

Manufacturer	Model	Cell Type	Power @ STC (W)	Power @ PTC (W)	Power Tolerance (%)	Power Per Sq. Ft. (W)	Module Efficiency (%)	Max. Power Voltage (Vmp)	Max. Power Current (Imp)
Evergreen Solar www.evergreensolar.com	ES-C-110-fa2	Ribbon	110	99.1	+5/-5	9.9	10.6	16.8	6.57
	ES-C-115-fa4		115	103.7		10.3	11.1	17.9	6.42
	ES-C-120-fa2		120	108.3		10.8	11.6	17.3	6.95
	ES-C-125-fa4		125	112.9		11.2	12.1	18.4	6.81
	ES-B-180-fa1/fb1		180	154.6	+3.4/-2	11.2	12.0	17.1	10.53
	ES-B-190-fa1/fb1		190	163.4	+2.6/-2	11.8	12.7	17.4	10.92
	ES-B-195-fa1/fb1		195	167.9	+2.6/-0	12.1	13.1	17.6	11.08
	ES-A-200-fa3		200	180.7	+2.5/-0	11.8	12.7	18.1	11.05
	ES-A-205-fa3		205	185.4	+2.4/-0	12.1	13.1	18.2	11.27
	ES-A-210-fa3		210	190.0		12.4	13.4	18.3	11.48

GE Energy www.gepower.com	GEPVp-200-M	Poly	200	173.1	+/-5	12.8	13.9	26.3	7.60
	GEPVp-205-M		205	177.6		13.1	14.2	27.2	7.60

Kaneka www.pv.kaneka.co.jp	G-SA060	a-Si	60	57	+10/-5	5.9	6.3	67	0.9
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Kyocera www.kyocerasolar.com	KD130GX-LP	Poly	130	114.8	+/-3.8	12.0	12.9	17.7	7.39
	KD135GX-LP		135	119.4	+/-3.7	12.5	13.4	17.7	7.63
	KD135GX-LPU		135	119.4		14.0	13.4	17.7	7.63
	KD185GX-LPU		185	162.5	+/-2.7	11.6	13.9	23.6	7.84
	KD205GX-LPU		205	180.0	+2.4/-0	12.8	13.8	26.6	7.71
	KD210GX-LPU		210	184.6	+2.3/-0	13.1	14.1	26.6	7.90
	KD215GX-LPU		215	189.1		13.4	14.4	26.6	8.09

Lumos www.lumosolar.com	LS 185	Mono	185	165.6	+/- 3	13.5	14.5	37.1	5.01
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Mitsubishi www.mitsubishielectricsolar.com	PV-EE120MF5N	Poly	120	108.7	+10/-5	11.1	11.9	17.2	6.99
	PV-EE125MF5N		125	112.4		11.5	12.4	17.3	7.23
	PV-EE130MF5N		130	117.0		12.0	12.9	17.4	7.47
	PV-UD175MF5		175	157.0	+/-3	11.8	12.7	23.9	7.32
	PV-UD180MF5		180	161.6		12.1	13.0	24.2	7.45
	PV-UD185MF5		185	166.2		12.4	13.4	24.4	7.58
	PV-UD190MF5		190	169.8		12.8	13.7	24.7	7.71

NingBo Solar www.nbsolar.com	TDB125x125-72-P 150W	Mono	150	133.2	+/-5	10.9	11.8	35.2	4.26
	TDB125x125-72-P 155W		155	137.7		11.3	12.2	35.4	4.38
	TDB125x125-72-P 160W		160	142.3		11.7	12.5	35.6	4.50
	TDB125x125-72-P 165W		165	146.8		12.0	12.9	35.8	4.61
	TDB125x125-72-P 170W		170	151.4		12.4	13.3	36.0	4.72
	TDB125x125-72-P 175W		175	155.9		12.7	13.7	36.2	4.84
	TDB125x125-72-P 180W		180	160.5		13.1	14.1	36.4	4.95

Pevafera www.pevafera-america.com	IP-VA 180	Mono	180	159.2	+3/-2	13.03	14.1	35.3	4.83
	IP-VAP210	Poly	210	183.7		12.02	13.0	27.47	7.58
	IP-VAP230		230	201.0		13.17	14.2	27.66	7.72

REC www.recgroup.com	REC205AE-US	Poly	205	178.2	+/-3	11.5	12.4	27.2	7.60
	REC210AE-US		210	182.7		11.8	12.7	27.6	7.60
	REC215AE-US		215	187.2		12.1	13.0	28.0	7.70
	REC220AE-US		220	191.7		12.4	13.3	28.4	7.80
	REC225AE-US		225	196.2		12.7	13.6	28.8	7.80
	REC230AE-US		230	200.7		12.9	13.9	29.1	7.90

Sanyo www.sanyo.com/solar	HIT-190BA19	Mono, a-Si	190	171.2	+10/-0	15.2	16.4	54.8	3.47
	HIT-186DA3 ¹		186	172.6		14.2 ² /18.2 ³	15.3 ² /19.6 ³	54.8 ² /55.1 ³	3.40 ² /4.32 ³
	HIT-190DA3 ¹		190	176.8		14.6 ² /18.6 ³	15.7 ² /20.0 ³	55.3 ² /55.6 ³	3.44 ² /4.37 ³
	HIT-195DA3 ¹		195	181.1		14.9 ² /19.1 ³	16.1 ² /20.5 ³	55.8 ² /56.1 ³	3.50 ² /4.45 ³
	HIT-195BA19		195	179.8		15.6	16.8	55.3	3.53
	HIT-200BA19		200	184.5		16.0	17.2	55.8	3.59
	HIT-205BA19		205	185.1		16.4	17.7	56.7	3.62
	HIT-205NKHA1		205	190.2		15.1	16.3	40.7	5.05
	HIT-210NKHA1		210	194.9		15.5	16.7	41.3	5.09
	HIT-215NKHA1		215	199.6		15.9	17.1	42.0	5.13

¹ Bifacial module ² At STC ³ At up to 30% backside irradiance contribution

Open-Circuit Voltage (Voc)	Short-Circuit Current (Isc)	Pmp Temp. Coeff. (%/°C)	Voc Temp. Coeff. (%/°C)	Isc Temp. Coeff. (%/°C)	Nominal Operating Cell Temp. (°C)	Series Fuse Rating (A)	Connector Type	Frame Color	Back-Sheet Color	Length (In.)	Width (In.)	Depth (In.)	Weight (Lbs.)	Materials Warranty (Yrs.)	Power Warranty (Yrs.) 90%/80%
20.9	7.33	-0.43	-0.31	0.05	45	15	J-Box	Silver	White	62.40	25.67	1.60	27.00	5	10/25
22.3	7.15														
21.3	7.62														
22.6	7.37														
21.3	11.64	-0.49	-0.34	0.06	46	20	MC4	Black	White	61.80	37.50	40.10	5	10/25	
21.5	11.95														
21.7	12.11														
22.6	11.80														
22.7	11.93	-0.43	-0.31	0.05	45					65.00	1.80	41.00	5	10/25	
22.8	12.11														
32.9	8.10	-0.50	-0.36	0.07	50	15	Tyco	Silver	White	58.50	38.60	1.40	39.00	5	10/20
33.0	8.20														
91.8	1.19	-0.26	-0.31	DNR	45	7	MC	Black	N/A	37.79	38.97	1.57	30.2	5	25
22.1	8.06	-0.48			47	15	MC4	Black	White	59.10	26.30	1.40	28.70	5	10/20
22.1	8.37														
22.1	8.37														
29.5	8.58	-0.49	-0.36	0.05	48	15	MC4	Black	White	59.10	39.00	1.81	36.30	5	10/20
33.2	8.36														
33.2	8.58														
33.2	8.78														
45.4	5.27	-0.47	-0.38	0.10	45	10	MC4	Black / Silver	White	62.20	31.80	1.40	34.10	5	10/25
21.6	7.75	-0.45	-0.34	0.05	48	15	MC4	Black	White	58.90	26.50	1.81	29.80	5	10/25
21.8	7.90														
21.9	8.05														
30.2	7.93														
30.4	8.03														
30.6	8.13														
30.8	8.23														
43.4	4.92	-0.40	-0.35	0.03	47	10	MC4	Silver	White	62.20	31.80	1.80	35.27	5	10/25
43.6	4.98														
43.8	5.04														
44.0	5.10														
44.2	5.16														
44.4	5.22														
44.6	5.28														
44.9	5.19	-0.50	-0.37	0.106	47	10	Tyco	Silver, others avail.	White, others avail.	62.72	31.61	1.81	41.14	5	12/25
36.9	8.10			0.135	48					64.60	38.94	1.91	51.70		
36.8	8.32			-0.36	49										
36.0	8.30	-0.50	-0.37	0.11	49	15	MC4	Silver / Black	White	65.55	39.02	1.69	48.50	5	10/25
36.1															
36.3															
36.4															
36.6															
36.8															
67.5	3.75	-0.30			45	15	MC4	Black	White	51.90	34.60	1.80	33.07	5	10/20
67.5 ² /68.2 ³	3.68 ² /4.78 ³				47		MC3	Silver	None	53.20	35.35	2.36	50.70	2	
68.1 ² /68.8 ³	3.70 ² /4.81 ³				45		MC4	Black	White	51.90	34.60	1.80	33.07	5	
68.7 ² /69.5 ³	3.73 ² /4.85 ³	-0.29	-0.25	0.02	46										
68.1	3.79	-0.30													
68.7	3.83	-0.29													
68.8	3.84														
50.3	5.54	-0.34	-0.28	0.04	46					62.20	31.40	1.80	35.30	5	10/20
50.9	5.57														
51.6	5.61														