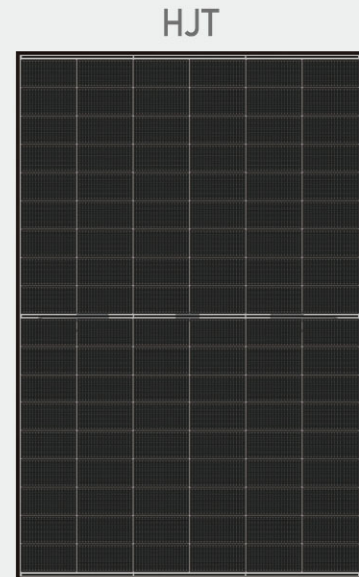


420~450 Watt

Full Black with Transparent Glass
Black Grid Glass



MG-440TD

Key Features



High Efficiency

Leading module efficiency in industry, up to 23%



Hetero Junction Technology Half Cell

Series-then-parallel cell connection design, more reliable soldering technology



High Reliability

Two times EL/Critical Visual inspection



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



Excellent Rear Side Power Generation

Bifaciality is up to 90%, up to 25% more energy yield than conventional modules



Superior Low Irradiance Performance

Excellent low irradiance performance, increase power generation in low-light conditions like mornings, evenings and cloudy days

Product and Quality Certifications

IEC 61215, IEC 61730

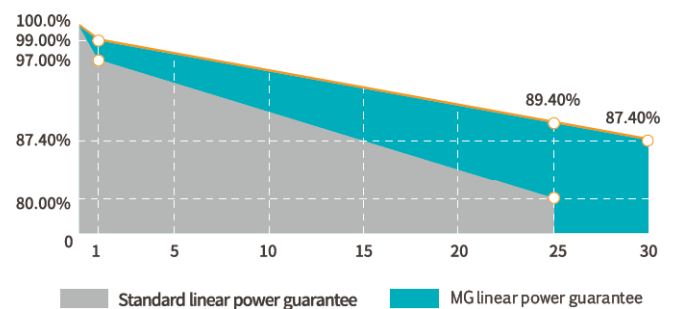
ISO 9001: Quality Management System

ISO 14001: Environment Management System

ISO 45001: Occupational Health and Safety Management System

IEC 62716, IEC 61701: Ammonia, Salt mist corrosion test

IEC TS 62804-1, IEC 60068-2-68: PID test, Dust and Sand test



MG-440TD

182mm HJT All Black Transparent Glass Glass Series
Black / White Grid Rear Side Available

Electrical Characteristics (STC*)

Maximum Power (Pmax)	430W	435W	440W	445W	450W
Module Efficiency (%)	22.02%	22.28%	22.53%	22.79%	23.04%
Optimum Operating Voltage (Vmp)	34.60V	34.86V	35.12V	35.38V	35.63V
Optimum Operating Current (Imp)	12.43A	12.48A	12.53A	12.58A	12.63A
Open Circuit Voltage (Voc)	40.87V	41.14V	41.41V	41.68V	41.94V
Short Circuit Current (Isc)	12.95A	13.00A	13.05A	13.10A	13.15A
Operating Module Temperature	-40 to +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				
Bifaciality	90% ± 5%				

*STC: Irradiance 1000 W/m², cell temperature 25 °C, AM=1.5, Tolerance of Pmax is within +/- 3%.

Bstc**

Maximum Power (Pmax)	480W	485W	490W	495W	500W
Optimum Operating Voltage (Vmp)	34.60V	34.86V	35.12V	35.38V	35.63V
Optimum Operating Current (Imp)	13.88A	13.92A	13.96A	14.00A	14.04A
Open Circuit Voltage (Voc)	40.87V	41.14V	41.41V	41.68V	41.94V
Short Circuit Current (Isc)	14.46A	14.49A	14.53A	14.57A	14.61A

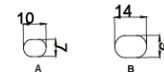
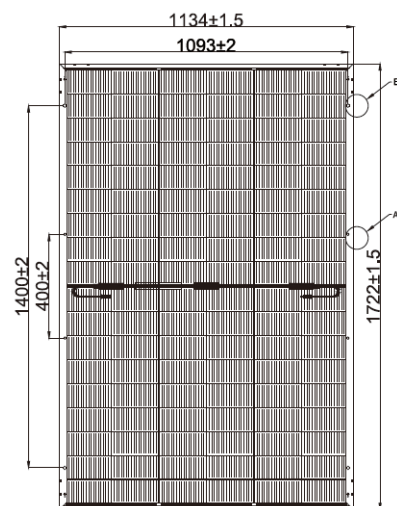
**BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25 °C.

Mechanical Specifications

Cell Type	HJT Mono 182×91.75mm
Cell Connection	108 (6×18)
Module Dimension	1722×1134×30 mm
Weight	26 kg
Junction Box	IP68
Output Cable	4mm ² , 1200mm in length, length can be customized / UV resistant
Connectors Type	MC4 original
Frame	Anodised aluminum alloy (Black)
Encapsulant	EPE
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	(F) 2.0mm anti-reflective solar glass (B) 2.0mm solar glass

Shipping Configurations

Container Size	40'
Pallets Per Container	26
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	936



Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature Coefficient of Pmax	-0.26%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

Safety & Warranty

Safety Class	Class II
Product Warranty	30 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty

* Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.