



ANKARA
SOLAR

MADE IN TURKIYE

HIGH TECHNOLOGY
SOLAR MODULES

MBB

HALF-CELL MONO
PV MODULE

AS - MQ7

390W - 410W

EUPD RESEARCH

TOP BRAND PV

MODULES

TURKEY

2022

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 20.90%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow and wind loads



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

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AS - MQ7 390 - 410W

MBB HALF-CELL MONOCRYSTALLINE PV SOLAR MODULE

ELECTRICAL PARAMETERS AT STC

Maximum Power (Pmax)	390W	395W	400W	405W	410W
Open Circuit Voltage (Voc)	36.8V	37.0V	37.2V	37.4V	37.6V
Short Circuit Current (Isc)	13.58A	13.64A	13.70A	13.76A	13.82A
Voltage at Maximum Power (Vmp)	30.6V	30.8V	31.0V	31.2V	31.4V
Current at Maximum Current (Imp)	12.75A	12.83A	12.91A	12.99A	13.06A
Module Efficiency (%)	19.88%	20.13%	20.39%	20.64%	20.90%

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

25A

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

ELECTRICAL PARAMETERS AT NMOT

Maximum Power (Pmax)	292W	296W	300W	304W	308W
Open Circuit Voltage (Voc)	33.8V	34.0V	34.2V	34.4V	34.6V
Short Circuit Current (Isc)	11.00A	11.05A	11.10A	11.15A	11.20A
Voltage at Maximum Power (Vmp)	27.8V	28.0V	28.2V	28.4V	28.6V
Voltage at Maximum Current (Imp)	10.51A	10.58A	10.64A	10.71A	10.77A

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

SPECIFICATIONS

Weight	21.5kg
Dimensions	1730x1134x35mm
Cell Dimensions	Monocrystalline PERC 182*91mm
Cell Amount	108(6*18) pcs
Maximum System Voltage	1500V
Junction Box	Ip68, 3 diodes
Frame	Anodized Aluminum Alloy
Cable	4mm ² , Portrait: 300mm; Landscape: 1200mm
Connector	Mc4 compatible
Application Level	Class A

TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43° C±2° C
Temperature Coefficients of P _{max}	-0.36%/° C
Temperature Coefficients of V _{oc}	-0.28%/° C
Temperature Coefficients of I _{sc}	0.05%/° C

PACKAGING CONFIGURATION

Standard packaging	32 pcs/pallet
Module quantity per 20' container	192 PCS
Module quantity per 40' container	832 pcs/pallet

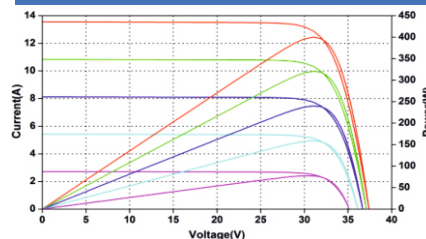
WARRANTY

12 YEARS
PRODUCT WARRANTY

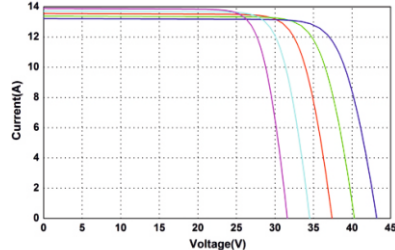
30 YEARS
POWER WARRANTY



IV CURVES

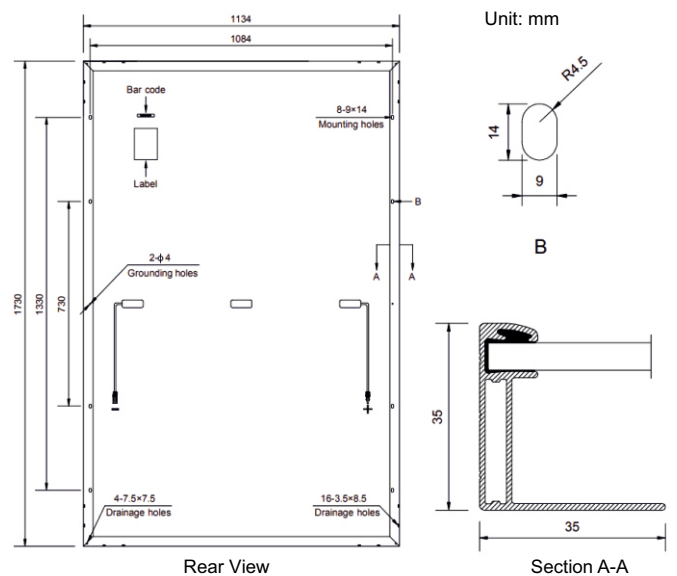


Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

ENGINEERING DRAWINGS



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