



ANKARA
SOLAR

MADE IN TURKIYE

HIGH TECHNOLOGY
SOLAR MODULES

MBB

HALF-CELL MONO
PV MODULE

AS - MQ8

640W - 665W



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 (3800 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

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AS - MQ8 640-665 W

MBB HALF-CELL MONOCRYSTALLINE PV SOLAR MODULE

ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	640W	645W	650W	655W	660W	665W
Open Circuit Voltage (Voc)	45.1V	45.3V	45.5V	45.7V	45.9V	46.1V
Short Circuit Current (Isc)	18.26A	18.31A	18.36A	18.41A	18.46A	18.51A
Voltage at Maximum Power (Vmp)	37.3V	37.5V	37.7V	37.9V	38.1V	38.3V
Current at Maximum Power (Imp)	17.16A	17.21A	17.26A	17.31A	17.36A	17.41A
Module Efficiency (%)	20.60	20.76	20.92	21.09	21.25	21.41
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)	480W	484W	488W	492W	496W	500W
Open Circuit Voltage (Voc)	41.5V	41.7V	41.9V	42.1V	42.3V	42.5V
Short Circuit Current (Isc)	14.79A	14.83A	14.87A	14.91A	14.95A	14.99A
Voltage at Maximum Power (Vmp)	33.9V	34.1V	34.3V	34.5V	34.7V	34.9V
Current at Maximum Power (Imp)	14.16A	14.20A	14.23A	14.27A	14.30A	14.33A

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

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 210*105mm
Number of cells	132 (6x22)
Module dimensions	2384x1303x35mm (93.86x51.30x1.38inches)
Weight	34kg (75.0lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² (0.006inches ²), Portrait: 300mm (11.81inches); Landscape: 1400mm (55.12inches)
Connector	MC4 or MC4 compatible

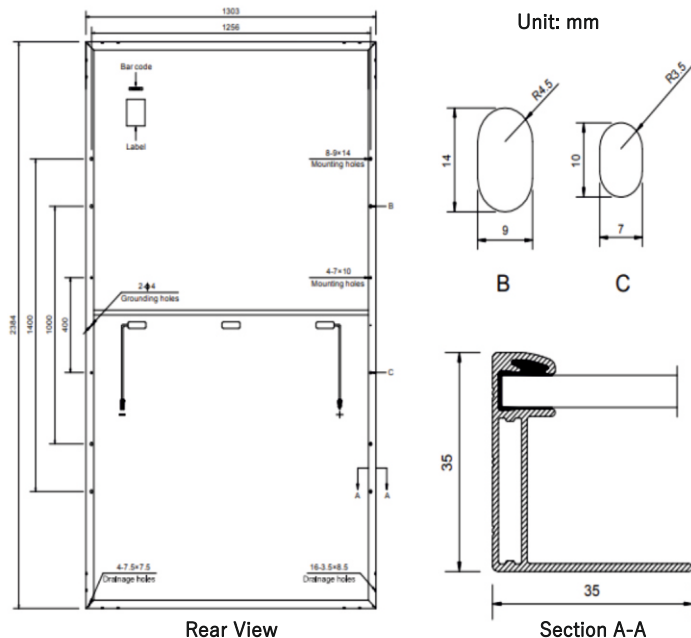
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43° C±2° C
Temperature Coefficients of Pmax	-0.34%/° C
Temperature Coefficients of Voc	-0.26%/° C
Temperature Coefficients of Isc	0.05%/° C

PACKAGING

Standard packaging	31 pcs/pallet
Module quantity per 20' container	124pcs
Module quantity per 40' container	527pcs (HQ)

ENGINEERING DRAWINGS



WARRANTY

12 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY



IV CURVES

