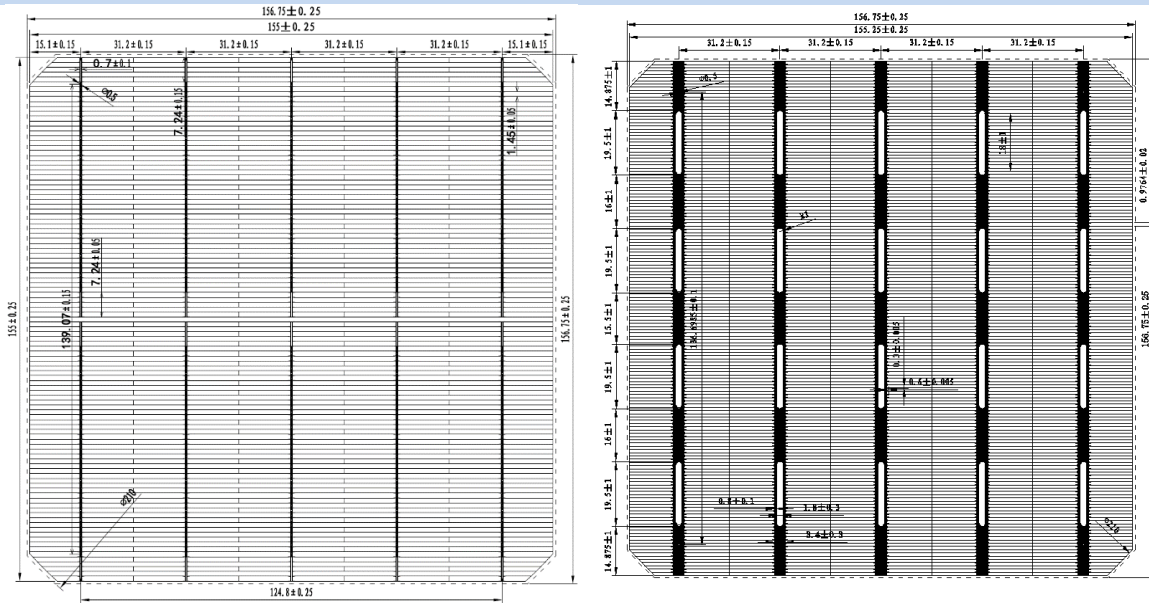


## TW Solar M1565BPERCBP Bifacial Monocrystalline Silicon SE Solar Cell

M1565BPERCBP

### Product Appearance



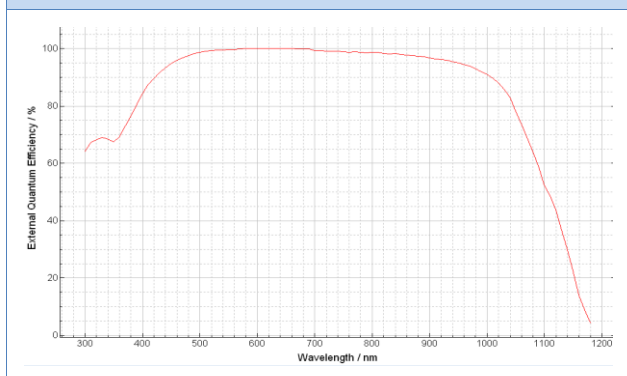
### Mechanical Data and Design

<b>Dimension</b>	156.75mm*156.75mm ±0.25mm
<b>Thickness</b>	190 ±30μm
<b>Front</b>	5 bus bars (silver), width 0.7mm, 108 finger grids , Blue anti-reflecting coating (silicon nitride)
<b>Back (+)</b>	wide soldering pads (silver)1.8mm, 5 bus bars (aluminum), 160 finger grids(aluminum), Blue anti-reflecting coating (silicon nitride)

### Temperature Coefficients

TkUoc (%/K)	<b>-0.36</b>
TkIsc(%/K)	<b>+0.06</b>
TkP <sub>MAX</sub> (%/K)	<b>-0.36</b>

### Spectral Response(QE)

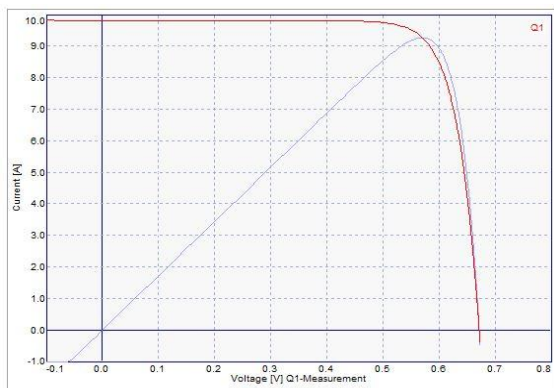


## Light Intensity dependence

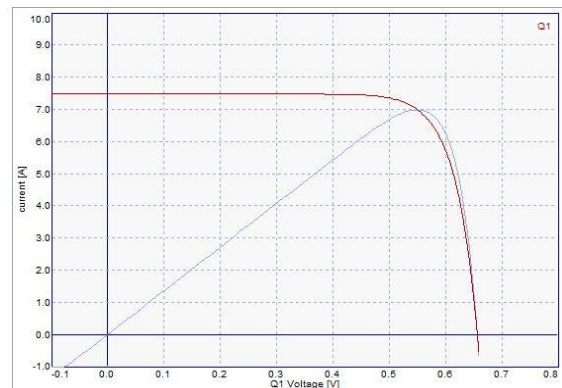
Intensity(W/m <sup>2</sup> )	U <sub>oc</sub>	I <sub>sc</sub>
1000	1.0	1.0
900	0.99	0.9
800	0.99	0.8
600	0.98	0.6
400	0.96	0.4

Ratio of Voc(Isc) at reduced intensity to Voc(Isc) at 1000W/m<sup>2</sup>.

### Front IV Curve



### Back IV Curve



### Front Efficiency Distribution

Efficiency Code	Efficiency (%)	P <sub>mpp</sub> (W)	U <sub>mpp</sub> (V)	I <sub>mpp</sub> (A)	U <sub>oc</sub> (V)	I <sub>sc</sub> (A)
TW-156.75M-220	22.00	5.38	0.578	9.342	0.679	9.847
TW-156.75M-219	21.90	5.35	0.577	9.329	0.678	9.832
TW-156.75M-218	21.80	5.33	0.576	9.316	0.677	9.818
TW-156.75M-217	21.70	5.30	0.575	9.303	0.676	9.803
TW-156.75M-216	21.60	5.28	0.574	9.291	0.675	9.788
TW-156.75M-215	21.50	5.25	0.573	9.279	0.674	9.774
TW-156.75M-214	21.40	5.23	0.571	9.269	0.673	9.759
TW-156.75M-213	21.30	5.20	0.569	9.255	0.672	9.744
TW-156.75M-212	21.20	5.18	0.567	9.244	0.671	9.730
TW-156.75M-211	21.10	5.16	0.566	9.205	0.670	9.724
TW-156.75M-210	21.00	5.13	0.565	9.180	0.669	9.709
TW-156.75M-209	20.90	5.11	0.564	9.162	0.668	9.703
TW-156.75M-208	20.80	5.08	0.562	9.140	0.667	9.681
TW-156.75M-207	20.70	5.06	0.560	9.113	0.666	9.667
TW-156.75M-206	20.60	5.03	0.558	9.089	0.665	9.652

STC (Standard Testing Conditions):1000W/m<sup>2</sup>, AM1.5, 25°C

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

### Back Efficiency Distribution

Efficiency Code	Efficiency (%)	P <sub>mpp</sub> (W)	U <sub>mpp</sub> (V)	I <sub>mpp</sub> (A)	U <sub>oc</sub> (V)	I <sub>sc</sub> (A)
TW-156.75M-151	>16.00%	3.93	0.565	6.959	0.665	7.353
TW-156.75M-150	15.50%-16.00%	3.86	0.564	6.833	0.664	7.219
TW-156.75M-149	15.00%-15.50%	3.76	0.563	6.678	0.663	7.052
TW-156.75M-148	<15.00%	3.61	0.560	6.420	0.660	6.757

STC (Standard Testing Conditions):1000W/m<sup>2</sup>, AM1.5, 25°C

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