

High TOPCon
Module

GSM- MT4/108- M430

410W | 415W | 420W
425W | 430W

430W
Maximum Power Output

80%
Bifaciality

21.99%
Maximum Efficiency

30YEAR
Linear Power Warranty

Product Features



SMBB Half Cell
Multi-busbar half-cell design, higher module efficiency and power output



High Energy Yield
Maximum Module Efficiency up to 21.99% achieved by mature mass production HJT cell technology



M10 Cell / Module
M10 size wafer, applicable to multiple scenarios



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



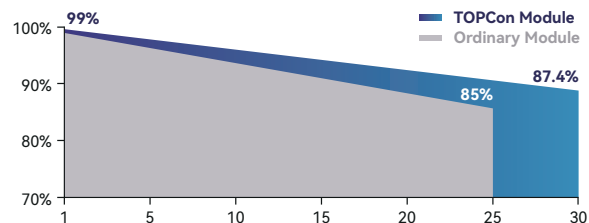
Higher Performance
Lower temperature coefficient and low operation temperature, resulting in better energy yield in all-weather



Better Warranty
Extremely low LID/PID in longer service life, less than 12.6% power degradation in 30 years

Quality Assurance

12 Years Product Warranty
30 Years Linear Power Warranty



Certificates



Guosheng Energy Co., Ltd.

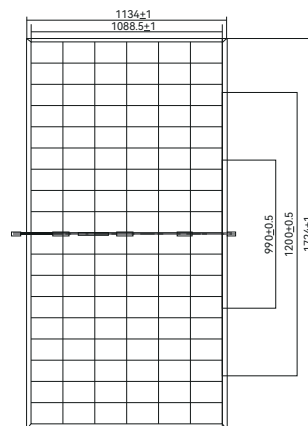
Web: www.grandsunergy.com E-mail: sales@grandsunergy.com

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



Mechanical Data

Cell(mm)	182×91
Weight(kg)	21.0±0.5kg
Dimension(L×W×H)(mm)	1724×1134×30mm
Cable(mm)	4mm ² , 300mm(customized length based on needs)
Frame	anodized aluminum
Junction Box	IP68, 1500VDC, 3Diodes
Packaging configuration	36pcs./pallet; 26pallets/container; 936pcs/container (40'Container; 17.5'Trailer) 40pallet/Trailer; 1440pcs/Trailer



Electrical Data(STC)

Model	GSM-MT4/108-M410	GSM-MT4/108-M415	GSM-MT4/108-M420	GSM-MT4/108-M425	GSM-MT4/108-M430
Pmax(Wp)	410	415	420	425	430
Voc(V)	37.75	37.92	38.11	38.31	38.50
Isc(A)	13.92	13.99	14.09	14.16	14.24
Vmpp(V)	31.14	31.34	31.52	31.72	31.89
Impp(A)	13.18	13.25	13.35	13.42	13.49
Efficiency	20.97%	21.23%	21.48%	21.74%	21.99%

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

Electrical Characteristics(NOCT)

Model	GSM-MT4/108-M410	GSM-MT4/108-M415	GSM-MT4/108-M420	GSM-MT4/108-M425	GSM-MT4/108-M430
Pmax(Wp)	302	306	310	314	318
Voc(V)	35.12	35.21	35.32	35.43	35.54
Isc(A)	11.15	11.23	11.36	11.46	11.56
Vmpp(V)	28.81	28.93	29.03	29.14	29.23
Impp(A)	10.49	10.58	10.70	10.79	10.88
α _{Isc} (%/K) : 0.045; β _{Voc} (%/K) : -0.25; γ _{Pmp} (%/K) : -0.29					

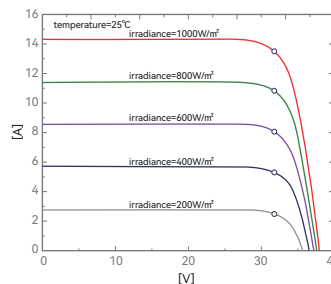
AM1.5, irradiance: 800W/m², Temperature=20°C, Wind speed=1m/s

Working Condition

Maximum System Voltage	1500VDC
Operating Temperature	-40°C ~ +85°C
Maximum Fuse Rating	25A
Rear Side Mechanical Load	2400Pa
Front Side Mechanical Load	5400Pa
NOCT	45±2°C
Safety Rating	Class II
Grounding Electric Conductivity	< 0.1Ω

I-V Diagram

(Different Irradiance)



I-V Diagram

(Different Temperature)

