





GW-BD16/60	280~310 W
Mono-Super Black Module	Power Output Range
19.0 %	0~+5 W
Maximum Efficiency	Power Tolerance


Product Specifications Book

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PID free module
Anti-PID cell technology
Anti-PID encapsulation technology

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UL 1703, IEC 61215, IEC 61730 and CE
ISO 9001 for Quality Management Systems
ISO 14001 for Environmental Management Systems
ISO 18001 Occupational Health and Safety System

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Lower annual power degradation and current sorting reduces the mismatch power loss in system operation

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Improve safety
1500VDC (TUV) / 1500VDC (CSA) certified
2 EL inspections per cell/module for defect-free consistency

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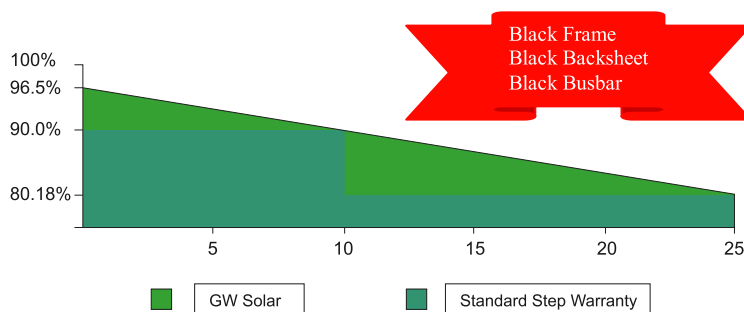
Load certificates: wind to 2400Pa
and snow to 5400Pa

Mono Perc Super Full Black Modules



LINEAR PERFORMANCE WARRANTY

15 years extra product warranty option



Munich RE Insurance Global Coverage

Green Wing Solar Technology Co.,Ltd.

Code: BM-EN-02-07

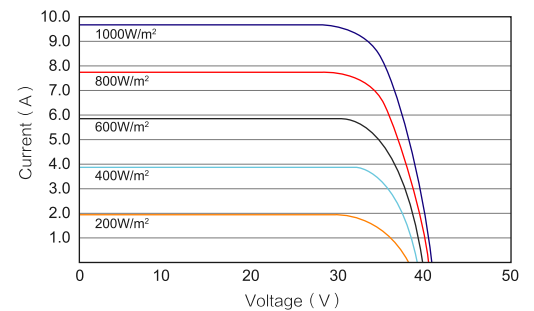
REV:03

Data: 2018-04-23

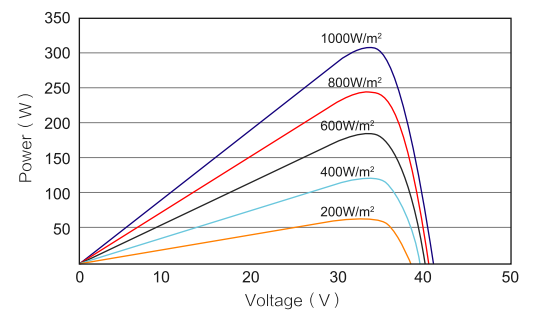
Electrical Specifications (standard test conditions)

Maximum Power -PMAX (Wp)	280	285	290	295	300	305	310
Power Tolerance -PMAX (W)	0 ~ +5						
Maximum power point of operating voltage -VMPP (V)	31.7	31.8	32.2	32.5	32.6	32.9	33.1
Maximum power point of operating current -IMPP (A)	8.84	8.97	9.01	9.08	9.19	9.28	9.37
Open circuit voltage -Voc (V)*	38.4	38.5	38.9	39.6	39.8	40.0	40.2
Short circuit current - Isc (A)	9.42	9.51	9.66	9.68	9.77	9.85	9.94
Module Efficiency η_m (%)	17.2	17.5	17.8	18.1	18.4	18.8	19.0
Standard test conditions under Measured Value:(air quality AM1.5, Irradiance 1000W / m ² , cell temperature 25 ° C)							

I-V Curves (305)



P-V Curves (305)



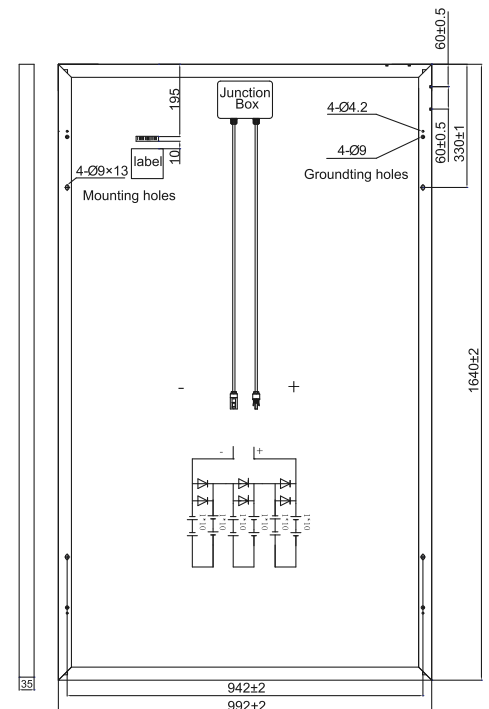
Electrical Index (under nominal operating cell temperature conditions)

Maximum Power-PMAX (Wp)	209	212	216	220	223	227	231
Maximum power point of operating voltage -VMPP (V)	29.4	29.5	29.9	30.1	30.2	30.5	30.7
Maximum power point of operating current -IMPP (A)	7.10	7.21	7.24	7.30	7.38	7.46	7.53
Open circuit voltage -Voc (V)*	35.7	35.8	36.2	36.8	37.0	37.2	37.4
Short circuit current - Isc (A)	7.61	7.68	7.80	7.82	7.89	7.95	8.03
NOCT: Irradiance 800W / m ² , ambient temperature of 20 ° C, wind speed 1m / s							

Temperature Rating	Limit parameter		
Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)	Working Temperature	-40~+85°C
Maximum power (PMAX) Temperature Coefficient	- 0.39%/°C	Maximum fuse rated Current	15A
Open-circuit voltage (VOC) Temperature Coefficient	- 0.29%/°C	Maximum system voltage	1500VDC (TUV)
Short circuit current (ISC) Temperature Coefficient	0.05%/°C	Maximum system voltage	1500VDC (CSA)

Mechanical Specifications

Solar cell Type	156.75mm × 156.75mm Mono-crystalline
Number of Cells	1 module 60pieces (6 × 10)
Dimensions	1640*992*35mm 64.57*39.06*1.38 inch
Weight	18.6 kg
Glass	3.2mm, High transparency, anti-reflective coatings toughened glass
Junction Box	Protection level IP 68
Frame	Black, anodized aluminum
Backsheet	Black
Busbar	Black
Cable	4.0 mm ² , 1000 mm Photovoltaic dedicated cables
Connector	MC4 compatible



Warranty

- 10-year warranty for product
- 25-year warranty for linear power
- Please refer to product warranty for details

Packaging Method

- Modules per box: 30 pcs
- Modules per 40 ft container: 840 pcs
- Installation depends on the mechanical load