

# Solar Panel Comparison

Manufacturer	Evergreen Solar		Schott Solar		Sharp	Siliken S.A.				SolarWorld AG	SunPower			
Model	ES-A-210-fa2	ES-A-210-fa3	SCHOTT POLY 217	SCHOTT POLY 220	ND-216UC1	SLK60P6L BLK/BLK 215Wp	SLK60P6L BLK/BLK 220Wp	SLK60P6L BLK/WHT 215Wp	SLK60P6L SLV/WHT 215Wp	SW220 Mono Black	SPR-215-WHT	SPR-217-WHT-U	SPR-220-BLK-U	SPR-220-WHT-U
STC Rated Power Output (W)	210	210	217	220	216	215	220	215	215	220	215	217	220	220
Voltage at Rated Power (V)	18.30	18.30	29.60	29.70	28.90	29.00	29.20	29.00	29.00	29.40	39.80	39.80	41.00	39.80
Current at Rated Power (A)	11.48	11.48	7.33	7.41	7.48	7.41	7.54	7.41	7.41	7.50	5.40	5.40	5.37	5.53
Open Circuit Voltage (V)	22.80	22.80	36.40	36.50	36.50	36.60	36.70	36.60	36.60	37.20	48.30	48.30	48.60	48.30
Short Circuit Current (A)	12.11	12.11	8.10	8.15	8.10	8.02	8.10	8.02	8.02	8.10	5.80	5.80	5.75	5.95
Fill Factor	76.1%	76.1%	73.6%	74.0%	73.1%	73.2%	74.0%	73.2%	73.2%	73.0%	76.7%	77.5%	78.7%	76.6%
Panel Efficiency	13.4%	13.4%	12.6%	13.1%	13.3%	13.2%	13.6%	13.2%	13.2%	13.1%	17.3%	17.4%	17.7%	17.7%
Power Tolerance	2.50% ~ 0.00%	0.00% ~ 2.50%	-4.00% ~ 4.00%	0.00% ~ 2.00%	-5.00% ~ 10.00%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	-3.00% ~ 3.00%	0.00% ~ 0.50%	-5.00% ~ 5.00%	-5.00% ~ 5.00%	-5.00% ~ 5.00%	-5.00% ~ 5.00%
Power Temperature Coefficiency (%/°C)		-0.43		-0.45	-0.49	-0.43	-0.43	-0.43	-0.43	-0.45	-0.38	-0.39	-0.41	-0.39
Temperature Coefficiency VOC (%/°C)		-0.31	-0.38	-0.33	-0.36	-0.36	-0.36	-0.36	-0.36	-0.33	-0.27	-0.29	-0.30	-0.29
Temperature Coefficiency ISC (%/°C)		0.050	0.100	0.030	0.053	0.062	0.062	0.056	0.062	0.042	0.058	0.043	0.045	0.043
NOCT (°C)		45.0		47.2	47.5	49.0	49.0	49.0	49.0	47.0	45.0	48.0	49.0	48.0
Panel Height (mm)	1650	1650	1685	1685	1640	1640	1640	1640	1640	1675	1559	1559	1559	1559
Panel Width (mm)	951	951	810	993	994	990	990	990	990	1001	798	798	798	798
Panel Depth (mm)	46	40	50	50	58	40	40	40	40	31	46	46	46	46
Panel Area (M^2)	1.57	1.57	1.36	1.67	1.63	1.62	1.62	1.62	1.62	1.68	1.24	1.24	1.24	1.24
Panel Weight (kg)	18.6	18.6	19.2	23.0	20.0	19.0	19.0	19.0	19.0	22.0	15.0	15.0	15.0	15.0
Material/Output Warranty (Years)		5/10/25		5/10/25	5/10/25	10/10/25	10/10/25	10/10/25	10/10/25	5/10/25	10/12/25	10/12/25	10/12/25	10/12/25
PTC Power Output (W)	190.0	190.0		198.5	190.4	191.8	196.4	191.8	192.4	195.9	195.5	197.4	198.2	200.2
PTC/STC Ratio	90.5%	90.5%		90.2%	88.1%	89.2%	89.3%	89.2%	89.5%	89.0%	90.9%	91.0%	90.1%	91.0%
Estimated Power At NOCT (W)		153.6		158.4	153.7	154.2	157.8	154.2	154.2	158.6	158.9	158.0	158.7	160.2

- 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