

PHYSICAL CHARACTERISTICS	
Format	156mm×156mm±0.5mm
Diagonal	220mm±0.5mm
Thickness	200±20 μm
Front(-)	Blue reflecting coating(silicon nitride); 1.9mm busbars(silver);
Back(+)	surface field(Aluminum); 2.0mm wide soldering pads;

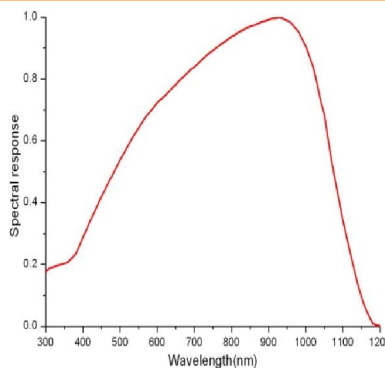
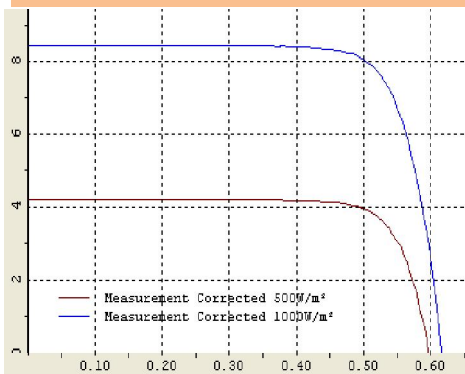
PHYSICAL CHARACTERISTICS	
Temperature coefficient of $I_{sc}(\alpha)$	0.053%/K
Temperature coefficient of $V_{oc}(\beta)$	-0.368%/K
Temperature coefficient of $P_{mpp}(\gamma)$	-0.531%/K

ELECTRICAL CHARACTERISTICS												
Efficiency	[%]	15.2	15.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2
$P_{mpp}$	[W]	3.70	3.75	3.8	3.85	3.89	3.94	3.99	4.04	4.09	4.14	4.19
$I_{sc}$	[A]	8.01	8.14	8.19	8.22	8.27	8.32	8.37	8.43	8.47	8.51	8.61
$V_{oc}$	[V]	606	608.2	609.6	609.2	611.4	614.5	616.8	620	622.8	624.6	626.6
$I_{mpp}$	[A]	7.49	7.59	7.66	7.71	7.76	7.81	7.86	7.92	7.97	8.01	8.11
$U_{mpp}$	[mV]	498.7	500	500.7	503.2	505.3	508	510.2	513	515.9	518.2	518.2
FF	[%]	76.27	75.79	76.16	77.03	77.02	77.11	77.33	77.34	77.58	77.93	77.71

\*The above data are presently measured average.

\*Data under standard testing condition (STC):1000W/m<sup>2</sup>&500W/m<sup>2</sup>,AM1.5,25°C.

**I-V CURVE                      SPECTRAL RESPONSE                      INTENSITY DEPENDENCE**



Intensity (W/m <sup>2</sup> )	$I_{sc}$ (A)	$V_{oc}$ (V)
1000	1.0	1.000
900	0.9	0.995
500	0.5	0.966
300	0.3	0.940
200	0.2	0.919

※ratio of  $V_{oc}$  at reduced intensity to  $V_{oc}(I_{sc})$  at 1000 W/m<sup>2</sup>