



## Features:

- High efficiency.
- High transparent low-iron, tempered glass.
- Unique techniques give the panel following features: aesthetic appearance, with stands high wind-pressure and snow load, and easy installation.
- Outstanding low-light performance.
- Nominal DC for standard output.
- Unique technology ensure that problems of water freezing and warping do not occur.
- Design to meet unique demand of customer.

## Quality Assurance:

Realsun photovoltaic modules have passed the following tests.

Thermal cycling test.

Thermal shock test.

Thermal/freezing and high humidity cycling test.

Electrical isolation test.

Hail impact test.

Mechanical, wind and twist loading test.

Salt mist test.

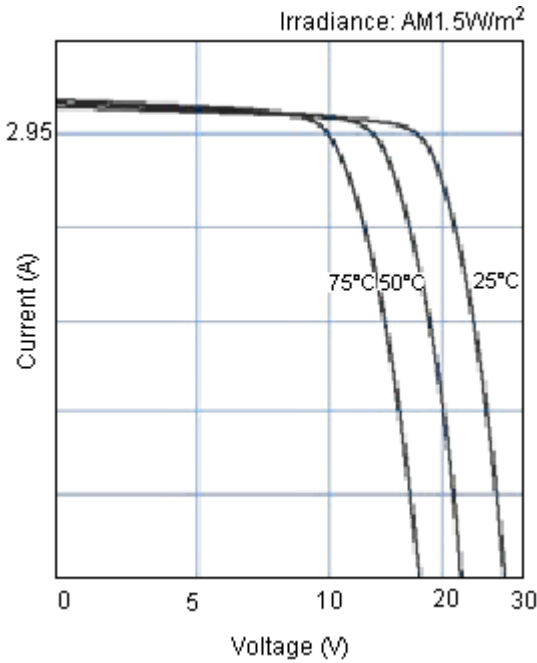
Light and water-exposure test.

Field exposure test.

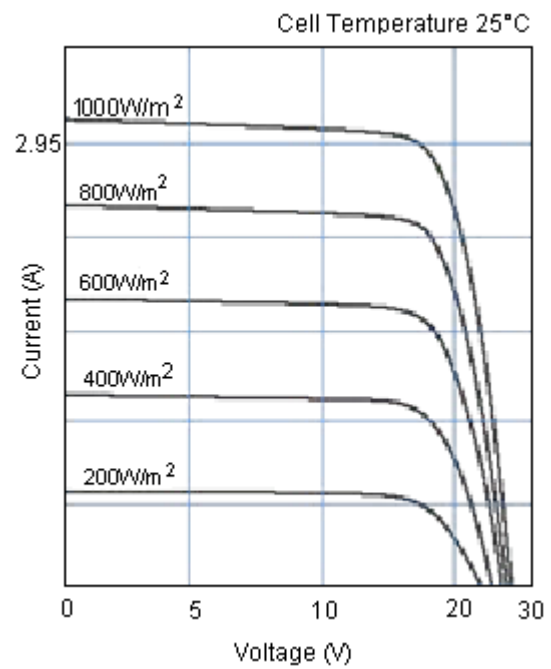
## Electrical Characteristics:

### I-V Curves

Current-voltage characteristics of photovoltaic Module SP50 at various cell temperatures



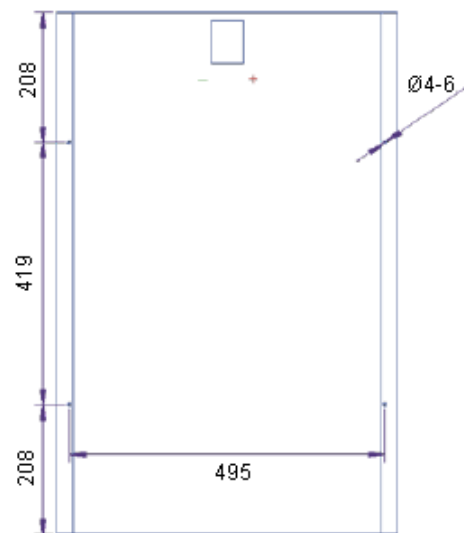
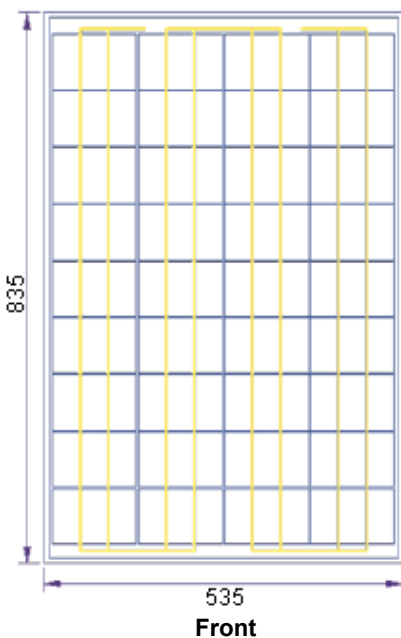
Current-voltage characteristics of photovoltaic Module SP50 at various irradiance levels



## Physical Specifications

SP50

Unit : mm



Back View

Dimensions : Millimetres

## Specifications:

MONO or poly	: Poly.
Maximum power	: 50Wp.
Maximum power voltage	: 17.00V.
Maximum power current	: 2.95A.
Open circuit voltage	: 21.50V.
Short circuit current	: 3.20A.
Size of module	: 835 x 535 x 35mm.
Weight	: 7.21Kg.
Package	: 1pc/box.
Maximum system voltage	: 720V dc.
Temperature coefficients of Isc	: 0.06%/K.
Temperature coefficients of Voc	: -0.36%/K.
Temperature coefficients of Pm	: -0.45%/K.
Temperature range	: -40°C to +85°C.
Surface maximum load capacity	: 60ms (200kg/sq.m).
Allowable hail load	: Steel ball fall down from 1m height.
Length of cables	: Terminals.
Output tolerance	: ±3%.
Frame (material, corners, etc.)	: Aluminium (epx 0.8w).
Warranty	: Free from defects in materials and workmanship for 5 years/10 years on 90% of the minimum power output/25 years on 80% of the minimum power output.

## Part Number Table

Description	Part Number
Solar Panel, 50W, 17.5V, 690 x 684 x 35mm	MC-SP50-GCS

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