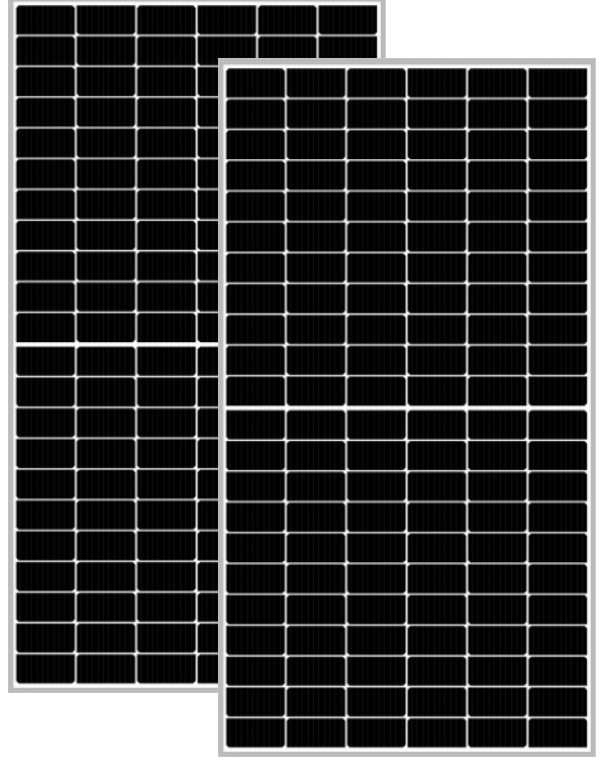


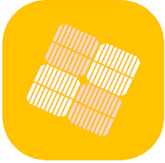
12BB

650W - 670W

132 HALF
CUT CELL



KEY FEATURES



12BB HALF-CUT CELL TECHNOLOGY

NEW CIRCUIT DESIGN, LOWER INTERNAL CURRENT, LOWER RS LOSS GA DOPPED WAFER, ATTENUATION <2% (1ST YEAR) / $\leq 0.55\%$ (LINEAR)



SIGNIFICANTLY LOWER THE RISK OF HOT SPOT

SPECIAL CIRCUIT DESIGN WITH MUCH LOWER HOT SPOT TEMPERATURE



LOWER LCOE

2% MORE POWER GENERATION, LOWER LCOE

+90 264 606 00 90

satis@iwesolar.com

Nakişlar Mah. Zafer-1 Cad. No:15/1
Erenler/SAKARYA

ELECTRICAL CHARACTERISTICS

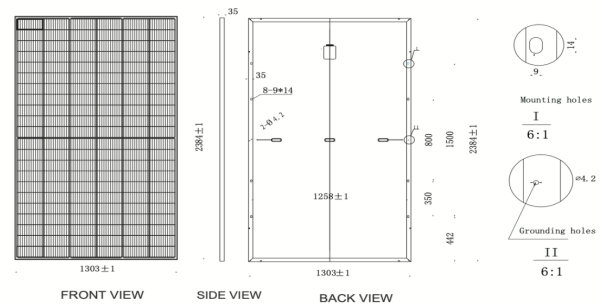
Module Type	650W	655W	660W	665W	670w
Max Power at STC, Pmax	650W	655W	660W	665W	670W
Short Circuit Current, Isc	18.35A	18.39A	18.44A	18.48A	18.51A
Open Circuit Voltage, Voc	45.2V	45.4V	45.6V	45.8V	46.0V
Max Power Current, Impp	17.34A	17.38A	17.42A	17.46A	17.50A
Max Power Voltage, Vmpp	37.5V	37.7V	37.9V	38.1V	38.3V
Module Efficiency	20.92%	21.09%	21.25%	21.41%	21.57%
Power Tolerance	0,+ 5W	0,+5W	0,+5W	0,+5W	0,+5W
Max System Voltage	VDC1500V				
Max Series Fuse	30A				
Increased Snow Load	5400 Pa				
Operating Temperature	-40 - +85 C Degrees				
Number of Bypass Diodes	3				
Pmax Temperature Coefficient	-0.34 % C Degrees				
Voc Temperature Coefficient	-0.6% C Degrees				
Isc Temperature Coefficient	0.04C Degrees				

STC: 1000W/m2, 25 Degrees Centigrade Cell Temperature, AM1.5

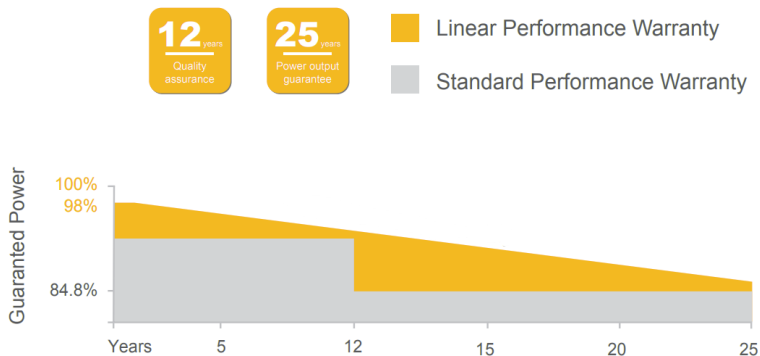
MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline 210x105mm
Number Of Cells	132 (6x22)
Dimensions(AxBxC)	2384x1303x35mm
Weights	34.5kg
Glass	3.2mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm ² ,+300mm,-300mm Customized Length

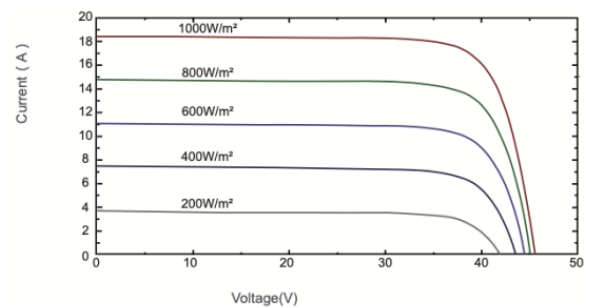
MECHANICAL DRAWINGS



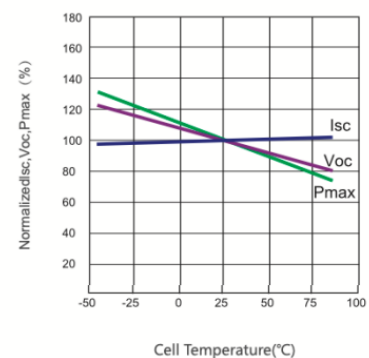
LINEAR PERFORMANCE WARRANTY



I-V CURVES



Power voltage current curve at different temperature



+90 264 606 00 90

satis@iwesolar.com

Nakişlar Mah. Zafer-1 Cad. No:15/1
Erenler/SAKARYA