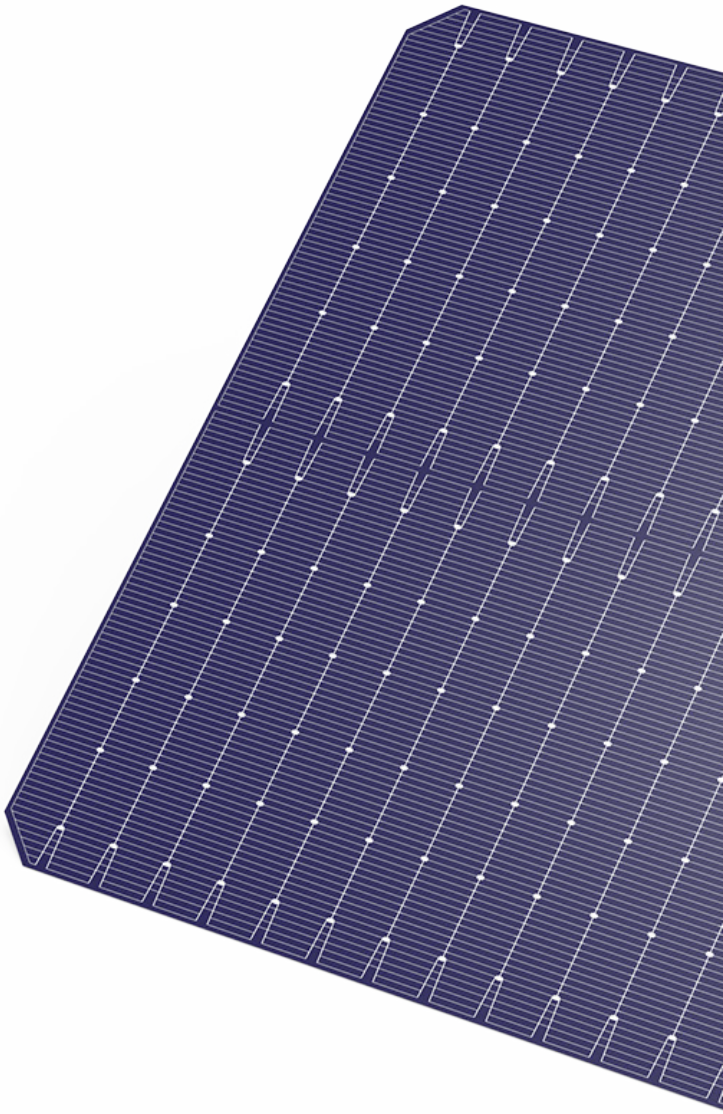
182M-16D1

N-TYPE TOPCON

N The Pioneer of N-type Solar Cell



Product Characteristics

LID
Lower LID

PID Resistance
Superior anti-PID performance

Lower Sealing Damage
Lower Cell to Module (CTM) Loss Rate, more suitable for high-efficiency module

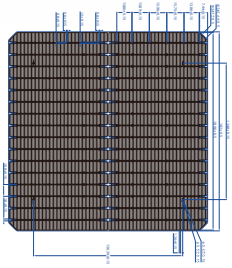
Lower Power Temperature Coefficient
Temperature coefficient of Power as low as -0.30%/ °C

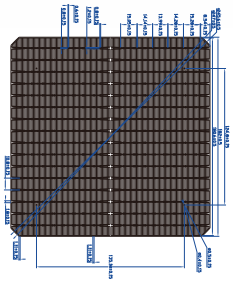
Better Performance In Low Irradiance Environment
Relative conversion efficiency≥98% under low light (200W/m²)

High Conversion Efficiency
Front efficiency≥25% , Bifaciality rate ≥80%

Mechanical Characteristics

Model	182 mono-crystalline Bifacial solar cell (SE-182M-16D1)
Dimension	182mmx182mm±0.5mm, Φ 247.28mm±0.5mm
Thickness	130μm±13μm, 120μm±12μm
Front	16 busbars, 12 pads, 144 fingers, busbar width 0.036±0.02mm
Back	16 busbars, 12 pads, 146 fingers, busbar width 0.036±0.02mm





Temperature Coefficients	
TkCurrent	0.045%/℃
TkPower	- 0.30%/℃
TkVoltage	- 0.25%/℃

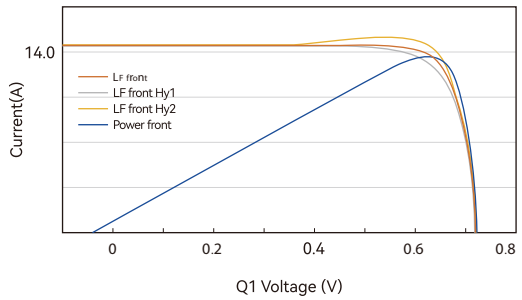
Quality Control
±0.1% Efficiency Tolerance
The accuracy of the efficiency test is controlled within ±0.1%
Electrical performance, appearance, EL 100% automatic inspection
Calibration cells are traceable to Fraunhofer ISE

Electrical Characteristics

Efficiency (%)	Power Pmpp (W)	Max.Power Current Impp (A)	Short Circuit Current Isc (A)	Max.Power Voltage Vmpp (V)	Open Circuit Voltage Voc (V)
>25.5	8.42	13.651	14.218	0.6168	0.7178
25.4~25.5	8.38	13.606	14.183	0.6159	0.7169
25.3~25.4	8.35	13.577	14.148	0.6150	0.7160
25.2~25.3	8.32	13.553	14.113	0.6141	0.7151
25.1~25.2	8.29	13.518	14.078	0.6131	0.7141
25.0~25.1	8.25	13.475	14.035	0.6122	0.7132
24.9~25.0	8.22	13.440	14.001	0.6114	0.7124
24.8~24.9	8.19	13.405	13.965	0.6106	0.7116
24.7~24.8	8.16	13.370	13.930	0.6097	0.7107
24.6~24.7	8.12	13.335	13.895	0.6089	0.7099
24.5~24.6	8.09	13.300	13.860	0.6081	0.7091
24.4~24.5	8.06	13.265	13.825	0.6073	0.7083
24.3~24.4	8.02	13.230	13.790	0.6065	0.7075
24.2~24.3	7.99	13.195	13.755	0.6059	0.7069
24.1~24.2	7.96	13.155	13.715	0.6054	0.7064
24.0~24.1	7.92	13.115	13.675	0.6040	0.7050
23.9~24.0	7.89	13.080	13.640	0.6032	0.7042
23.8~23.9	7.86	13.055	13.615	0.6024	0.7034
23.7~23.8	7.82	13.006	13.581	0.6016	0.7023
23.6~23.7	7.79	12.968	13.543	0.6008	0.7012
23.5~23.6	7.76	12.931	13.501	0.6000	0.7004
23.4~23.5	7.73	12.893	13.478	0.5992	0.6987
23.3~23.4	7.69	12.855	13.432	0.5984	0.6980
23.2~23.3	7.66	12.817	13.392	0.5976	0.6971
23.1~23.2	7.63	12.779	13.347	0.5968	0.6964
23.0~23.1	7.59	12.740	13.303	0.5960	0.6957
22.9~23.0	7.56	12.702	13.260	0.5952	0.6950
22.8~22.9	7.53	12.664	13.218	0.5944	0.6942

* Standard Test Condition (STC): 1000W/ m , AM 1.5G, 25°C /Solar Cell Efficiency Positive Tolerance / Specifications and data for reference only

IV Curve



Spectral Response