

SCHMID | **PEKINTAŞ**
ENERGY®



High-Tech
German Quality



Biggest Production
Capacity in Turkiye

MBB (Multi Busbar) - Half Cut Bifacial Solar Module

SPE 545 ~ SPE 550

- Durability Against Extreme Enviromental Conditions
- Long-Term High Performance Guarantee
- Positive Power Tolerance
- Higher Bifacial Benefits
- 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 _{max}	545 Wp	550 Wp
Maximum Power Voltage	V _{mpp}	41.96 V	42.15 V
Maximum Power Current	I _{mpp}	13.01 A	13.07 A
Open Circuit Voltage	V _{oc}	49.66 V	49.74 V
Short Circuit Current	I _{sc}	13.80 A	13.86 A
Module Efficiency	η _m	21.1 %	21.3 %
Positive Power Tolerance		~ +5W	

Standard Test Conditions (STC): Irradiance 1000W/m², AM 1.5, Cell Temperature 25°C
Measurement tolerance ± 3%

Electrical Characteristics (NOCT)

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

Nominal Operating Cell Temperature (NOCT): Irradiance 800 W/m², AM 1.5, Wind Speed 1m/s

System Design

Maximum System Voltage	1500V DC
Operating Temperature	-40°C — +85°C
Maximum Series Fuse Rating	30 A
Static Load	2400 Pa (Wind), 5400Pa (Snow)*
Safety Class	II
Fire Class	UL Type 1
Bifacial Rate**	%70±10

* Only mounted with adherence to prescribed techniques

** [P_{max} (backsurface) / P_{max} (frontsurface)] x 100

Thermal Characteristics

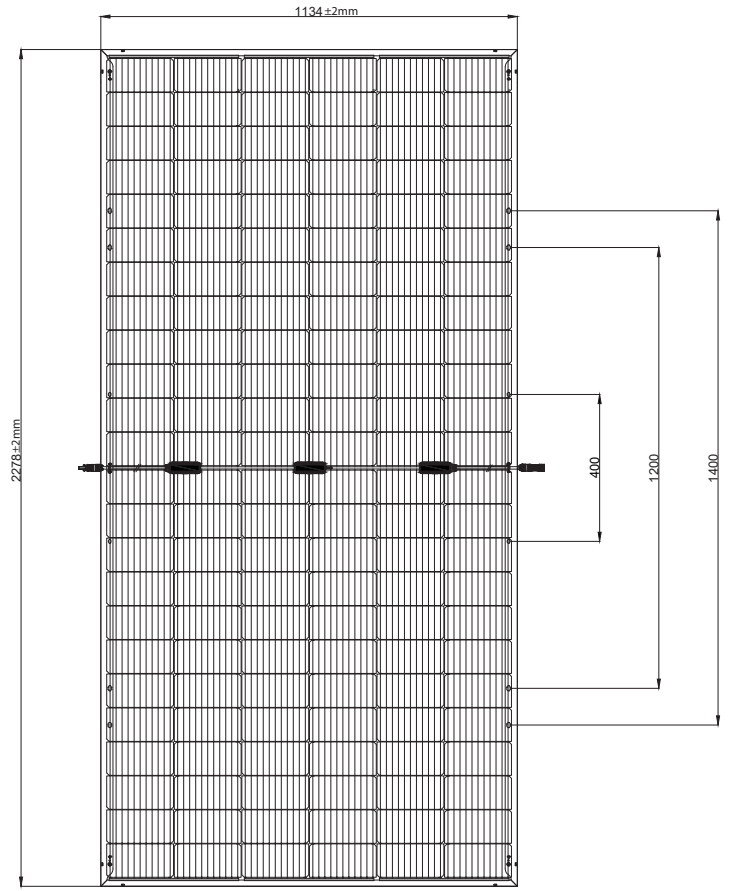
NOCT	45 ±2 °C
Temperature Coefficient P _{mpp}	-0.341 % / °C
Temperature Coefficient I _{sc}	+0.045 % / °C
Temperature Coefficient V _{oc}	-0.269 % / °C

Mechanical Characteristics

Dimension	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
Frame	Anodized Aluminum alloy
Junction Box	Protection Class IP68 (3 bypass diode)
Cable	4 mm ² solar cable, Length: 400mm (+), 300mm (-) / Length 1500mm (+), 1300 mm (-)*

* Cable length may differ based on the installation method

Technical Module Drawing

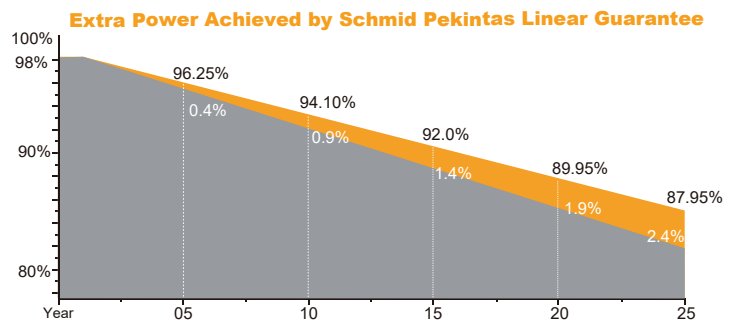


Measurement unit: mm

Bifacial Rearside Power Gain

Gain	Module Type	SPE 545	SPE 550
5 %	Maximum Power (P _{max})	572 Wp	578 Wp
	Module Efficiency at STC (%)	22.1	22.4
15 %	Maximum Power (P _{max})	627 Wp	633 Wp
	Module Efficiency at STC (%)	24.3	24.5
25 %	Maximum Power (P _{max})	681 Wp	688 Wp
	Module Efficiency at STC (%)	26.4	26.6

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

www.schmid-pekitas.com



Headquarters

↳ Büyükdere Caddesi No:32
Pekintas İş Merkezi - 34388
Mecidiyeköy - İstanbul

☎ +90 (212) 267 00 61
☎ +90 (212) 288 60 44

Factory 1

↳ 2.OSB 318. Ada 1. Parsel
Cumhuriyet Mah. 1. Cd. No: 5
81600 Beyköy-Düzce

☎ +90 (380) 790 01 55
☎ +90 (380) 790 01 56

Factory 2 (Giga Factory)

↳ İstilli Köyü Çiçek Mevki D-100
Karayolu Üzeri No: 725/9/1
Merkez - Düzce

☎ +90 (380) 790 01 55
☎ +90 (380) 790 01 56

