

G12-12BB P-type Bifacial-PERC Max Efficiency 23.8% Silicon Solar Cells Specification

The unique bifacial light receiving structure and half-chip design effectively improves the generating capacity of module.

Lower module operating temperature to further increase the power generation and life span of module.

Rigorous grading standards effectively reduce the power loss in the module package.

Unique finger design, greatly improving the conversion efficiency of the solar cell.

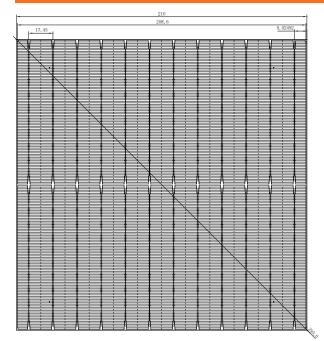
Strict appearance standards improve the passing rate of module production.

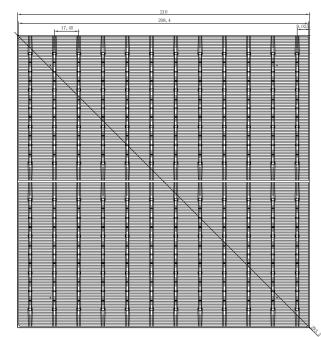
Strict pulling force test, to ensure a good weld ability.

Excellent anti-PID performance to ensure the stability of the module power.



Front and back of cell design drawing



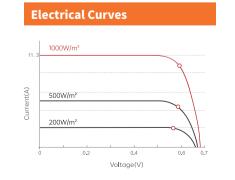


| Mechanical Characteristics | |
|-----------------------------------|---|
| Product | RunDa P-type Bifacial-PERC G12 12BB Silicon Solar Cells |
| Dimension | 210mm×210mm, tolerance±0.25mm |
| Thickness | 150μm, tolerance±15μm |
| Front (anode) | Passivated Emitter(AlOx and SiNx dual layer) Rear Contact(Al), Blue silicon nitride anti-reflection coating, 12 row, The size of the head pad is 0.6 \pm 0.1mm. |
| Back (cathode) | Blue silicon nitride anti-reflection coating,12 row, The size of the head pad is 0.6 \pm 0.1mm. |
| | |

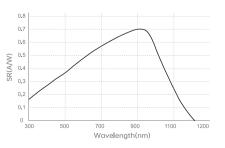
| Conversion efficiency Eff (%) | Maximum power Pmax (W) | Open circuit voltage Voc (V) | Short circuit current Isc (A) | Optimum operating voltage Vm (V) | Optimum operating current Im (A) |
|--|---------------------------------|------------------------------------|-------------------------------------|---|---|
| 23.80 | 10.495 | 0.698 | 18.381 | 0.613 | 17.120 |
| 23.70 | 10.451 | 0.697 | 18.330 | 0.612 | 17.076 |
| 23.60 | 10.407 | 0.696 | 18.279 | 0.611 | 17.032 |
| 23.50 | 10.363 | 0.695 | 18.228 | 0.610 | 16.988 |
| 23.40 | 10.318 | 0.694 | 18.176 | 0.609 | 16.943 |
| 23.30 | 10.274 | 0.693 | 18.125 | 0.608 | 16.899 |
| 23.20 | 10.230 | 0.692 | 18.073 | 0.607 | 16.854 |
| 23.10 | 10.186 | 0.691 | 18.021 | 0.606 | 16.809 |
| 23.00 | 10.142 | 0.690 | 17.969 | 0.605 | 16.764 |
| 22.90 | 10.098 | 0.689 | 17.917 | 0.604 | 16.719 |
| 22.80 | 10.054 | 0.688 | 17.865 | 0.603 | 16.673 |

All data at STC (standard testing conditions): 1000W/m2, AM1.5G, 25°C. Pmax \pm 1.5%, Efficiency \pm 0.2% abs.

| Temperature coefficients | | | |
|--------------------------|------------|--|--|
| Power | -0.38%/°C | | |
| Current | +0.07% /°C | | |
| Voltage | -0.36% /°C | | |
| | | | |



Spectral Response



The technical parameters contained in this datasheet may deviate slightly, and Runda Solar does not guarantee that they are completely accurate. Due to continuous Innovation.research and development and product Improvement, Runda Solar reserves the right to adjust the information in this datasheet at any time without prior notice. The customer should obtain the latest version of datasheet when signing the contract and make it an integral part of the binding contract signed by both parties. The Chinese (or other language) translation files of this datasheet are for reference only. If there is any inconsistency between the English version and the Chinese version (or other language versions), the English version shall prevail.