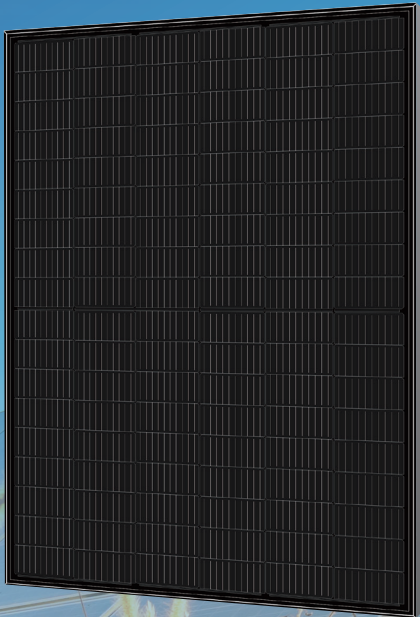


High Efficiency
All-Black
TOPCON Module

GSM- MT4/108- TDGB430

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



430W
Maximum Power Output

85%
Bifaciality

21.99%
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 21.99%



G10Cell/Module

G10 size cell and module, 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

Low temperature coefficient, low operating temperature, more energy yield



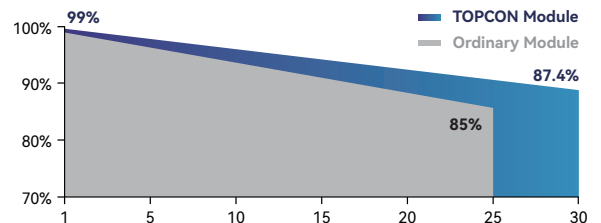
Better Warranty

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



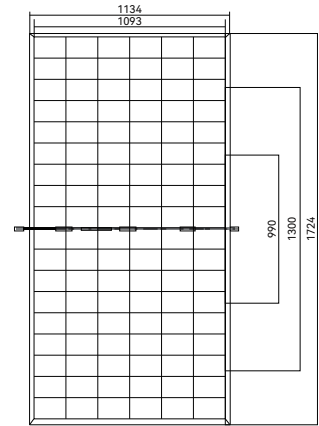
Guosheng Energy Co., Ltd.

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) | 24.5±0.5kg |
| Dimension(L×W×H)(mm) | 1724×1134×30mm |
| Cable(mm) | 4mm ² , 300mm(customized length based on needs) |
| Frame | anodized aluminum, black frame |
| Junction Box | IP68, 1500VDC, 3 Diodes |
| Packaging Configuration (40' Container; 17.5' Trailer) | 36pcs. / pallet; 26pallet / container; 936pcs / container 36pcs. / pallet; 32pallet / Trailer; 1152pcs / Trailer |



Electrical Data (STC)

| Model | GSM-MT4/108-TDGB410 | GSM-MT4/108-TDGB415 | GSM-MT4/108-TDGB420 | GSM-MT4/108-TDGB425 | GSM-MT4/108-TDGB430 |
|------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 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-TDGB410 | GSM-MT4/108-TDGB415 | GSM-MT4/108-TDGB420 | GSM-MT4/108-TDGB425 | GSM-MT4/108-TDGB430 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| 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 |
| αIsc (%/K) : 0.045; βVoc (%/K) : -0.25; γPmp (%/K) : -0.29 | | | | | |

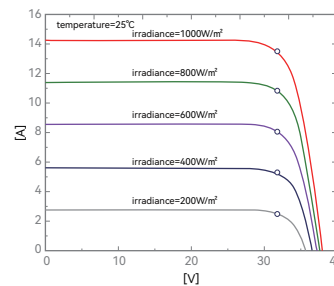
NOCT standard: AM1.5 Front irradiance: 800W/m² temperature=20°C wind speed=1m/s

Working Condition

| | |
|---------------------------------|---------------|
| Maximum System Voltage | 1500VDC |
| Operating Temperature | -40°C ~ +85°C |
| Maximum Fuse Rating | 30A |
| 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)

