

HIGH TECHNOLOGY
SOLAR MODULES

HJT

N-TYPE HJT BIFACIAL PV MODULE

AS - MQ7 HJT

580W - 600W



HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES WITH HETEROJUNCTION TECHNOLOGY



HJC 3.0

Combining gettering process and double-sided uc-Si to maximize cell efficiency and module power.



SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.



-0.26%/C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.



Up to 90% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside.



Small Chamfer Design

Bigger power generation area on the solar cell, increasing 1% cell power of single piece.



Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extend module lifespan.



IEC61215 | IEC61730 | IEC61701 | IEC62716 | IEC62804 PID Free
ISO 9001 | ISO 14001 | ISO 45001 | OHSAS 18001 | CE

AS - MQ7 - 156 580 - 600 W

N-TYPE HJT BIFACIAL SOLAR MODULE

ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	580W	585W	590W	595W	600W
Open Circuit Voltage (Voc)	53.92V	54.12V	54.31V	54.50V	54.70V
Short Circuit Current (Isc)	13.35A	13.40A	13.45A	13.50A	13.55A
Voltage at Maximum Power (Vmp)	45.00V	45.21V	45.42V	45.63V	45.84V
Current at Maximum Power (Imp)	12.89A	12.94A	12.99A	13.04A	13.09A
Module Efficiency (%)	22.45	22.65	22.84	23.03	23.23
Power Output Tolerance	0~+5W				
Operating Temperature	-40° C to +85° C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse Rating	25A - 30A				
Bifaciality	85%±5%				

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

ELECTRICAL CHARACTERISTICS AT BSTC

Maximum Power (Pmax)	640W	645W	650W	655W	660W
Open Circuit Voltage (Voc)	53.92V	54.12V	54.31V	54.50V	54.70V
Short Circuit Current (Isc)	14.73A	14.77A	14.82V	14.86A	14.91A
Voltage at Maximum Power (Vmp)	45.00V	45.21V	45.42V	45.63V	45.84V
Current at Maximum Power (Imp)	14.23A	14.27A	14.32A	14.36A	14.40A

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

MECHANICAL CHARACTERISTICS

Cell type	HJT Mono 182*91mm
Number of cells	144 (6x24)
Module dimension	2279x1134x35mm
Weight	29kg or 32kg
Output Cable	4mm ² , 300mm in length can be customized/UV resistant
Frame	Anodised aluminum alloy
Junction box	IP68
Connectors Type	MC4 original/MC4 compatible
Front Cover	3,2mm or 2,0mm Tempered Glass with AR Coating
Back Cover	Transparent Backsheet or 2,0mm Glass

TEMPERATURE CHARACTERISTICS

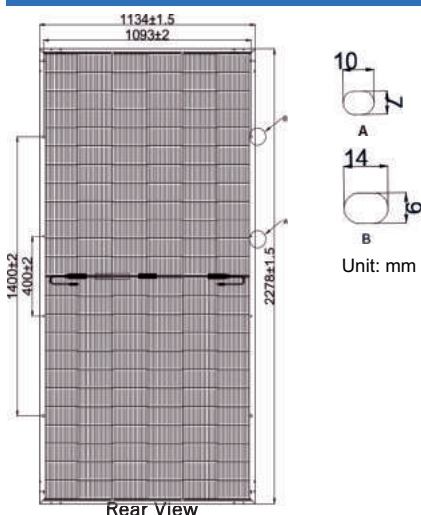
Nominal Operating Cell Temperature (NOCT)	44° C±2° C
Temperature Coefficients of P _{max}	-0.26%/° C
Temperature Coefficients of V _{oc}	-0.24%/° C
Temperature Coefficients of I _{sc}	0.04%/° C

SAFETY & WARRANTY

Safety Class	Class II
Product Warranty	12 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.

ENGINEERING DRAWINGS



PACKAGING

Container Size	40'
Pallets Per Container	20
Modules Per Pallet	32pcs
Modules Per Container	640pcs

WARRANTY

12 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY