ZPM

PERC Monocrystalline Silicon Photovoltaic Panel 440-460 W 72 pcs ZPM 440MH3-72~ZPM 460MH3-72







MBB and half-cell technology applied functions to improve energy density and bring higher output power.



Products of this series passed salt spray and ammonia corrosion test certified by TUV.



The panel is certified for wind load of 2400 Pa and snow load of 5400 Pa.



Attenuation in the first year is less than 2.5%, and the linear attenuation is 0.55% per year within 25 years.



New generation battery technology and optimized circuit design secures to obtain better temperature coefficient and Hot Spot Resistance.



MBB technology adopted secures a stronger performance against Micro Cracking and grid breaking.

Technical parameters:	ZPM 440MH3-72	ZPM 445MH3-72	ZPM 450MH3-72	ZPM 455MH3-72	ZPM 460MH3-72
	Electrical performance parameters (STC)				
Maximum output power	440	445	450	455	460
Open circuit voltage	49.08	49.28	49.48	49.68	49.88
Short circuit current	11.39	11.46	11.53	11.59	11.67
Maximum power voltage	40.54	40.74	40.94	41.14	41.34
Maximum power current	10.86	10.93	11	11.07	11.13
Panel conversion efficiency	20.24	20.47	20.7	20.93	21.16
Operation temperature	-40 ℃~ 85 ℃				
Maximum system voltage	1000/1500 VDC				

	Structural parameters		
Battery specifications	166*83 mm monocrystalline		
Dimension of the panel (mm)	2094*1038*35		
Weight of the panel	24 kg		
Front glass	3.2 mm high light transmittance, coated tempered glass		
Back panel	ageing resistant film		
Panel frame	anodized aluminium alloy		
Junction box	degrees of protection IP68		
Cable	4.0mm² positive pole: 250mm negative pole: 300mm wire length, customizable		
Connector	MC4 compatible connector		

	Temperature characteristics		
Temperature coefficient (Pm)	−0.350%/°C		
Temperature coefficient (Voc)	-0.270%/°C		
Temperature coefficient (Lsc)	0.048%/°C		
NMOT battery rated operating temperature	41±3 °C		
Certification	IEC61215-1, IEC61215-2, IEC61730-1, IEC61730-2		