POLYCRYSTALLINE SOLAR MODULE
SPE 270 / 275

SCHMID | PEKİNTAŞ ENERGY®

Experience and Reliability

More than 200 years experience of Schmid & Pekintas Groups

Production With Full Automation

All processes that require high sensitivity are done with robotic systems in Schmid Pekintas high-tech production line. Full automation in Schmid Pekintas line enables production of high quality Photovoltaic (PV) modules as superior in performance, long life and durability. Schmid Pekintas offers high quality products to customers according to the international standards by using German Technology.

Positive Power Tolerance

Power output of Schmid Pekintas solar modules have always positive (+) tolerance. During production, all solar modules are automatically classified according to the power output values.

Excellent Resistance To Harsh Environment

Schmid Pekintas solar modules have high resistance to salt water and ammonia. Therefore, they can safely be used in corrosive environments such as animal farms and marine sites.

World Class Quality

- High Product Quality
- High Efficiency
- Anti-PID technology
- Positive Power Tolerance 0 / +5 Wp
- Robust and Aesthetic Design
- High Long-Term Performance
- 25 years Linear Performance Guarantee
- 10 years Product Warranty
- MAX LOAD 5400Pa — 5400Pa Snow Load, 2400Pa Wind Load Resistance
- 1000V / 1500V Maximum System Voltage

TS EN 61701 TS EN 62716 IEC 62804 | TS 13381 TS 12690 | TS EN 61215-1-1 TS EN 61730-1 TS EN 61730-2 | IEC 61215 IEC 61730-1 IEC 61730-2 | CE | Certified System swiss TS ISO 9001 | Certified System swiss TS ISO 14001 | Certified System swiss TS OHSAS 18001

Electrical Characteristics (STC)

Model		SPE 270		SPE 275	
Maximum Power	Pmpp	270	Wp	275	Wp
Maximum Power Voltage	Vmpp	31.30	V	31.56	V
Maximum Power Current	Impp	8.63	A	8.72	A
Open Circuit Voltage	Voc	38.06	V	38.27	V
Short Circuit Current	Isc	9.14	A	9.23	A
Module Efficiency	ηm	16.35	%	16.65	%
Positive Power Tolerance	~ +5W				

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

Electrical Characteristics (NOCT)

Model		SPE 270		SPE 275	
Maximum Power	Pmpp	198	Wp	202	Wp
Maximum Power Voltage	Vmpp	28.42	V	28.65	V
Maximum Power Current	Impp	6.97	A	7.06	A
Open Circuit Voltage	Voc	34.43	V	34.62	V
Short Circuit Current	Isc	7.39	A	7.46	A

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

System Design

Maximum System Voltage	1000 V DC (1500V DC upon request)
Operating Temperature	-40°C — +85°C
Maximum Series Fuse Rating	15 A
Static Load	5400 Pa
Safety Class	II
Fire Class	C

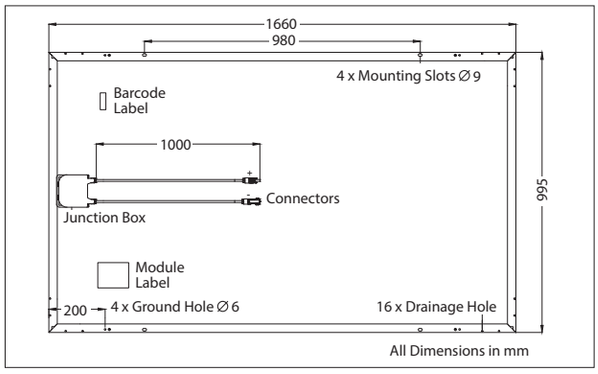
Thermal Characteristics

NOCT	45 ±2	°C
Temperature Coefficient Pmpp	-0.39	% / °C
Temperature Coefficient Isc	+0.045	% / °C
Temperature Coefficient Voc	-0.31	% / °C

Mechanical Characteristics

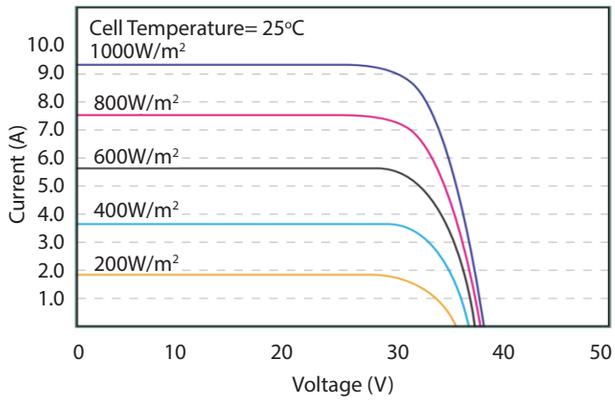
Dimensions	1660mm x 995mm x 35mm
Cell Type	Polycrystalline
Cells per module	60
Weight	18kg ±1kg
Front Glass	3.2mm High transmission and tempered glass with low iron content
Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Backsheet	PET Film
Frame	Anodized aluminum alloy
J-Box	Protection class IP67 (3 bypass diode)
Cable	4 mm² solar cable, Lenght: 1000 mm
Connector	MC4 compatible

Module Technical Drawing

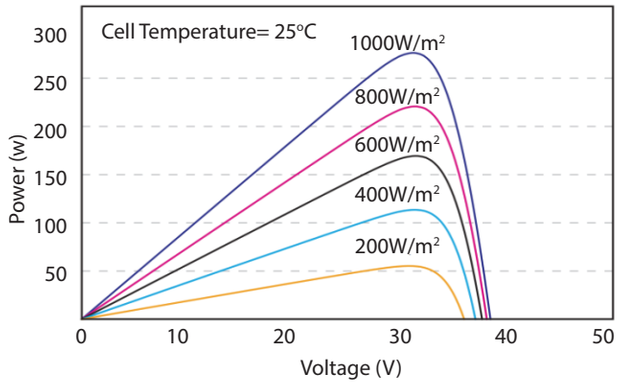


Performance at Low Irradiance

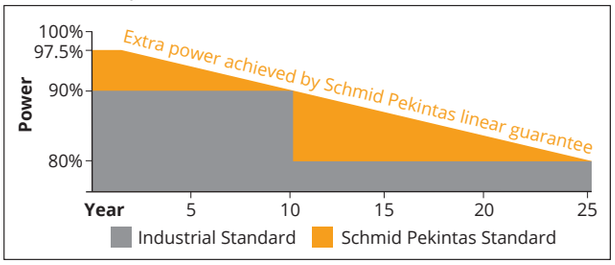
SPE 275 Current-Voltage Graph



SPE 275 Power-Voltage Graph



Warranty



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.

10 years Product Warranty **25 years** Linear Performance Guarantee

Head Office
Büyükdere Caddesi No:32 Pekintaş
İş Merkezi - 34388 Mecidiyeköy - İstanbul
+90 (212) 267 00 61
+90 (212) 288 60 44

Factory
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

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