

G10-58P

N-type Bifacial Double Glass Module

HSM-GFB-NM455~480

480W

Maximum Power Output

23.6%

Maximum Efficiency

High Energy Yield

- High-density cell package, increasing 2% cells
- Lower temperature coefficient (Pmax): $-0.29\%/^{\circ}\text{C}$
- Up to 80% power bifaciality

Industry-leading G10 Wafer

- $<1\%$ degradation in the first year
- Smaller wafer chamfer, larger light receiving area

Superior Customer Value

- Integrated technology: TOPCon + Shingling
- Higher installed DC capacity within limited rooftop space
- More artistic beauty with no-gap design

Long-term Reliability

- 1/3 cell technology, lower current loss and hot spot risk
- Harsh environment resistance
- Damage-free laser cutting, lower micro-crack risk
- Mechanical load: Front 5400 Pa, Back 2400 Pa

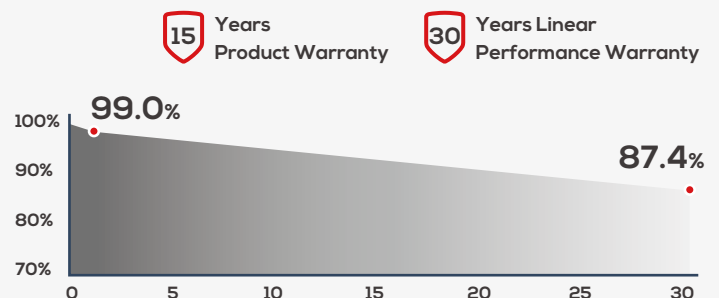
Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 ISO 9001:2015 ISO 45001:2018 ISO 14001:2015



Linear Performance Warranty



* Please refer to product warranty for details

G10-58P N-type Bifacial Double Glass Module

HSM-GFB-NM455~480

480W

Maximum Power

23.6%

Maximum Efficiency

0~+5W

Power Tolerance

Electrical Parameters (STC*)

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±2%

Maximum Power	P _{max} (W)	455	460	465	470	475	480
Open Circuit Voltage	V _{oc} (V)	42.13	42.31	42.49	42.67	42.85	43.03
Short Circuit Current	I _{sc} (A)	13.45	13.52	13.55	13.58	13.61	13.64
Maximum Power Voltage	V _{mp} (V)	35.70	35.95	36.20	36.45	36.70	36.95
Maximum Power Current	I _{mp} (A)	12.75	12.80	12.85	12.90	12.95	13.00
Module Efficiency	(%)	22.4	22.7	22.9	23.2	23.4	23.6

Electrical Characteristics with 10% Bifacial Gain*

* The additional gain from the back side depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

Maximum Power	P _{max} (W)	501	506	512	517	523	528
Open Circuit Voltage	V _{oc} (V)	42.13	42.31	42.49	42.67	42.85	43.03
Short Circuit Current	I _{sc} (A)	14.80	14.87	14.91	14.94	14.97	15.00
Maximum Power Voltage	V _{mp} (V)	35.70	35.95	36.20	36.45	36.70	36.95
Maximum Power Current	I _{mp} (A)	14.03	14.08	14.14	14.19	14.25	14.30

Mechanical Data

* Please refer to installation manual for details

No. of Cells	174pcs (6×29)
Dimension	1790×1134×30mm
Weight	24.8kg
Front Glass	2.0mm High Transmission, Heat Strengthened, AR coating Glass
Back Glass	2.0mm High Transmission, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68
Cables	4.0mm ² , +1200mm, -1200mm/±1400mm (can be customized)
Diodes	3
Maximum Static Load	Front: 5400Pa/Back: 2400Pa*

Temperature Coefficient

* NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Nominal Module Operating Temperature*	43±2°C	Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of I _{sc}	+0.045%/°C	Temperature Coefficient of P _{max}	-0.29%/°C

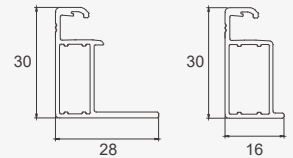
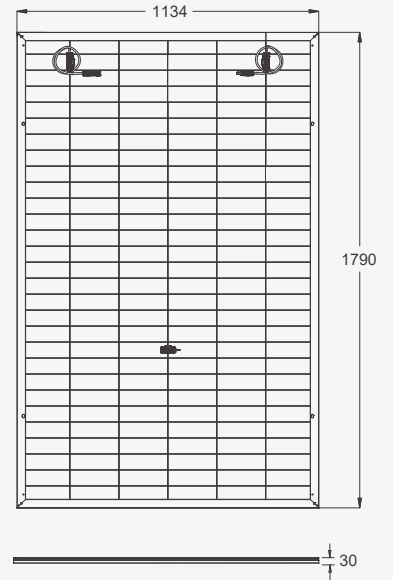
Operating Parameters

Operating Temperature	-40~+85°C
Maximum System Voltage	1000V & 1500V DC
Maximum Series Fuse Rating	25A
Power Bifaciality	80±5%

Packaging Configuration

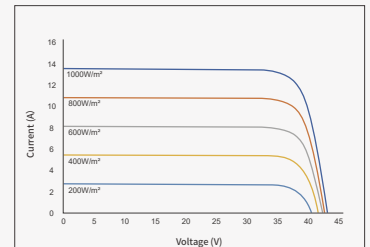
Modules per Pallet	36pcs
Modules per 40'HQ Container	864pcs
Pallets per 40'HQ Container	24plt

Engineering Drawing [Unit: mm]

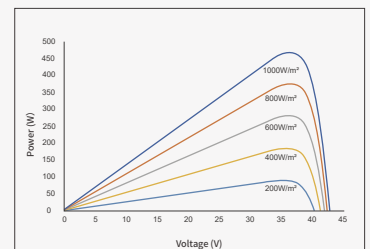


Curve Graph

I-V Curves (470W)



P-V Curves (470W)



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Datasheets