

# Solar Panel Comparison

Manufacturer	Schott Solar	Sharp			Siliken S.A.			SolarWorld AG			Solon SE		Suniva Inc.	SunPower		
Model	SCHOTT POLY 230	ND-U230C1	ND-V230A1	NU-U230F3	SLK60P6L BLK/BLK 230Wp	SLK60P6L BLK/WHT 230Wp	SLK60P6L SLV/WHT 230Wp	SW230 mono	SW230 Mono Black	SW230 poly	SOLON Black 230/15/01 230Wp	SOLON Black 230/6+/01 230Wp	ART230-60-3-1	SPR-230E-WHT-D	SPR-230-WHT	SPR-230-WHT-U
STC Rated Power Output (W)	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230
Voltage at Rated Power (V)	30.00	30.30	30.30	30.00	29.50	29.50	29.50	30.00	30.00	29.80	29.20	29.20	30.90	40.50	41.00	41.00
Current at Rated Power (A)	7.66	7.60	7.60	7.67	7.79	7.79	7.79	7.68	7.68	7.72	7.88	7.88	7.48	5.68	5.61	5.61
Open Circuit Voltage (V)	36.90	37.00	37.00	37.00	36.90	36.90	36.90	37.40	37.40	36.80	36.22	36.22	37.00	48.20	48.70	48.70
Short Circuit Current (A)	8.33	8.24	8.24	8.40	8.32	8.32	8.32	8.16	8.16	8.25	8.38	8.38	8.26	6.05	5.99	5.99
Fill Factor	74.8%	75.4%	75.4%	74.0%	74.9%	74.9%	74.9%	75.4%	75.4%	75.8%	75.8%	75.8%	75.3%	78.9%	78.8%	78.8%
Panel Efficiency	13.7%	14.1%	14.1%	14.1%	14.2%	14.2%	14.2%	13.7%	13.7%	13.7%	14.0%	14.0%	14.2%	18.5%	18.5%	18.5%
Power Tolerance	0.00% ~ 2.00%	-5.00% ~ 10.00%	-5.00% ~ 10.00%	-5.00% ~ 10.00%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	0.00% ~ 0.50%	0.00% ~ 0.50%	0.00% ~ 0.50%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	-2.00% ~ 2.00%	-5.00% ~ 5.00%	-5.00% ~ 5.00%	-5.00% ~ 5.00%
Power Temperature Coefficiency (%/°C)	-0.45	-0.49	-0.49	-0.49	-0.43	-0.43	-0.43	-0.45	-0.45	-0.48	-0.47	-0.47	-0.46	-0.37	-0.38	-0.39
Temperature Coefficiency VOC (%/°C)	-0.33	-0.36	-0.36	-0.35	-0.36	-0.36	-0.36	-0.30	-0.33	-0.34	-0.36	-0.36	-0.33	-0.29	-0.27	-0.29
Temperature Coefficiency ISC (%/°C)	0.030	0.053	0.053	0.053	0.062	0.056	0.062	0.040	0.042	0.034	0.040	0.040	0.036	0.050	0.058	0.043
NOCT (°C)	47.2	47.5	47.5	47.5	49.0	49.0	49.0	46.0	47.0	46.0	48.0	48.0	46.0	51.0	45.0	48.0
Panel Height (mm)	1685	1640	1640	1640	1640	1640	1640	1675	1675	1675	1640	1640	1653	1559	1559	1559
Panel Width (mm)	993	994	994	994	990	990	990	1001	1001	1001	1000	1000	982	798	798	798
Panel Depth (mm)	50	58	46	58	40	40	40	31	31	31	42	42	46	46	46	46
Panel Area (M^2)	1.67	1.63	1.63	1.63	1.62	1.62	1.62	1.68	1.68	1.68	1.64	1.64	1.62	1.24	1.24	1.24
Panel Weight (kg)	23.0	20.0	20.0	20.0	19.0	19.0	19.0	21.2	22.0	22.0	23.5	23.5	18.7	15.0	15.0	15.0
Material/Output Warranty (Years)	5/10/25	5/10/25	5/10/25	5/10/25	10/10/25	10/10/25	10/10/25	5/10/25	5/10/25	5/10/25	5/10/25	5/10/25	5/12/25	10/12/25	10/12/25	10/12/25
PTC Power Output (W)	207.7	203.1	203.1	207.1	204.4	202.0	206.1	205.8	205.0	205.2	196.2	198.9		207.6	209.5	209.5
PTC/STC Ratio	90.3%	88.3%	88.3%	90.0%	88.9%	87.8%	89.6%	89.5%	89.1%	89.2%	85.3%	86.5%		90.3%	91.1%	91.1%
Estimated Power At NOCT (W)	165.6	163.7	163.9	163.7	165.0	165.0	165.0	166.6	165.8	165.5	164.1	164.1	166.2	166.3	170.0	167.5

- 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](http://www.posharp.com). Contact Posharp at 888-429-7989 for special services, including solar panel supplies