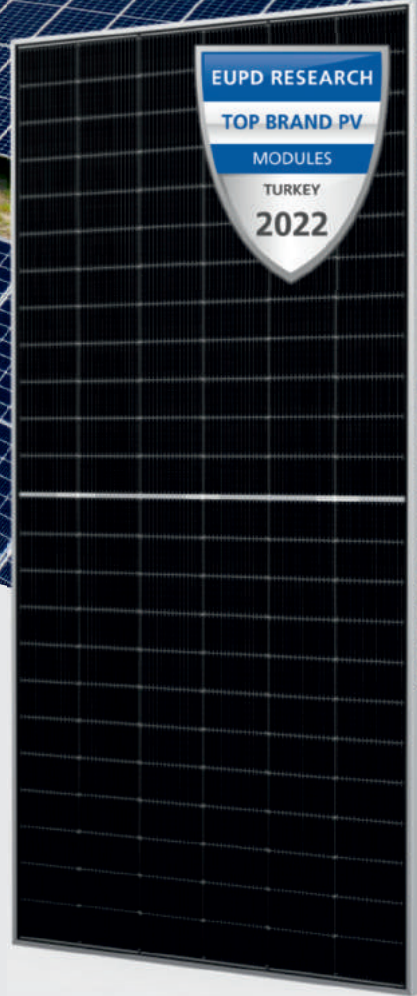


HIGH TECHNOLOGY
SOLAR MODULES

TOPCon

N-TYPE TOPCon MBB BIFACIAL PV MODULE

570W - 595W



HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES WITH TOPCON TECHNOLOGY



N-Type TOPCon

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.



-0.30%/C Pmax temperature coefficient

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



Up to 85% 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.

AS - MQ7 - 156 570 - 595W

N-TYPE TOPCON HALF CELL MBB BIFACIAL PV SOLAR MODULE

ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	570W	575W	580W	585W	590W	595W
Open Circuit Voltage (Voc)	50.8V	51.0V	51.2V	51.4V	51.6V	51.8V
Short Circuit Current (Isc)	14.14A	14.19A	14.24A	14.29A	14.34A	14.39A
Voltage at Maximum Power (Vmp)	42.6V	42.8V	43.0V	43.2V	43.4V	43.6V
Current at Maximum Power (Imp)	13.39A	13.44A	13.49A	13.55A	13.61A	13.67A
Module Efficiency (%)	22.06	22.25	22.45	22.65	22.84	23.03
Operating Temperature	-40° C to +85° C					
Maximum System Voltage	1000V DC/1500V DC					
Fire Resistance Rating	Type 1(in accordance with UL1703)/Class C(IEC61730)					
Maximum Series Fuse Rating	30A					

STC: Irradiance 1000W/m2, Cell Temperature 25° C, AM1.5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (Pmax)	429W	433W	437W	441W	445W	449W
Open Circuit Voltage (Voc)	48.3V	48.5V	48.7V	48.9V	45.1V	45.3V
Short Circuit Current (Isc)	11.45A	11.49V	11.54A	11.59A	11.61A	11.65A
Voltage at Maximum Power (Vmp)	40.1V	40.3V	40.5V	40.7V	40.9V	41.1V
Current at Maximum Power (Imp)	10.70A	10.75A	10.80A	10.85A	10.90A	10.96A

NOCT: Irradiance 800W/m2, Ambient temperature 20°C, Wind Speed 1m/s

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: 580W)

Maximum Power (Pmax)	638W	667W	696W	725W	754W
Open Circuit Voltage (Voc)	51.2V	51.2V	51.2V	51.2V	51.2V
Short Circuit Current (Isc)	15.66A	16.38A	17.09V	17.80A	18.51A
Voltage at Maximum Power (Vmp)	43.0V	43.0V	43.0V	43.0V	43.0V
Current at Maximum Power (Imp)	14.84A	15.51A	16.19A	16.96A	17.54A
Power Gain (%)	10	15	20	25	30

MECHANICAL CHARACTERISTICS

Solar cells	Monocrystalline Bifacial N type 182*91 mm
Cell configuration	144 (6x24)
Module dimension	2278x1134x35
Weight	32kg
Front/Back Cover	2.0mm AR coated tempered glass/2.0mm tempered glass
Frame	Black/Silver Altenative Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cables	4mm2, Portrait: 300mm; Landscape: 1300mm
Connector	MC4 or MC4 compatible

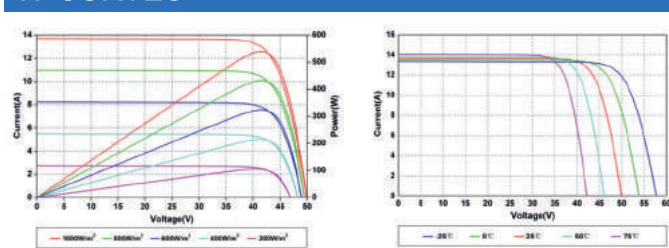
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	42° C±2° C
Temperature Coefficients of Pmax	-0.30%/° C
Temperature Coefficients of Voc	-0.25%/° C
Temperature Coefficients of Isc	0.05%/° C

PACKAGING

Standard packaging	32pcs/pallet
Module quantity per 20° container	160pcs
Module quantity per 40° container	640pcs(HQ)

IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances

Current-Voltage Curves at Different Temperatures

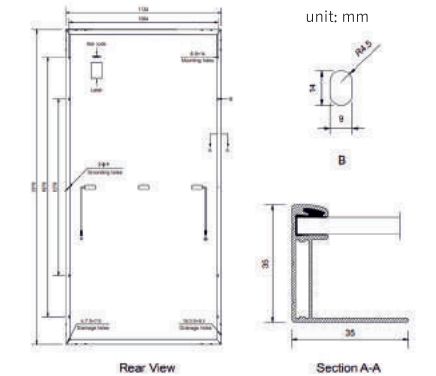
WARRANTY

12 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY



ENGINEERING DRAWINGS



Specifications in this datasheet are subject to change without prior notice.