

490 W

Back-Contact Solar Module



HPBC 182.2*96mm Cell

Back-contact solar cell from LONGi Solar, without busbar ribbon reach higher efficiency

Low light performance

hpbc capabilities to produce energy under low irradiation are up to 2.01%

Load Capacity

Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV.

PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized.

Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by TUV.

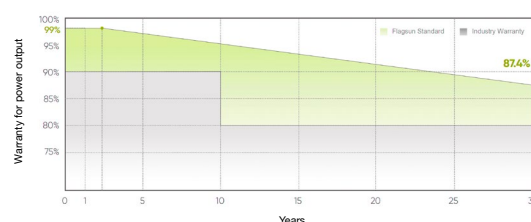
Quality Management System and Product Certification

IEC 61215-1:2021
EN IEC 61215-1:2021/AC:202
IEC 61215-1-1:2021
EN IEC 61215-1-1:2021
IEC 61215-2:2021
EN IEC 61215-2:2021
IEC 61730-1:2023
IEC 61730-2:2023



Quality Guarantee

15 Years Materials Warranty 30 Years Power Warranty



Mechanical Characteristics

Weight	26.5 kg
Dimensions	1800×1134×30 mm
Cell Dimensions	182.2×96 mm
Cell Amount	54×2 pcs
Maximum System Voltage	1500 V
Junction Box	IP68
Glass Thickness	(F) 2.0 mm, Anti-Reflection Coating (B) 2.0 mm, Heat Strengthened Glass Black/white backsheet
Frame	Aluminum Alloy
Cable	4mm2, 900mm or customization
Connector	MC4 Compatible/MC4-EVO2
Tolerance	±3%
Packing	35pcs/box, 840pcs/40'HQ

Electrical Parameters (STC*)

Maximum Power (Pmax/W)	490
Open Circuit Voltage (Voc/V)	39.80
Short Circuit Current (Isc/A)	15.37
Voltage at Maximum Power (Vmp/V)	34.99
Current at Maximum Power (Imp/A)	14.00
Module Efficiency (%)	24.01

*STC: Irradiance 1000W/m2, cell temperature 25°C, AM=1.5. Tolerance of Pmax is within ±3%

Electrical Parameters (NMOT**)

Maximum Power (Pmax/W)	390
Open Circuit Voltage (Voc/V)	38.64
Short Circuit Current (Isc/A)	13.60
Voltage at Maximum Power (Vmp/V)	33.50
Current at Maximum Power (Imp/A)	11.64

**NMOT: Under Nominal Module Operating Temperature (NMOT), irradiance of 800W/m2, spectrum AM 1.5, ambient temperature 20°C, wind speed 1m/s.

Electrical Parameters (At 10% Bifacial Power Output)

Output Power (Pmax/W)	539
Open Circuit Voltage (Voc/V)	39.80
Short Circuit Current (Isc/A)	16.91
Voltage at Maximum Power (Vmp/V)	34.99
Current at Maximum Power (Imp/A)	15.40

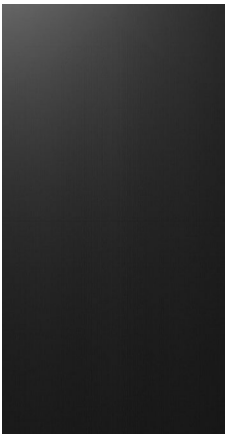
Temp. Characteristics

NMOT	41±3°C
Temp. Coefficient of Voc	-0.23%/°C
Temp. Coefficient of Isc	+0.050%/°C
Temp. Coefficient of Pmax	-0.290%/°C

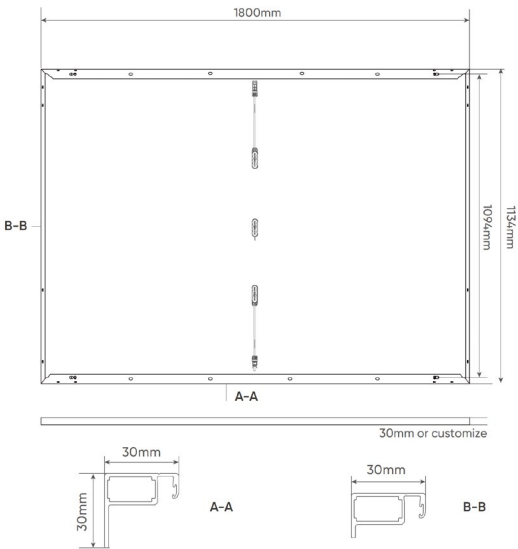
Mechanical loading

Hailstone Test	25mm at the speed of 23m/s
Operating Temp.	-40°C~+85°C
Wind/Snow Load	2400Pa/5400Pa
Fuse Current	25A

Product Image



Drawings



Characteristics (480W)

