



ANKARA[®]
SOLAR

MADE IN TURKIYE

HIGH TECHNOLOGY
SOLAR MODULES

MBB

**HALF-CELL MONO
PV MODULE**

AS - MQ7

450W - 465W



HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES WITH HALF CELL TECHNOLOGY

0+5

Positive power tolerance (0+5W) guaranteed



High performance under low light.
Works at cloudy, rainy days



The monolithic perc cell structure technology (low resistance characteristics) is adopted (the maximum conversion efficiency of modules is up to 21.41%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa)



Reduced resistance between cells Less micro cracks, higher output power



SUPER STRONG FRAME. The overflow tank is waterproof with double layers. Aluminum frame enhances the mechanical load strength by 10%



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

AS - MQ7 450 - 465W

MBB HALF-CELL MONOCRYSTALLINE PV SOLAR MODULE

ELECTRICAL PARAMETERS AT STC

Maximum Power (Pmax)	450W	455W	460W	465W
Open Circuit Voltage (Voc)	41.40V	41.60V	41.80V	42.00V
Short Circuit Current (Isc)	13.68A	13.73A	13.78A	13.83A
Voltage at Maximum Power (Vmp)	34.70V	34.90V	35.20V	35.40V
Current at Maximum Current (Imp)	12.96A	13.02A	13.08A	13.14A
Module Efficiency (%)	20.79%	21.02%	21.25%	21.48%

Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°.

ELECTRICAL PARAMETERS AT NMOT

Maximum Power (Pmax)	331W	335W	339W	343W
Open Circuit Voltage (Voc)	36.68V	38.88V	39.08V	39.28V
Short Circuit Current (Isc)	10.78A	10.83A	10.88A	10.93A
Voltage at Maximum Power (Vmp)	32.34V	32.54V	32.74V	32.94V
Voltage at Maximum Current (Imp)	10.24A	10.30A	10.35A	10.40A

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

SPECIFICATIONS

Weight	23.5kg
Dimensions	1909x1134x35mm
Cell Dimensions	Monocrystalline PERC 182*91mm
Cell Amount	120(6*20) pcs
Maximum System Voltage	1500V
Junction Box	Ip68, 3 diodes
Frame	Aluminum Alloy
Cable	4mm ² , Landscape: N 1200mm/P 1200mm Portrait: N 300mm/P 300mm
Connector	MC4 compatible
Application Level	Class A

TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	41° C±3° C
Temperature Coefficients of Pmax	-0.36%/° C
Temperature Coefficients of Voc	-0.28%/° C
Temperature Coefficients of Isc	0.05%/° C

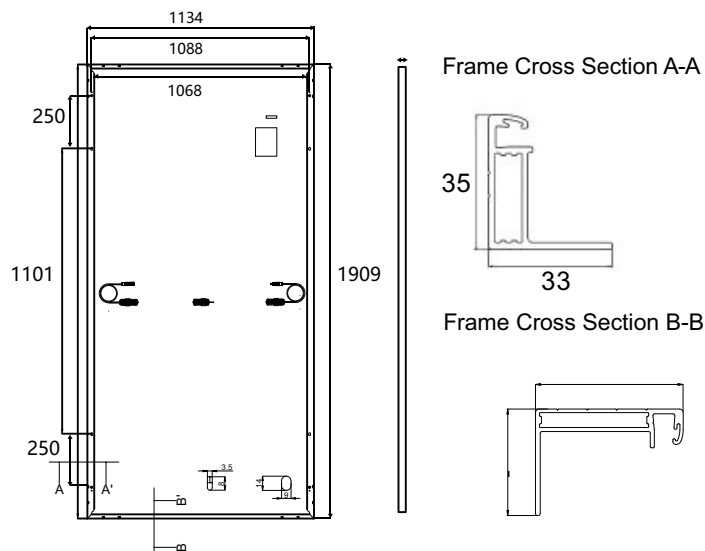
PACKAGING CONFIGURATION

Standard packaging	31 pcs/pallet
Module quantity per 40' container	744 PCS

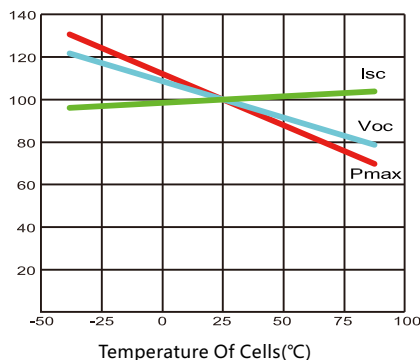
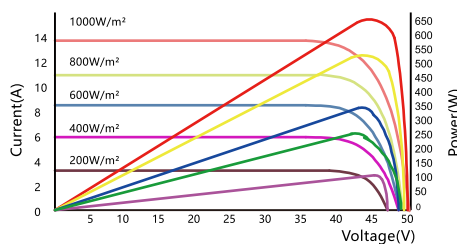
MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-0.40° C~+85° C
Wind Load/Snow Load	2400pa/540pa
Fuse Current	25A

ENGINEERING DRAWINGS



IV CURVES



WARRANTY

12 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

