



MBB HC BIFACIAL RECTANGULAR N-TYPE TOPCON CELL PV MODULE

620 - 640 W



CELL TECHNOLOGY 16BB Half-Cut TOPCon Cells

Low LID/LeTID loss and high performance under low irradiance conditions.



BIFACIAL PERFORMANCE Dual-side power generation

Higher energy yield and lower LCOE thanks to rear-side gain.



PID PROTECTION Advanced Anti-PID Technology

Long-term performance under high system voltage conditions



HIGH PERFORMANCE WARRANTY 30-Year Linear Power Output Warranty

Stable and reliable module performance for long-term operation



HARSH ENVIRONMENT RESISTANCE Design suitable for all climate conditions

Suitable for sand, humidity, wind, and dusty environments



MECHANICAL STRENGTH High durability

5400 Pa snow load / 2400 Pa wind load.



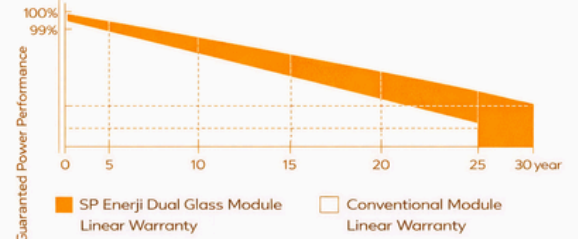
ENVIRONMENTALLY FRIENDLY PRODUCTION Low carbon footprint

Composite frame and sustainable manufacturing process.

WARRANTY

Additional Linear Performance Warranty

12-Year Product Warranty · 30-Year Linear Power Warranty
Average annual power degradation of 0.4% over 30 years



Product
Warranty



Linear Power
Output
Warranty

CERTIFICATIONS

TUV AUSTRIA CERTIFICATION
CE CONFORMITY
ISO 9001:2015 QUALITY MANAGEMENT SYSTEM
ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEM
OHSAS 18001 - OCCUPATIONAL HEALTH & SAFETY
FPC FACTORY PROCESS CONTROL CERTIFICATION



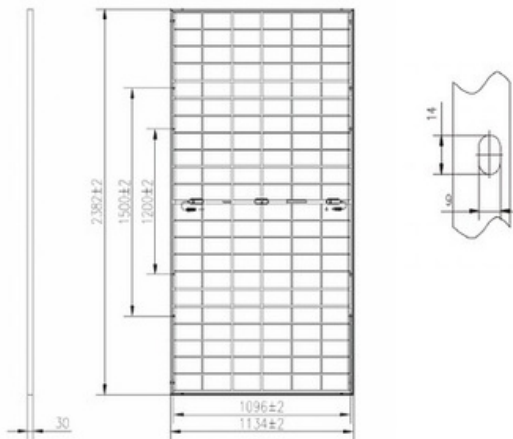
SP ENERJİ ELEKTRİK ÜRETİM LİMİTED ŞİRKETİ

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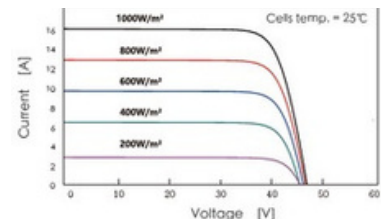




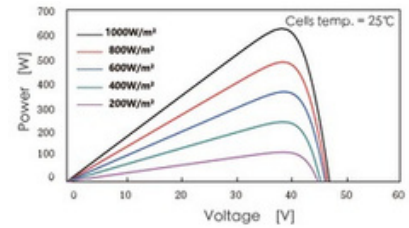
TECHNICAL DRAWING



I-V CURVE



P-V CURVE



ELECTRICAL PARAMETERS

Maximum Power (Pmax)	620	625	630	635	640
Open Circuit Voltage (Voc) [V]	48.98	49.17	49.35	49.47	49.66
Short Circuit Current (Isc) [A]	15.97	16.02	16.1	16.17	16.23
Voltage at Pmax (Vmp) [V]	40.8	40.97	41.12	41.24	41.39
Current at Pmax (Imp) [A]	15.2	15.26	15.33	15.4	15.47
Module Efficiency (STC) [%]	22.95%	23.14%	23.33%	23.51%	23.70%

REAR SIDE GAIN

5%	Maximum Power (W)	651	656.25	661.5	666.75	672
	Module Efficiency (STC):	24.10%	24.30%	24.50%	24.69%	24.89%
15%	Maximum Power (W)	713	718.75	724.5	730.25	736
	Module Efficiency (STC):	26%	26.61%	26.82%	27.03%	27.24%
25%	Maximum Power (W)	775	781.25	787.5	793.75	800
	Module Efficiency (STC):	28.69%	28.93%	29.16%	29.39%	29.62%

MECHANICAL PARAMETERS

Power Tolerance	(0,+4,99)
Maximum System Voltage	1500V DC
Pmax Temperature Coefficient	-0.30%/°C
Voc Temperature Coefficient	-0.25%/°C
Isc Temperature Coefficient	+0.045%/°C
Maximum Series Fuse Rating	30A
Operating Temperature	-40~ +85°C
Nominal Operating Cell Temperature (NOCT)	42±2°C

DIMENSIONS & CONSTRUCTION

Dimensions	2382*1134*30mm
Weight	32.5Kg±5%
Solar Cells	132Cells (2*6*11)
Glass	Dual glass 2.0 + 2.0 mm, AR coated, tempered, low iron
Frame	Composite (Colored)
Junction Box & Cable	IP68, 3 diodes, 4 mm², 350 mm cable
Mechanical Load	Front 5400 Pa / Rear 2400 Pa
Packaging	36 modules per pallet

* Cable length can be customized upon customer request during order.

