Solar Panel Comparison

Manufacturer	Canadian Solar		Canadian Solar Inc.	Mitsubishi Electric	Sharp		Trina Solar		Yingli Green Energy
Model	**CS5P-230M**	**CS6P-230P**	**CS6P-230PX**	**PV-UJ230GA6**	**ND-U230C1**	**NU-U230F3**	**TSM-230DA05**	**TSM-230PA05**	**YL230P-29b**
STC Rated Power Output (W)	230	230	230	230	230	230	230	230	230
Voltage at Rated Power (V)	47.50	29.80	29.60	30.20	30.30	30.00	30.00	29.80	29.50
Current at Rated Power (A)	4.84	7.71	7.78	7.62	7.60	7.67	7.66	7.78	7.80
Open Circuit Voltage (V)	58.80	36.80	36.80	36.60	37.00	37.00	37.00	37.00	37.00
Short Circuit Current (A)	5.25	8.34	8.34	8.35	8.24	8.40	8.18	8.26	8.40
Fill Factor	74.5%	74.9%	74.9%	75.3%	75.4%	74.0%	76.0%	75.3%	74.0%
Panel Efficiency	13.5%	14.3%	14.3%	14.0%	14.1%	14.1%	14.1%	14.1%	14.1%
Power Tolerance	0.00% ~ 2.10%	0.00% ~ 2.10%	0.00% ~ 2.10%	-3.00% ~ 3.00%	-5.00% ~ 10.00%	-5.00% ~ 10.00%	0.00% ~ 3.00%	0.00% ~ 3.00%	-3.00% ~ 3.00%
Power Temperature Coefficiency (%/°C)	-0.45	-0.45	-0.43	-0.45	-0.49	-0.49	-0.45	-0.43	-0.45
Temperature Coefficiency VOC (%/°C)	-0.35	-0.35	-0.34	-0.34	-0.36	-0.35	-0.35	-0.32	-0.37
Temperature Coefficiency ISC (%/°C)	0.060	0.060	0.065	0.054	0.053	0.053	0.050	0.047	0.006
NOCT (°C)	45.0	45.0	45.0	47.5	47.5	47.5	47.0	46.0	46.0
Panel Height (mm)	1602	1638	1638	1658	1640	1640	1650	1650	1650
Panel Width (mm)	1061	982	982	994	994	994	992	992	990
Panel Depth (mm)	40	40	40	46	58	58	46	40	50
Panel Area (M^2)	1.70	1.61	1.61	1.65	1.63	1.63	1.64	1.64	1.63
Panel Weight (kg)	20.0	20.0	22.0	20.0	20.0	20.0	19.5	19.5	19.8
Material/Output Warranty (Years)	6/10/25	6/12/25	6/12/25	5/10/25	5/10/25	5/10/25	5/10/25	5/12/25	5/10/25
PTC Power Output (W)	209.4	211.0	211.0	207.8	203.1	207.1	202.7	208.9	206.6
PTC/STC Ratio	91.0%	91.7%	91.7%	90.3%	88.3%	90.0%	88.1%	90.8%	89.8%
Estimated Power At NOCT (W)	167.4	167.4	168.2	165.3	163.7	163.7	165.8	167.4	166.6

- PTC Power: The output power under PVUSA Test Conditions. 1000 W/M2 solar irradiance, 20°C ambient air temperature, and 1m/s wind speed at 10 meters above ground level.
- Estimated Power At NOCT: The estimated output power under the NOCT conditions: 800 W/M2 solar irradiance, 20°C ambient air temperature, and 1m/s wind speed.
- The report is generated from the solar panel database at www.posharp.com. Contact Posharp at 888-429-7989 for special services, including solar panel supplies