduce module's temperature. Aging resistance, corrosion resistance and airtight.

### Aluminum Frame

Using the framework of the anodized aluminum frame with high intensity, mechanical shock resistance capacity.

