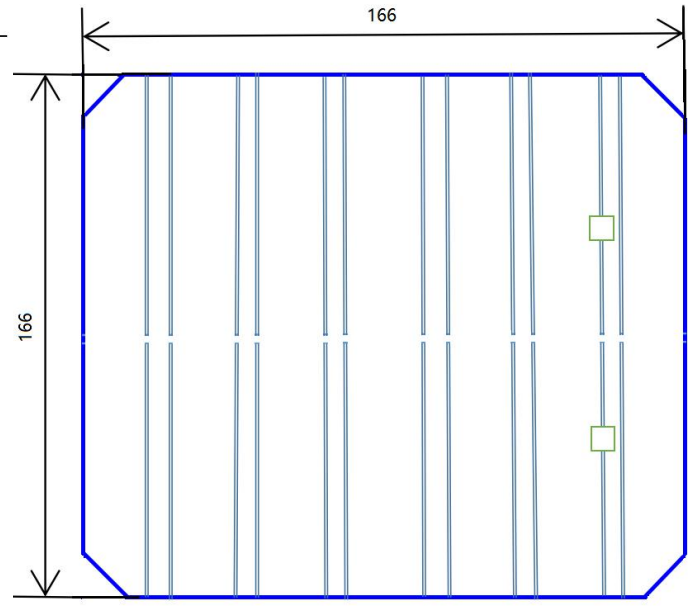
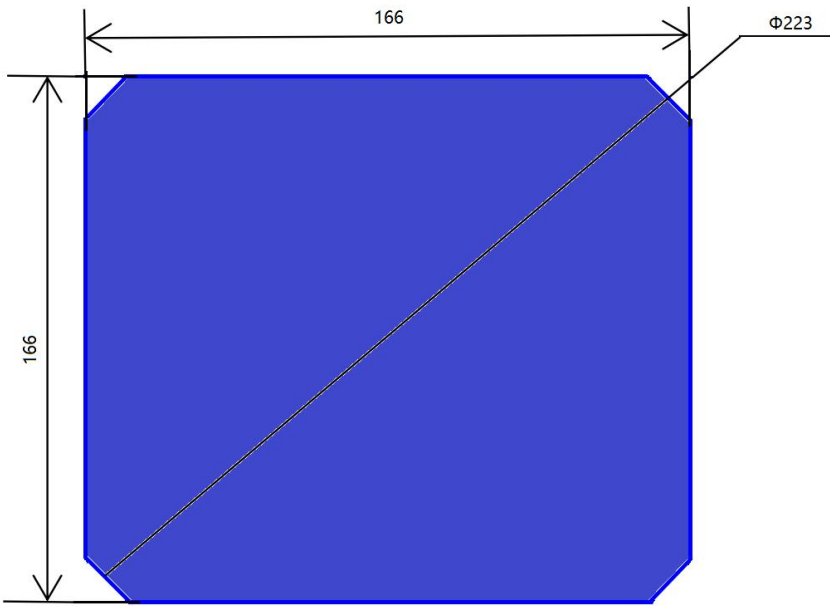


HD SOLAR

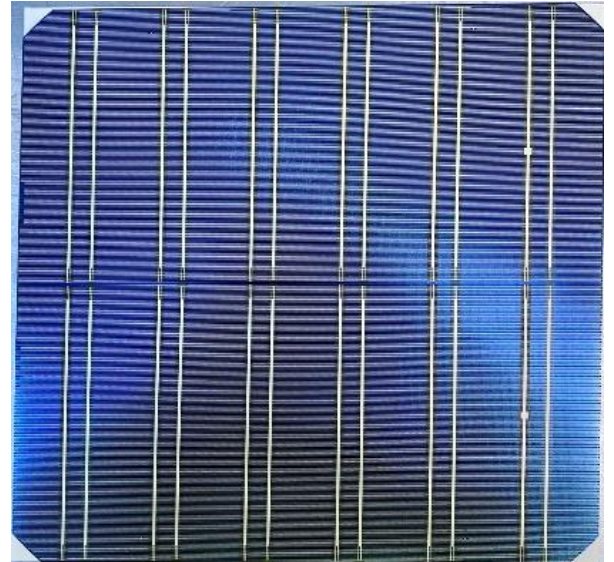
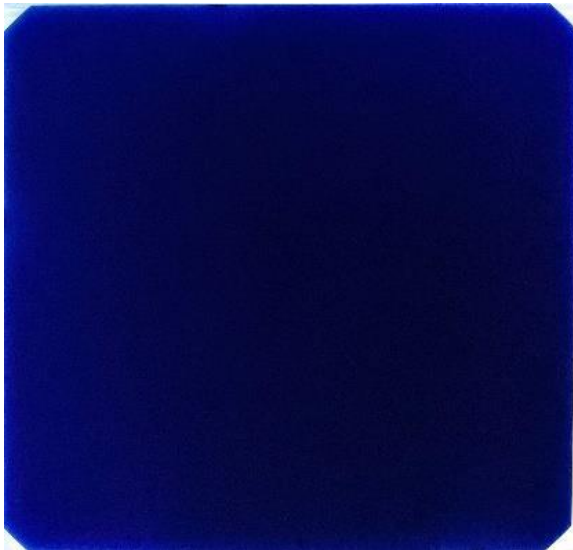
IBC

N TYPE Monocrystalline silicon 166 solar cells



Front side

Back side



MECHANICAL DATA AND DESIGN

Format	166mm×166mm±0.25mm
Diameter	223±0.25mm(round chamfers)
Thickness	170μm±20μm
Front(-)	Blue SiNx anti-reflection coating, Free of grid lines
Back(+)	Interdigitated electrode structure 0.8mm bus bars(silver)

TEMPERATURE COEFFICIENTS

TK Voltage	-0.268%/K
TK Current	+0.042%/K
TK Power	-0.300%/K

Product Feature

High conversion efficiency up to 24.30%.

Non Light Induced Degradation(LID),No light-induced degradation,Uniform cell performance with stable process control, Excellent power generation performance under low irradiation, low hot spot effect low Hot spot risk, No optical shading from metal grid on front side.

Quality Control

The accuracy of the efficiency test is controlled at $\pm 0.1\%$

IV/EL /Appearance 100% automatic inspection

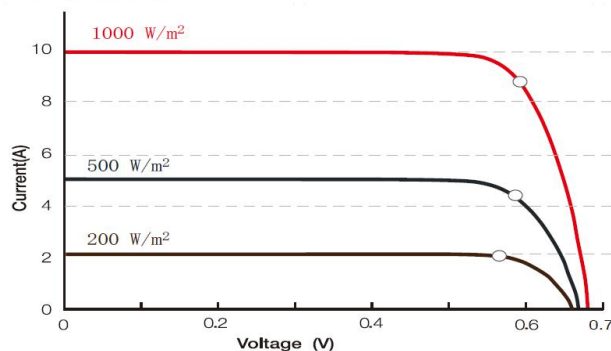
Calibration cell source to fraunhofer ISE

Efficiency(%)	Pmpp(W)	Ump(V)	Ipp(A)	Uoc(V)	Isc(A)	FF(%)
24.30	6.66	0.599	11.712	0.700	12.289	81.55
24.20	6.63	0.598	11.683	0.699	12.290	81.32
24.10	6.61	0.597	11.653	0.699	12.263	81.17
24.00	6.58	0.596	11.625	0.698	12.252	81.01
23.90	6.55	0.595	11.598	0.698	12.224	80.93
23.80	6.52	0.595	11.552	0.697	12.191	80.92
23.70	6.50	0.594	11.531	0.697	12.180	80.74
23.60	6.47	0.593	11.517	0.696	12.172	80.54
23.50	6.44	0.591	11.502	0.696	12.166	80.32
23.40	6.42	0.589	11.487	0.695	12.161	80.08
23.30	6.39	0.588	11.470	0.695	12.156	79.82
23.20	6.36	0.586	11.453	0.694	12.152	79.56

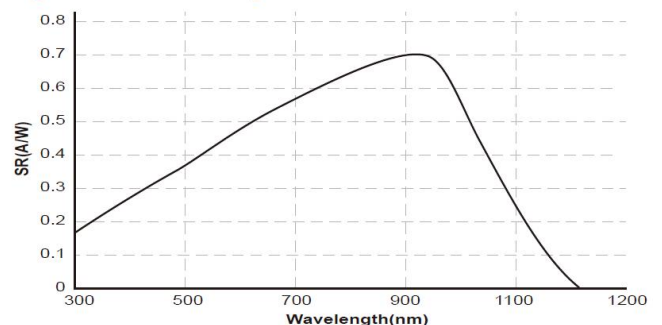
Standard test conditions:1000w/m²,AM 1.5 , 25 °C

Specifications and data are only for reference

IV Curve



Spectral Response (SR)



Specifications subjects to technical changes and tests. HD Solar reserves the right of final interpretation.

Specifications subject to technical changes 05.2010 HD Solar

HD SOLAR POWER LIMITED

Tel:86-18688922286

Email:hdosolar@hdosolar.com

Http://www.hdosolar.com