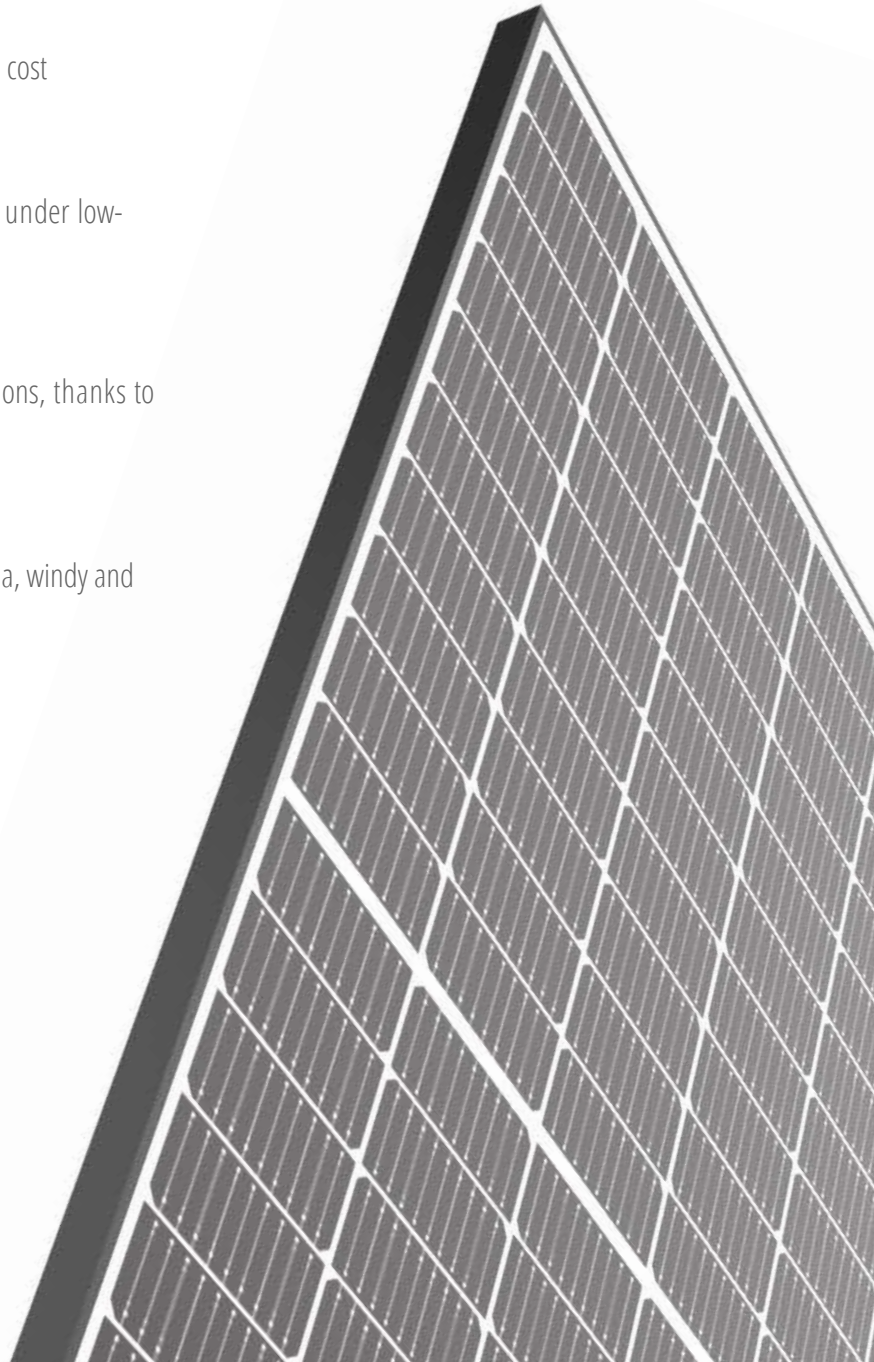


# GS3 Series

- **Additional Power Generation Gain**  
At least 30-year product life, more than 10%- 30% additional power gain comparing with conventional module
- **ZERO LID (Light Induced Degradation)**  
N-type solar cell has no LID naturally, can increase power generation
- **Lower LCOE**  
High power and 1500V system voltage, saving BOS cost
- **Better Weak Illumination Response**  
Wide spectral response, higher power output even under low-light settings like smog or cloudy days
- **Better Temperature Coefficient**  
Higher power generation under working conditions, thanks to passivating contact cell technology
- **Wider Applicability**  
BIPV, vertical installation, snowfield, high-humid area, windy and dusty area



## Electrical Properties

STC\*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	375	380	385	390	395	400
MPP Voltage (Vmp) (V)	34.7	34.9	35.1	35.3	35.5	35.7
MPP Current (Imp) (A)	10.81	10.89	10.97	11.05	11.13	11.21
Open Circuit Voltage (Voc) (V)	41.6	41.8	42.0	42.2	42.4	42.6
Short Circuit Current (Isc) (A)	11.45	11.54	11.62	11.69	11.77	11.85
Module Efficiency (%)	20.22	20.49	20.76	21.03	21.30	21.57

\*STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5

The data above is for reference only and the actual data is in accordance with the practical testing

## Electrical Properties

NOCT\*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	284	287	291	295	299	303
MPP Voltage (Vmp) (V)	32.5	32.7	32.9	33.1	33.3	33.5
MPP Current (Imp) (A)	8.72	8.78	8.84	8.91	8.97	9.04
Open Circuit Voltage (Voc) (V)	39.8	40.0	40.1	40.3	40.5	40.7
Short Circuit Current (Isc) (A)	9.23	9.30	9.37	9.43	9.49	9.55

\*NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

## Operating Properties

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V (IEC)
Maximum Series Fuse Rating(A)	25
Power Tolerance	0~+5W
Bifaciality*	80%

\*Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%

## Temperature Coefficient

Temperature Coefficient of Pmax*	-0.320%/°C
Temperature Coefficient of Voc	-0.260%/°C
Temperature Coefficient of Isc	+0.046%/°C
Nominal Operating Cell Temperature (NOCT)	42±2°C

\*Temperature Coefficient of Pmax±0.03%/°C

## Mechanical Properties

Cell Type	166.00mm*83.00mm
Number of Cells	120pcs(12*10)
Dimension	1773mm*1046mm*30mm
Weight	24kg
Front /Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm <sup>2</sup> , 300mm
Connector	MC4 Compatible

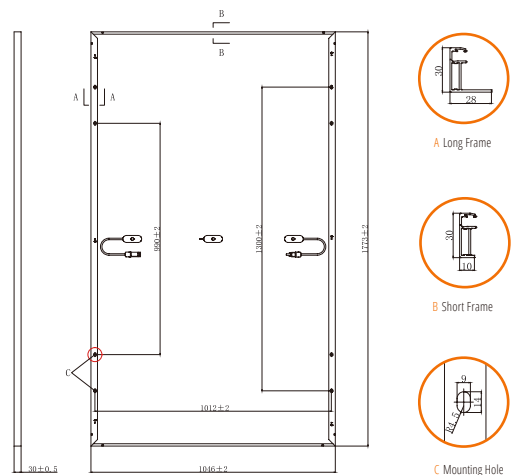
\*Heat strengthened glass

\*Cable length can be customized

## With Different Power Generation Gain (regarding 380W as an example)

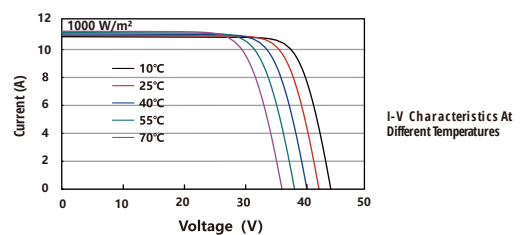
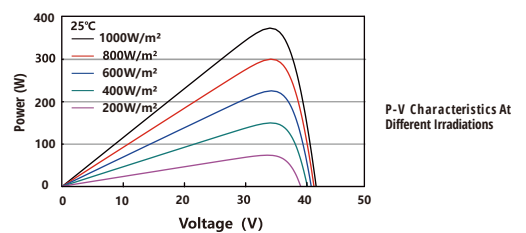
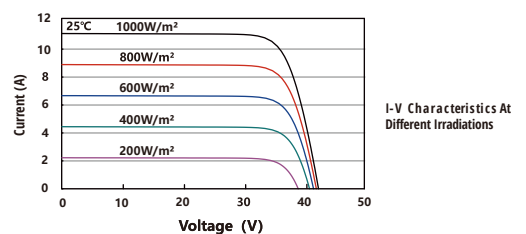
Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	410	34.9	11.75	41.8	12.44
15	426	34.9	12.18	41.8	12.89
20	441	35.0	12.61	41.9	13.34
25	456	35.0	13.04	41.9	13.79
30	471	35.0	13.47	41.9	14.24

## Engineering Drawing (unit:mm)



## Characteristic Curves

HD60NBG-380



## Packaging Configuration

Packing Type	20'GP	40'GP	40'HQ
Piece/Pallet		35	
Pallet/Container	6	12	24
Piece/Container	210	420	840

\*The specification and key features described in this data sheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, GSHK Solar reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the data sheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

\* STC: Irradiance 1000W/m<sup>2</sup>

Cell Temperature 25°C

AM=1.5