

High Efficiency **TOPCon** Module

GSM-MT2/96-BTDG450

435W | 440W | 445W | 450W



15 Years

Product
Warranty

30 Years

Linear Power
Warranty

450W

Maximum
Power Output

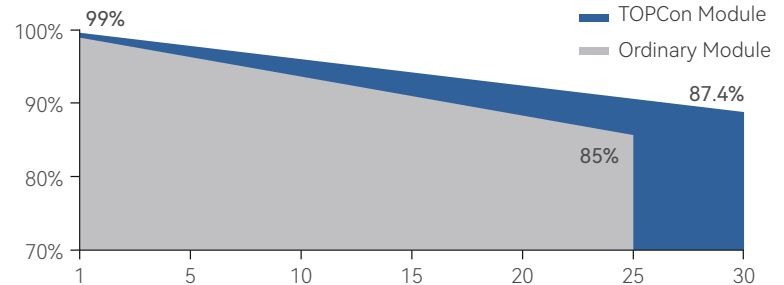
22.52%

Maximum
Efficiency

85±5%

Bifaciality

Quality Assurance



Product Features



SMBB Half Cell

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



G12R Cell / Module

Innovative rectangular silicon wafer, effectively reduced LCOE and improved ROI



High Reliability

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



High Energy Yield

Maximum Module Efficiency up to 22.52% achieved by mature mass production HJT cell technology



Better Warranty

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



Higher Performance

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

Certificates



JP-AC

Electrical Data(STC)

Model	GSM-MT2/96-BTDG435	GSM-MT2/96-BTDG440	GSM-MT2/96-BTDG445	GSM-MT2/96-BTDG450
Pmax(Wp)	435	440	445	450
Voc(V)	34.77	34.98	35.19	35.40
Isc(A)	15.90	15.98	16.06	16.14
Vmpp(V)	29.31	29.50	29.70	29.90
Impp(A)	14.85	14.92	14.99	15.06
Efficiency	21.77%	22.02%	22.27%	22.52%

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

Electrical Characteristics(BSTC)

Model	GSM-MT2/96-BTDG435	GSM-MT2/96-BTDG440	GSM-MT2/96-BTDG445	GSM-MT2/96-BTDG450
Pmax(Wp)	330	333	337	341
Voc(V)	32.33	32.52	32.74	32.91
Isc(A)	13.05	13.11	13.16	13.24
Vmpp(V)	27.19	27.27	27.57	27.74
Impp(A)	12.14	12.18	12.22	12.28

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

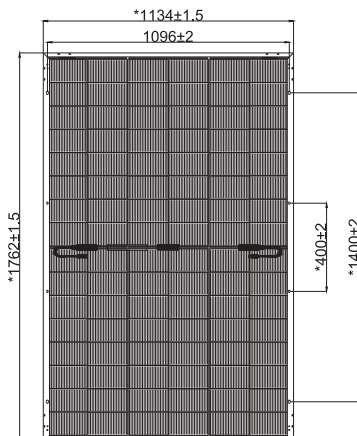
 AM1.5, Front irradiance: 1000W/m², Back Irradiance 135W/m², Temperature=25°C, Wind speed=1m/s

Mechanical Data

Cell(mm)	182×105 All Dimensions
Weight(kg)	26.0±0.5kg
Dimension(L×W×H)(mm)	1762×1134×30mm
Cable(mm)	4mm ² , 300mm (customized length based on needs)
Frame	Anodized aluminum
Junction Box	IP68, 1500VDC, 3Diodes
Packaging configuration (40' Container; 17.5' Trailer)	1008pcs/40'HQ; 1008pcs/13'Trailer; 1296pcs/17.5'Trailer

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 Rating	Class II
Grounding Electric Conductivity	< 0.1Ω

Dimensions (mm)

I-V Diagram
