M182BP SE Mono-Crystalline

PERC Bifacial Solar Cell Specification

Fellow Enerji Anonim Şirketi
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Factory：Fellow Enerji Anonim Şirketi

NEW Big Size: Cell 182mm*182mm±0.25mm Monocrystalline

Efficiency Range:
From 22.70% to 23.50%

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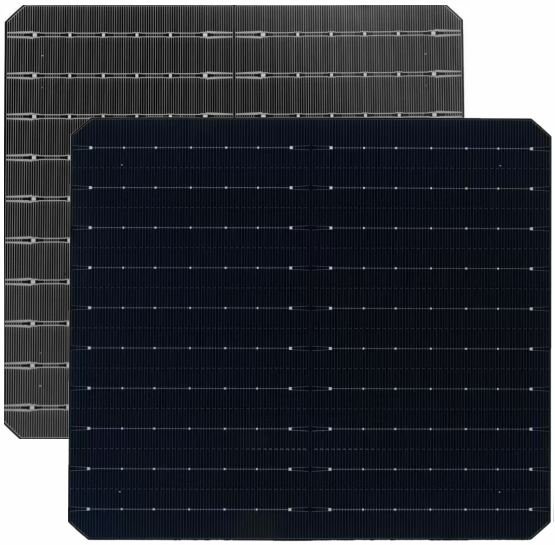

Size 182mm*182mm±0.25mm，
Diagonal distance 247mm±0.5mm
Thickness 165±20um

Advanced PERC cell structure minimizes internal power loss and improves overall conversion efficiency. Excellent heat dissipation design prevents hot-spot generation and ensures long-term stability and performance.

PERC

Optimized number and width of main grid lines increase the effective light-receiving area of the cell,reducing internal resistance and improving current collection efficiency. Enhanced passivation ensures excellent stability and long-term reliability.

The Fellow Energy M182 PERC bifacial solar cell adopts advanced AlOx/SiNx passivation technology, ensuring high conversion efficiency and long-term stability.
With an efficiency range of 21.6% to 23.5% and low LID performance, this high-quality cell provides superior power output and excellent reliability under diverse operating conditions.

1500V

Designed for high-efficiency PERC cell applications, featuring excellent surface uniformity and low contact resistance. Optimized metallization and passivation ensure superior electrical performance and long-term reliability.

EL

MIcrocrack resistant
Double glass structure enhance reliability, double EL tested of high quality control.

2%

All the cells are sorted and packaged by amperage, reducing mismatch losses and maximizing system output.

Enhanced Mechanical Strength

Cells are engineered to withstand mechanical stresses during stringing, soldering, and lamination processes, ensuring stable and durable performance in module assembly.

Enhanced RearSide Light Response (PERC Rear Reflection)

PID

Anti-Reflective Coating,10 Busbars

Comprehensive and first-rate certification system

IEC61215 : 2016.IEC61730 : 2016 Latest Standardand
ISO 9001,ISO 14001 and ISO45001
meeting the highest international standards
Strict quality control

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Better Choice For Higher Efficiency!

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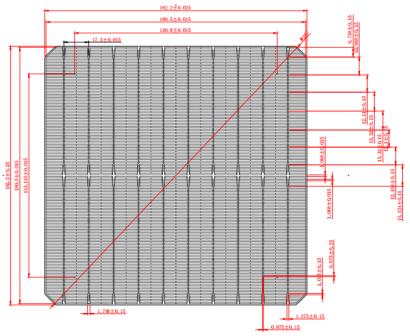
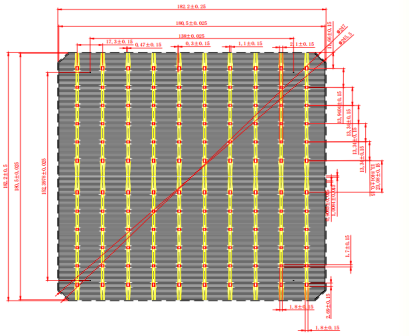
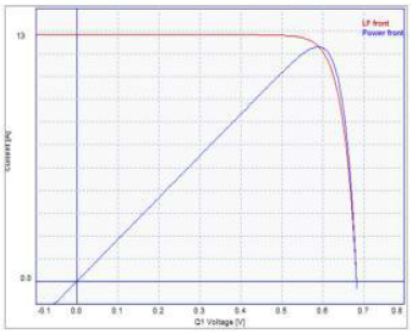




Electrical Characteristics (STC)

Efficiency Code	Efficiency	Maximum Power output	Maximum Voltage output	Maximum Current output	Open-circuit Voltage	Short-circuit Current
	Eff	Pmpp	Umpp	Impp	Uoc	Isc
	(%)	(W)	(V)	(A)	(V)	(A)
182M-235	23.5	7.76	0.697	12.878	0.695	13.579
182M-234	23.4	7.72	0.696	12.850	0.694	13.541
182M-233	23.3	7.69	0.695	12.821	0.693	13.502
182M-232	23.2	7.66	0.694	12.792	0.692	13.463
182M-231	23.1	7.63	0.693	12.780	0.691	13.425
182M-230	23.0	7.59	0.692	12.745	0.690	13.386
182M-229	22.9	7.56	0.691	12.683	0.689	13.287
182M-228	22.8	7.53	0.690	12.656	0.688	13.263
182M-227	22.7	7.49	0.689	12.635	0.687	13.250

IV Curve



Technical Data

Size	182mm*182mm±0.25mm， Diagonal distance 247mm±0.5mm	TkVoltage：-0.36 %/K
Thickness	165±20μm	TkCurrent：+0.07%/K
Front Design	10*0.6±0.05mm Bus Bar(Silver)，170fingers， Front Pitch：17.3±0.15mm，Front pad width： 1.35/0.95±0.15mm	TkPower：-0.38%/K
Rear Design	10Bus Bar(Silver)，200fingers，Rear Pitch：17.3 ±0.15mm，Rear pad width：1.8±0.15mm	Rsh≥35 Ω，Irev2≤1.0A

Weldability

Peel Strength	≥1.25N/mm

The results may be affected by different solder strip or welding conditions.

Light Intensity Stability

Intensity(W/m2)	Uoc	Isc
1000	1.000	1.000
900	0.996	0.903
800	0.991	0.803
600	0.988	0.602
400	0.962	0.403

The amplitude of Uoc(Isc) decreasing with irradiation intensity based on STC(1000W/m2, AM1.5, 25°C).

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