



Grand Sunergy

High Efficiency
Bifacial PERC Module

**GSM-
MP3/100-
BMDG505**

485W | 490W | 495W
500W | 505W



. 505W

Maximum Power Output

. 65+5%

Bifaciality

. 21.21%

Maximum Efficiency

. 30Years

Linear Power Warranty

Product Features



MBB Half Cell

Multi-busbar half cell design, together with many other technologies to increase module power and efficiency



High Energy Yield

High density interconnection technology optimizes module efficiency up to 21.21%



G12 Cell/Module

G12 big size wafer, low BOS cost, best for utility scale projects



High Reliability

Certified mechanical performance up to 5400 Pa positive load and 2400 Pa negative load, with better protection against harsh weather



Higher Performance

Low temperature coefficient, low operating temperature, more energy yield



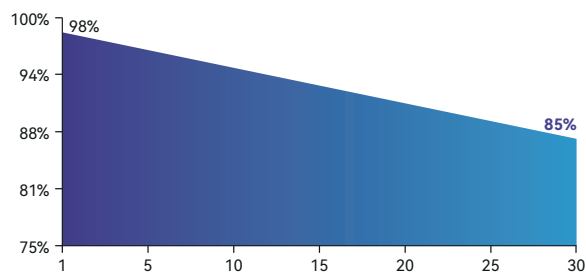
Better Warranty

Low LID/PID in longer service life, less than 15% power degradation in 30 years

Quality Assurance

12 Years Product Warranty

30 Years Linear Power Warranty



Certificates



Guosheng Energy Co., Ltd.

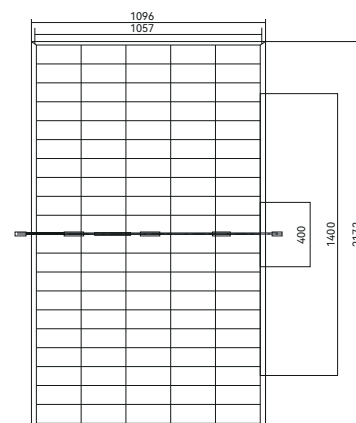
Web: www.grandsunergy.com E-mail: sales@grandsunergy.com

Add: West Side to Zhongjing 7th Road, South Side to Pengcheng Boulevard, Xuzhou Industrial Park, Xuzhou City, Jiangsu Province



Mechanical Data

Cell(mm)	210×105
Weight(kg)	29.5±0.5kg
Dimension(L×W×H)(mm)	2172×1096×35mm
Cable(mm)	4mm ² , 300mm(customized length based on needs)
Frame	anodized aluminum
Junction Box	IP68, 1500VDC, 3 Diodes
Packaging Configuration (40'Container; 17.5'Trailer)	31pcs./Pallet; 20pallet/container; 620pcs/container 31pcs./Pallet; 30pallet/trailer; 930pcs/trailer



Electrical Data (STC)

Model	GSM-MP3/100-BMDG485	GSM-MP3/100-BMDG490	GSM-MP3/100-BMDG495	GSM-MP3/100-BMDG500	GSM-MP3/100-BMDG505
Pmax(Wp)	485	490	495	500	505
Voc(V)	33.84	34.04	34.24	34.44	34.64
Isc(A)	18.36	18.41	18.47	18.52	18.56
Vmpp(V)	28.2	28.4	28.6	28.8	28.9
Impp(A)	17.27	17.32	17.36	17.4	17.48
Efficiency	20.37%	20.58%	20.79%	21.00%	21.21%

STC: AM1.5 Irradiance: 1000W/m² Temperature=25°C

Electrical Characteristics (NOCT)

Model	GSM-MP3/100-BMDG485	GSM-MP3/100-BMDG490	GSM-MP3/100-BMDG495	GSM-MP3/100-BMDG500	GSM-MP3/100-BMDG505
Pmax(Wp)	360	363	367	371	374
Voc(V)	30.69	30.88	31.07	31.27	31.46
Isc(A)	14.99	15.02	15.03	15.04	15.06
Vmpp(V)	26.55	26.74	26.86	27.06	27.09
Impp(A)	13.60	13.63	13.70	13.76	13.82
α _{Isc} (%/K) : 0.05; β _{Voc} (%/K) : -0.265; γ _{Pmp} (%/K) : -0.34					

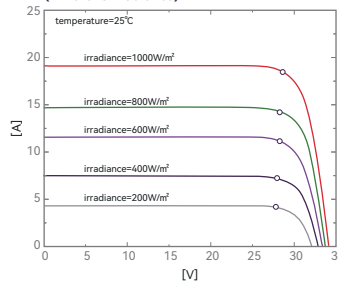
NMOT standard: AM1.5 Front irradiance: 800W/m² Temperature=20°C Wind speed=1m/s

Working Condition

Maximum System Voltage	1500VDC
Operating Temperature	-40°C ~ +85°C
Maximum Fuse Rating	35A
Rear Side Mechanical Load	2400Pa
Front Side Mechanical Load	5400Pa
NOCT	44±2°C
Safety Class	Class II
Grounding Electric Conductivity	< 0.1Ω

I-V Diagram

(Different Irradiance)



I-V Diagram

(Different Temperature)

