

**SCHMID** | **PEKINTAŞ**  
ENERGY®



High-Tech  
German Quality



Biggest Production  
Capacity in Turkiye

## MBB (Multi Busbar) - Half Cut Solar Module

### SPE 545 ~ SPE 550

Durability Against Extreme Enviromental Conditions

Long-Term High Performance Guarantee

Positive Power Tolerance

Maximum Efficiency with M10 (182mm) Half-Cut Cells

100% Customer Satisfaction

Anti-PID Technology

**15** 15 Years Product Warranty

**25** 25 Years Linear  
Performance Guarantee

Produced by  
**Solar Green  
Energy**

**PEKINTAŞ** GROUP



## Electrical Characteristics (STC)

Model		SPE 545	SPE 550
Maximum Power	P <sub>max</sub>	545 Wp	550 Wp
Maximum Power Voltage	V <sub>mpp</sub>	41.96 V	42.15 V
Maximum Power Current	I <sub>mpp</sub>	13.01 A	13.07 A
Open Circuit Voltage	V <sub>oc</sub>	49.66 V	49.74 V
Short Circuit Current	I <sub>sc</sub>	13.80 A	13.86 A
Module Efficiency	η <sub>m</sub>	21.1 %	21.3 %
Positive Power Tolerance		~ +5W	

Standard Test Conditions (STC): Irradiance 1000W/m<sup>2</sup>, AM 1.5, Cell Temperature 25°C  
Measurement tolerance ± %3

## Electrical Characteristics (NOCT)

Model		SPE 545	SPE 550
Maximum Power	P <sub>max</sub>	410 Wp	413 Wp
Maximum Power Voltage	V <sub>mpp</sub>	38.90 V	39.00 V
Maximum Power Current	I <sub>mpp</sub>	10.55 A	10.60 A
Open Circuit Voltage	V <sub>oc</sub>	46.70 V	46.80 V
Short Circuit Current	I <sub>sc</sub>	11.13 A	11.18 A

Nominal Operating Cell Temperature (NOCT): Irradiance 800 W/m<sup>2</sup>, AM 1.5, Wind Speed 1m/s

## System Design

Maximum System Voltage	1500V DC
Operating Temperature	-40°C — +85°C
Maximum Series Fuse Rating	25 A
Static Load	2400 Pa (Wind), 5400Pa (Snow)*
Safety Class	II
Fire Class	UL Type 1

\* Only mounted with adherence to prescribed techniques

## Thermal Characteristics

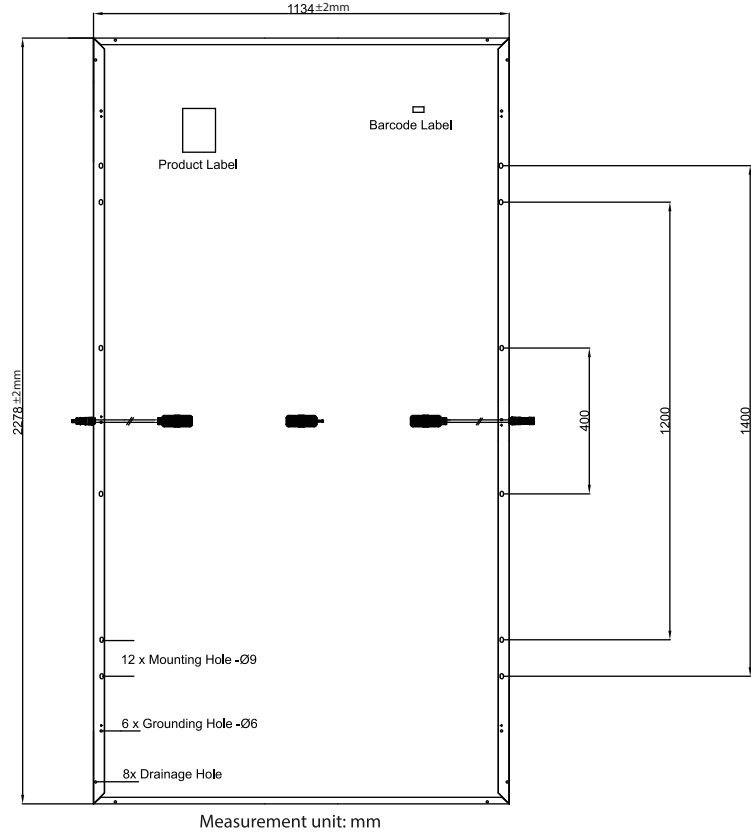
NOCT	45 ±2	°C
Temperature Coefficient P <sub>mp</sub>	-0.341	% / °C
Temperature Coefficient I <sub>sc</sub>	+0.045	% / °C
Temperature Coefficient V <sub>oc</sub>	-0.269	% / °C

## Mechanical Characteristics

Dimensions	2278mm x 1134mm x 35mm
Cell Type	Monocrystalline PERC M10
Cells Per Module	144 Half-Cell
Weight	28kg ±1kg
Front Glass	3.2mm high transmission and tempered glass with low iron content
Encapsulation	Etilen Vinily Acetate (Eva)
Backsheet	PET film
Frame	Anodized Aluminum alloy
J-Box	Protection Class IP68 (3 bypass diode)
Cable	4 mm <sup>2</sup> solar cable, Length: 400mm (+), 300mm (-) / Length 1500mm (+), 1300 mm (-)*

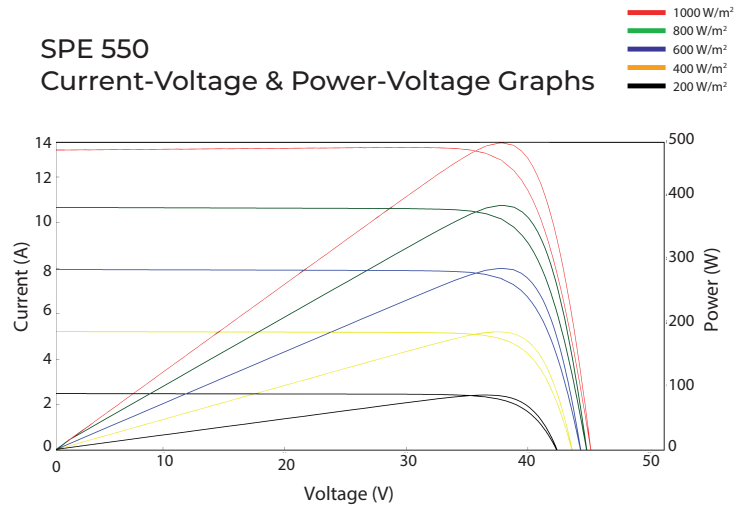
\* Cable length may differ based on the installation method

## Technical Module Drawing

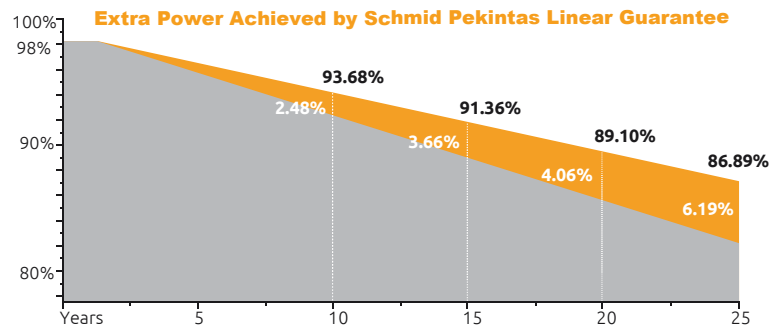


## Temperature Dependence & Electrical Performance

### SPE 550 Current-Voltage & Power-Voltage Graphs



## Warranty Period



The information contained in this datasheet may deviate due to the ongoing innovation and product development processes. Schmid Pekintas reserves the right to make changes in the information described herein

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