

HIGH PERFORMANCE BIFAC AL PERC MONOCRYSTALLINE MODULE

580BMDG-600BMDG

144 CELL Mono PERC Module	580-600Wp Power Output Range
1500VDC Maximum System Voltage	21.2% Maximum Efficiency

KEY SALIENT FEATURES

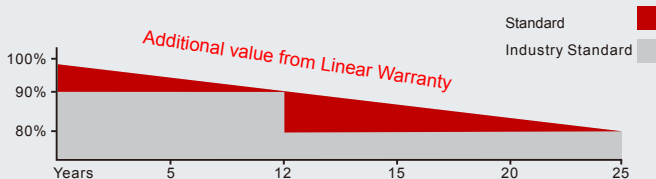
- Global, Tier 1 manufacturer brand, with independently certified state-of-the-art automated manufacturing
- Bifacial technology enables additional energy harvesting from rear side (up to 30%)
- Industry leading lowest thermal co-efficient of power
- Excellent low irradiance performance
- Excellent PID resistance
- Dual stage 100% EL Inspection warranting defect-free product
- Module Imp binning radically reduces string mismatch losses
- Excellent wind load 2400Pa & snow load 5400Pa under certain installation method
- Comprehensive product and system certification
 - ◆ IEC61215:2016; IEC61730-1/-2:2016;
 - ◆ ISO 9001:2015 Quality Management System
 - ◆ ISO 14001:2015 Environmental Management System
 - ◆ ISO 45001:2018 Occupational Health and Safety Management System

Guaranteed Power

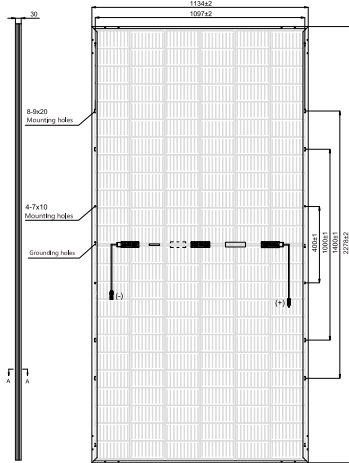


LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty / 25 year Linear Power Warranty



Dimensions of PV Module Unit: mm



ELECTRICAL DATA(STC)

Model Number	580BMDG	585BMDG	590BMDG	595BMDG	600BMDG
Rated Power in Watts-Pmax(Wp)	580	585	590	595	600
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	18.06	18.11	18.16	18.21	18.26
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Impp(A)	17.05	17.10	17.15	17.20	17.25
Module Efficiency (%) ★	20.5	20.7	20.8	21.0	21.2

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.
Bifacial factor: 70%±5 ★ Module Efficiency (%): Round-off to the nearest number

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	638	644	649	655	660
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	19.87	19.92	19.98	20.03	20.09
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Impp(A)	18.76	18.81	18.87	18.92	18.98

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA(NMOT)

Model Number	580BMDG	585BMDG	590BMDG	595BMDG	600BMDG
Maximum Power-Pmax (Wp)	439.5	443.1	447.0	450.7	454.6
Open Circuit Voltage-Voc (V)	38.04	38.22	38.41	38.60	38.78
Short Circuit Current-Isc (A)	14.81	14.85	14.89	14.93	14.97
Maximum Power Voltage-Vmpp (V)	31.59	31.76	31.94	32.11	32.29
Maximum Power Current-Impp (A)	13.91	13.95	13.99	14.04	14.08

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

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2278×1134×30mm
Cables	4.0mm ² (12AWG), Positive(+)350mm, Negative(-)230mm (Connector Included)
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Connector	Twinsel PV-SY02, IP68
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Weight	32.5kg
Frame	Anodized Aluminium Alloy type 6005-2T6, Silver Color

TEMPERATURE&MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

PACKAGING CONFIGURATION

	40ft(HQ)Aluminum Frame	40ft(HQ)Alloy Steel Frame
Number of modules per container	720	700
Number of modules per pallet	36	35
Number of pallets per container	20	20
Packaging box dimensions (LxWxH) in mm	2355×1140×1260	2350×1130×1275
Box gross weight[kg]	1205	1240

