



PEAK PV
SOLAR

Mono-PERC

990

High Performance Monocrystalline PERC Module

PEAK144-530-550MP

144 CELL

Half-Cut Cell

530-550Wp

Power Output Range

1500VDC

Maximum System Voltage

10 BB

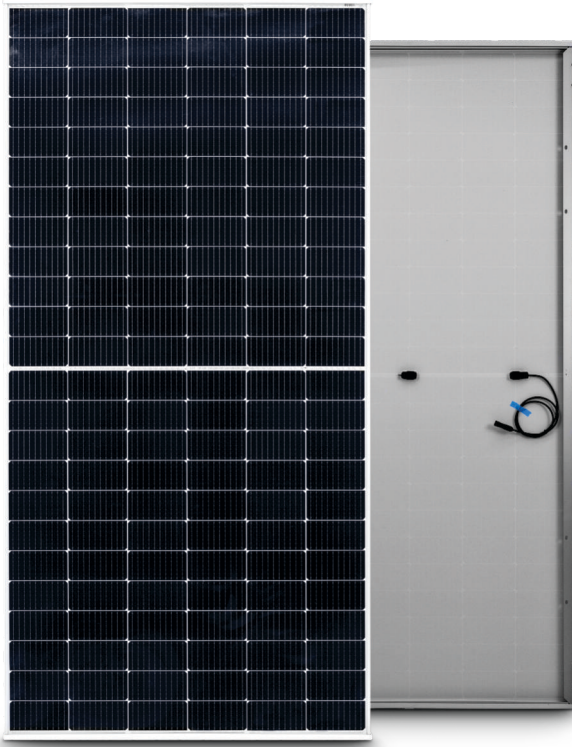
Busbar Technology

21.3%

Maximum Efficiency

Mono-PERC

P-Type Cell



KEY FEATURES



Better Temperature Coefficient



Excellent low irradiance performance



PID

Excellent PID resistance



3x EL

Triple EL testing ensuring defect-free products



Module Imp binning radically reduces string mismatch loss



Certified to withstand severe environmental conditions

- Anti-reflective & anti-soiling surface minimise power loss from dirt and dust
- Severe salt mist, ammonia & blown sand resistance, for seaside, farm and desert environments
- Excellent wind load 2400Pa & snow load 5400Pa resistance under certain installation method



Comprehensive product and system certification

- IEC 61215:2021; IEC 61730:2023
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- ISO 45001:2018 Occupational Health & Safety Management System
- ISO 50001:2018 Energy Management System
- ISO/IEC 27001:2022 Information Security Management System
- ISO 10002:2018 Customer Satisfaction Management System

SGS

SGS
TUV
SAAR

ISO

IEC

TSE

CE



Our factory complies with ISO (9001, 10002, 14001, 27001, 45001, 50001) standards & the solar panels produced are in international IEC (61215, 61730, 62716, 61701, 60068, 62804) standards.

★ As there are different certification requirements in different markets, please contact your local PEAK PV SOLAR sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

For more details, please contact:

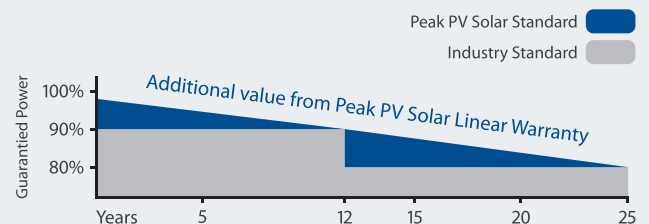
Peak PV Solar Teknolojileri A.Ş.

HQ: Saray Mah. Atom Cad. No:17 Kahramankazan/Ankara, P. +90.312 815 48 80 (pbx)

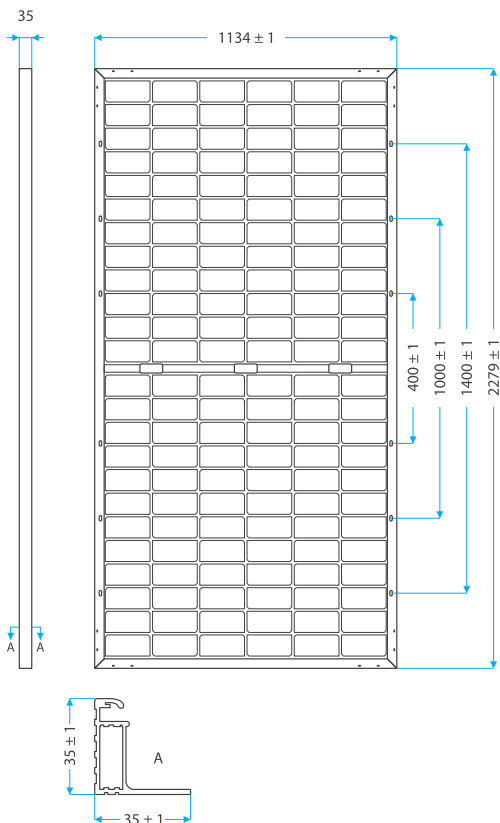
Factory: ASO 2 OSB, Alıcı OSB Mah. 2033. Cd. No:16, Sincan/Ankara, P. +90.312 309 03 44 (pbx)

LINEAR PERFORMANCE WARRANTY

12-year Product Warranty | **25-year** Linear Power Warranty

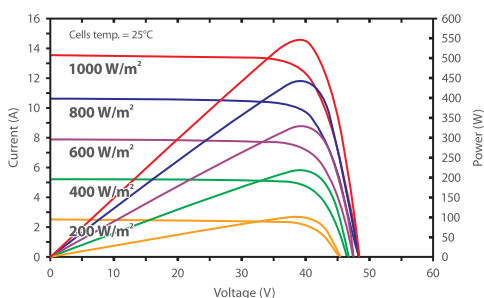


Dimensions of PV Module Unit: mm

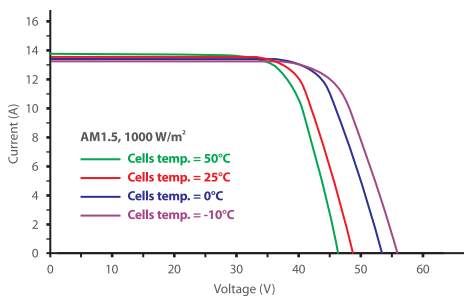


PEAK144-535MP

I-V characteristics at different irradiances



I-V characteristics at different temperatures



TYPE FAMILY PEAK144-530-550MP

Pmp (W)	530	535	540	545	550
Voc (V)	49.40	49.50	49.60	49.70	49.80
Isc (A)	13.55	13.64	13.74	13.84	13.94
Vmp (V)	41.75	41.87	41.99	42.11	42.23
Imp (A)	12.70	12.79	12.87	12.96	13.03
Module Efficiency (%)	20.5	20.7	20.9	21.1	21.3
Power Tolerance	0 + 4.99	0 + 4.99	0 + 4.99	0 + 4.99	0 + 4.99

STC: Irradiance 1000 W/m², Cell Temperature 25 °C, AM=1.5 according to EN 60904-3

★ Module Efficiency (%): Round-off to the nearest number. Measurement Tolerance: ±3

Electrical Data (NMOT)

Model Number	Pmp (W)	Voc (V)	Isc (A)	Vmp (V)	Imp (A)
PEAK144-530MP	394.6	46.58	11.11	38.60	10.22
PEAK144-535MP	398.5	46.68	11.18	38.70	10.30
PEAK144-540MP	402.0	46.77	11.27	38.80	10.36
PEAK144-545MP	405.8	46.87	11.35	38.90	10.43
PEAK144-550MP	409.6	46.98	11.48	39.00	10.50

★ NMOT: Irradiance 800 W/m², Ambient Temperature 20 °C, Wind Speed 1 m/s, AM=1.5

Mechanical Data

Solar Cells MonoPERC	Cell Configuration 144 Cells	Module Dimensions 2279 x 1134 x 35 mm	Weight 27,8 kg
Front Glass 3.2 mm High Transmission, Low Iron, Tempered ARC Glass	Frame Anodized Aluminium Alloy	J-Box IP68, 3 bypass diodes	Connector MC4-EVO2
Cables*	4.0 mm ² (IEC), Positive (+) 1200 mm, Negative (-) 1200 mm (Connector incl.)		

★ Cable lengths are optional. May vary depending on the project.

Temperature & Maximum Ratings

Nominal Module Operating Temperature (NMOT) 43°C ± 2°C	Temperature Coefficient of Voc -0.25% / °C	Temperature Coefficient of Isc 0.045% / °C	Temperature Coefficient of Pmax -0.32% / °C
Operational Temperature -40°C ~ +85°C	Maximum System Voltage 1500VDC	Max Series Fuse Rating 25A	

Packaging Configuration

Container 40 ft (HQ)	Number of Modules per Container 704	Number of Modules per Pallet 32	Number of Pallets per Container 22
Packaging Box Dimensions (L x W x H) in mm 2325 x 1150 x 1250	Box Gross Weight (kg) 910		