

HIGH TECHNOLOGY
SOLAR MODULES

BIFACIAL

HALF-CELL BIFACIAL PV MODULE

AS-MQ7-144-BHC

540W - 560W

EUPD RESEARCH
TOP BRAND PV
MODULES
TURKEY
2022

HIGH EFFICIENCY BIFACIAL 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 per cell structure technology (low resistance characteristics) is adopted (the maximum conversion efficiency of modules is up to 21.66%)



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

AS - MQ7 - 144 BHC 540 - 560W

MBB BIFACIAL HALF-CELL MONOCRYSTALLINE PV SOLAR MODULE

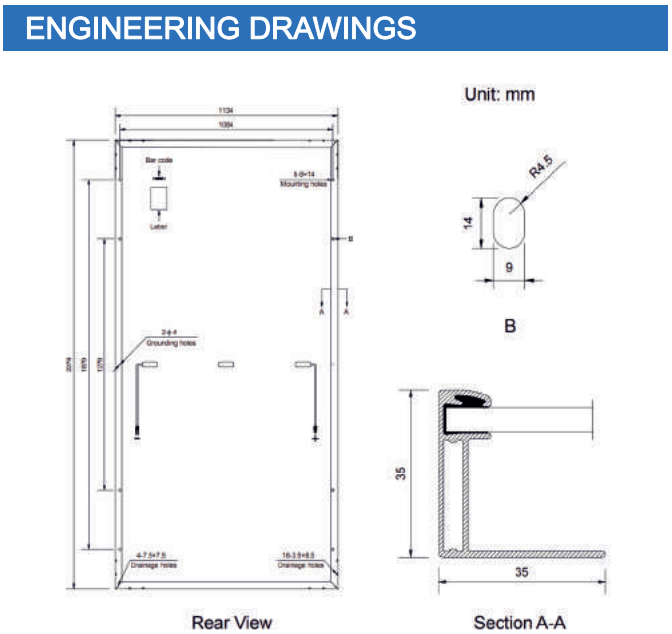
ELECTRICAL CHARACTERISTICS AT STC					
Maximum Power (Pmax)	540W	545W	550W	555W	560W
Open Circuit Voltage (Voc)	49.6V	49.8V	50.0V	50.2V	50.4V
Short Circuit Current (Isc)	13.86A	13.90A	13.94A	13.98A	14.03A
Voltage at Maximum Power (Vmp)	41.4V	41.6V	41.8V	42.0V	42.2V
Current at Maximum Power (Imp)	13.05A	13.11A	13.16A	13.22A	13.28A
Module Efficiency (%)	20.89	21.09	21.28	21.47	21.66
Operating Temperature			-40° C to +85° C		
Maximum System Voltage			1000V DC/1500V DC		
Fire Resistance Rating			Class C		
Maximum Series Fuse Rating			30A		
STC: Irradiance 1000W/m², Cell temperature 25° C, AM1.5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%					

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-MQ7-BHC-540W)					
Power Gain	Pmax	Voc	Isc	Vmp	Imp
10%	594W	49.6V	15.24V	41.4V	14.35A
15%	621W	49.6V	15.93A	41.4V	15.00A
20%	648W	49.6V	16.62V	41.4V	15.66V
25%	675W	49.6V	17.31A	41.4V	16.31A
30%	702W	49.6V	17.99A	41.4V	16.96A

MECHANICAL CHARACTERISTICS	
Cell type	Monocrystalline bifacial
Number of cells	144 (6x24)
Module dimensions	2279x1134x35mm
Weight	29kg
Front cover	3.2mm tempered glass with AR coating
Back Cover	Transparent backsheet
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm², Length: Portrait: 300mm; Landscape: 1300mm
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS	
Nominal Operating Cell Temperature (NOCT)	42° C±2° C
Temperature Coefficients of Pmax	-0.36%/° C
Temperature Coefficients of Voc	-0.28%/° 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)



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

WARRANTY

12 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

