

High TOPCon  
Module

# GSM- MT4/108- BTDG430

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

**430W**  
Maximum Power Output

**80±5%**  
Bifaciality

**21.99%**  
Maximum Efficiency

**30YEAR**  
Linear Power Warranty

## Product Features



**10BB 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



**G10 Cell / Module**  
G10 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

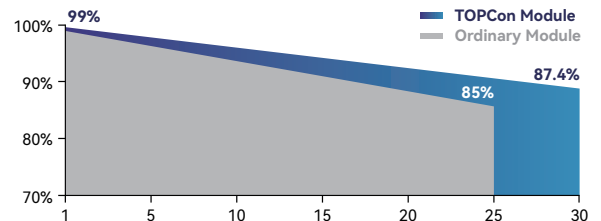


**Better Warranty**  
Extremely low LID/PID in longer service life, less than 12.6% power degradation in 30 years

## Quality Assurance

**12** Years Product Warranty

**30** Years Linear Power Warranty



## Certificates



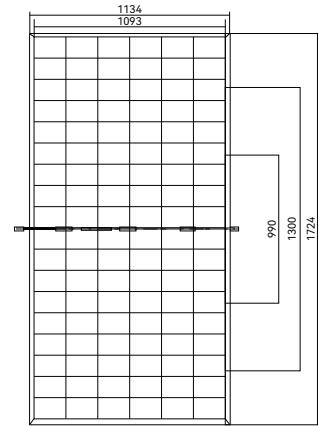
Guosheng Energy Co., Ltd.

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## Mechanical Data

Cell(mm)	182×91
Weight(kg)	24.5±0.5kg
Dimension(L×W×H)(mm)	1724×1134×30mm
Cable(mm)	4mm <sup>2</sup> , 300mm(customized length based on needs)
Frame	anodized aluminum
Junction Box	IP68, 1500VDC, 3Diodes
Packaging configuration (40'Container; 17.5'Trailer)	36pcs./pallet; 26pallets/container; 936pcs/container 36pcs./pallet; 32pallet/Trailer; 1152pcs/Trailer



## Electrical Data(STC)

Model	GSM-MT4/108-BTDG410	GSM-MT4/108-BTDG415	GSM-MT4/108-BTDG420	GSM-MT4/108-BTDG425	GSM-MT4/108-BTDG430
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/m<sup>2</sup>, Temperature=25°C

## Electrical Characteristics(NOCT)

Model	GSM-MT4/108-BTDG410	GSM-MT4/108-BTDG415	GSM-MT4/108-BTDG420	GSM-MT4/108-BTDG425	GSM-MT4/108-BTDG430
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

$\alpha_{Isc} (\%/K) : 0.045$ ;  $\beta_{Voc} (\%/K) : -0.25$ ;  $\gamma_{Pmp} (\%/K) : -0.29$

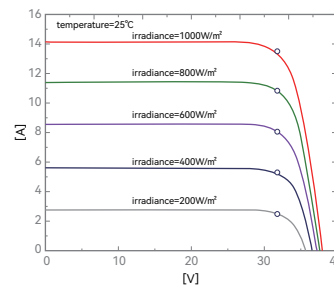
AM1.5, irradiance: 800W/m<sup>2</sup>, Temperature=20°C, Wind speed=1m/s

## 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	45±2°C
Safety Rating	Class II
Grounding Electric Conductivity	< 0.1Ω

## I-V Diagram

(Different Irradiance)



## I-V Diagram

(Different Temperature)

