

MonoPower Large Half Cells

ASP MC-144 Series 440W-450W

Monocrystalline PV-module



QUALITY & RELIABILITY

Best raw materials, optimized production process and accurate testing makes the quality difference



GERMAN ENGINEERING

Best design by the art of German engineering



SAVE INVESTMENT

Product warranty of 12 years and performance warranty of 25 years



POSITIVE PERFORMANCE TOLERANCE

Up to +5 W plus-tolerance on output



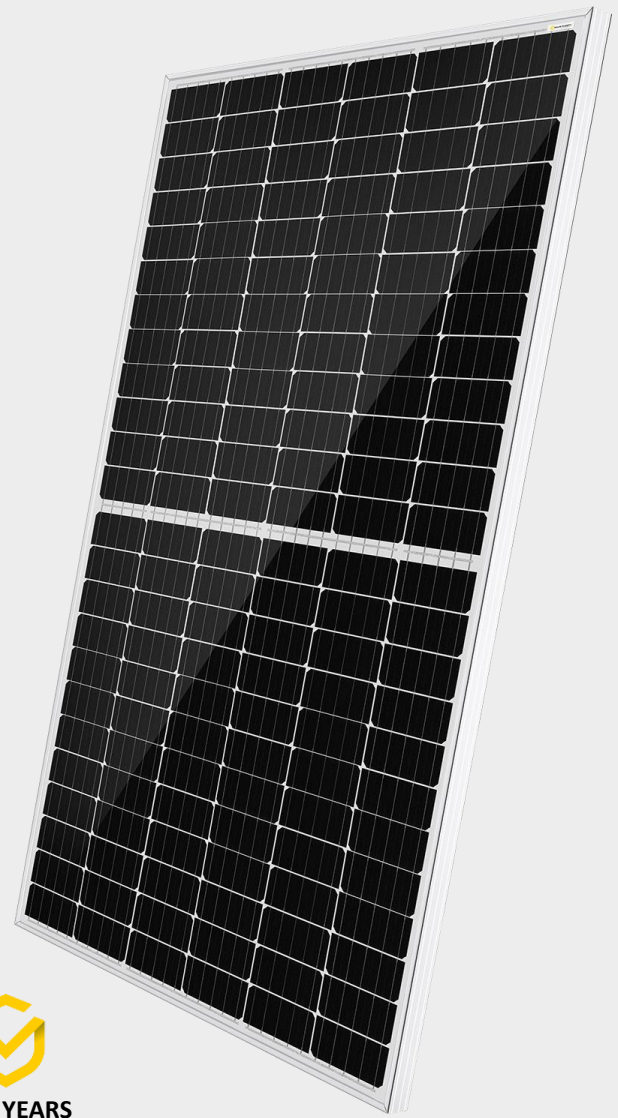
FOR ALL ENVIRONMENTAL CONDITIONS

Resistant against PID, sand, salt and ammonia



STABLE AND STRONG

Capable to bear heavy snow loads up to 5400 Pa and wind loads up to 2400 Pa

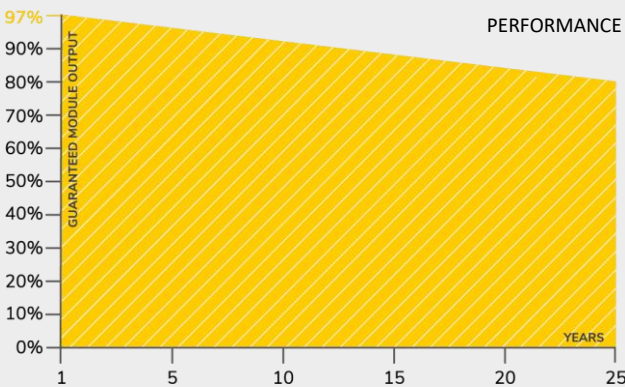


12 YEARS
PRODUCT WARRANTY

OUR PERFORMANCE GUARANTEE



25 YEARS
PERFORMANCE GUARANTEE



CERTIFICATES



IEC 61215
IEC 61730
PERIODICAL
INCEPTION



PID RESISTANT
SALT MIST RESISTANT
SAND RESISTANT
CORROSIVE GAS (NH₃)



Quality
Diligence
Durability



MonoPower Large Half Cells

ASP MC-144 Series 440W-450W

TECHNICAL DATA

ASP440MC-144

ASP445MC-144

ASP450MC-144

Parameter	Unit	ASP440MC-144	ASP445MC-144	ASP450MC-144
Maximum power	P _{max} (Wp)	440	445	450
Maximum power voltage	V _{mp} (V)	41.0	41.2	41.4
Maximum power current	I _{mp} (A)	10.74	10.80	10.87
Open-circuit voltage	V _{oc} (V)	49.6	49.8	50.0
Short-circuit current	I _{sc} (A)	11.33	11.46	11.54
Module efficiency	%	20.2	20.5	20.7
Power tolerance	P _{max} (W)		0/+5	
Maximum system voltage DC	V		1500	
Operating temperature	°C		-40 to +85	
Temperature coefficients of P _{max}	%/°C		-0.370	
Temperature coefficients of V _{oc}	%/°C		-0.286	
Temperature coefficients of I _{sc}	%/°C		0.057	
Nominal operating cell temp. (NOCT)	°C		45±2	

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

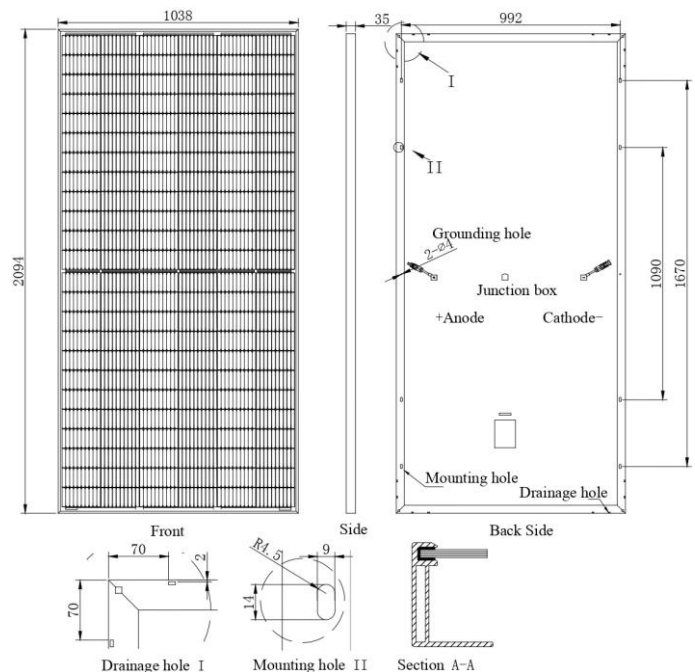
MATERIAL CHARACTERISTICS

Cell type	Monocrystalline 166 x 83 mm
No. of cells	144 (6 x 24)
Dimensions	2094 x 1038 x 35 mm
Weight	23.0 kg
Junction box	IP68 rated
Output cable	4.0 mm ² , 350 mm length
Connector type	MC4 / MC4 compatible
Hail resistance	Max. Ø 25 mm, at 23 m/s
Wind load	2400 Pa / 244 kg / m ²
Mechanical load	5400 Pa / 550 kg / m ²

PACKING INFORMATION

Packing configuration	62 pcs / double pallet
Loading capacity	682 pcs / 40 HQ
Size / pallet	2125 x 1135 x 2415 mm
Weight	1550 kg / double pallet

DRAWINGS



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