### Half-Cell High Efficiency PV Module

## HCP60 280W-290W

Polv

Half-cells module is spliced from the entire cells and then connected in series. In order to ensure the same overall output voltage and current as regular modules, half-cell modules are generally designed in series and parallel configurations, which is equivalent to two small modules connected in parallel. The structure is tempered glass, EVA and backsheet for packaging, and generally adopts three-part junction box.

#### **QUALITY GUARANTEE**



#### PRODUCT PERFORMANCE ADVANTAGE



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Excellent space utilization performance, increasing power density effectively and reducing costs



Reducing the temperature of the solar module hot spot battery above 20  $^{\circ}\mathrm{C}$  ,to ensure system stability and reliability



Reducing the operating temperature of the solar module by 1-2°C effectively , reducing the generation of hot spots



Lower temperature coefficient, zero depth reflection increasing



Reuse of defective cells to reduce production costs



Reducing the loss of current mismatch and resistance

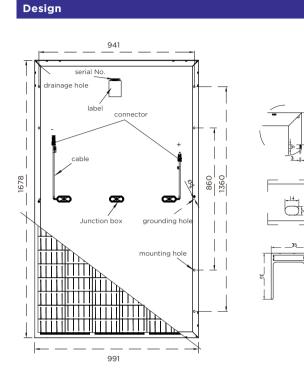


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# Half-Cell High Efficiency PV Module HCP60 280W-290W



| Mechanical Specification |  |  |  |  |
|--------------------------|--|--|--|--|
| Cells Type               | Poly 156.75×78.375mm                             |  |  |  |
| Weight                   | 18.6kg   |  |  |  |
| Dimension (L×W×T)        | 1678×991×35mm                                    |  |  |  |
| Output Cables            | 300/400mm, 4.0mm <sup>2</sup>                    |  |  |  |
| No.of Cells              | 120 (6×20)                                       |  |  |  |
| Glass                    | 3.2 mm High Transmission, Antireflection Coating |  |  |  |
| Junction box             | IP68, 3 Bypass Diodes                            |  |  |  |
| Connector                | QC4  |  |  |  |
| Packing                  | 30pcs/pallet, 396pcs/20GP, 858pcs/40HQ           |  |  |  |

| <b>Operating Parameters</b>        |                |
|------------------------------------|----------------|
| Maximum system voltage             | 1000V/1500V DC |
| Operating Temperature              | -40 ~ +85℃     |
| Maximum series fuse rating         | 20A            |
| Snow load, frontside               | 5400Pa         |
| Wind load, backside                | 2400Pa         |
| Nominal operating cell temperature | 45℃±2℃         |
| Application level                  | Class A        |

#### Electrical Characteristics(STC)

| Module Type                    | HCP60-280W  | HCP60-285W | HCP60-290W |  |
|--------------------------------|---|------------|------------|--|
| Maximum Power (Pmax)           | 280W  | 285W       | 290W       |  |
| Open-circuit Voltage (Voc)     | 39.3V   | 39.5V      | 39.7V      |  |
| Maximum Power Voltage (Vmp)    | 32.3V   | 32.6V      | 32.9V      |  |
| Short-circuit Current (Isc)    | 9.20A   | 9.26A      | 9.30A      |  |
| Maximum Power Current (Imp)    | 8.67A   | 8.75A      | 8.81A      |  |
| Module Efficiency (%)          | 16.84%  | 17.14%     | 17.44%     |  |
| Power Tolerance                | 0~+5W   |            |            |  |
| Temperature Coeffcient of Isc  | 0.05%/℃   |            |            |  |
| Temperature Coeffcient of Voc  | -0.32%/°C   |            |            |  |
| Temperature Coeffcient of Pmax | -0.41%/°C   |            |            |  |
| Standard Test Environment      | Irradiance 1000w/m², Cell temperature 25℃, Spectrum AM1.5 |            |            |  |

| Electrical Characteristics(NOCT) |  |            |            |  |  |
|----------------------------------|--|------------|------------|--|--|
| Module Type                      | HCP60-280W   | HCP60-285W | HCP60-290W |  |  |
| Maximum Power (Pmax)             | 209W   | 213W       | 215W       |  |  |
| Open-circuit Voltage (Voc)       | 36.1V  | 36.4V      | 37.2V      |  |  |
| Maximum Power Voltage (Vmp)      | 29.6V  | 29.9V      | 30.0V      |  |  |
| Short-circuit Current (Isc)      | 7.42A  | 7.47A      | 7.57A      |  |  |
| Maximum Power Current (Imp)      | 7.06A  | 7.12A      | 7.15A      |  |  |
| Standard Test Environment        | Irradiance 800w/m², Cell temperature 20°C, Spectrum AM1.5, Wind speed 1m/s |            |            |  |  |



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