

TECHNICAL SPECIFICATIONS OF SOLAR PHOTO VOLTAIC (MONO/MULTI) CRYSTALLINE MODULES

Energia Module Range	335 Wp to 300 Wp								295 Wp - 270 Wp						260 Wp - 250 Wp						200 Wp						195 Wp - 170 Wp															
Model Name	E335	E330	E325	E320	E315	E310	E305	E300	E295	E290	E285	E280	E275	E270	E260	E255	E250	E200				E195			E190			E185			E180			E175			E170					
Pmax (W)	335	330	325	320	315	310	305	300	295	290	285	280	275	270	260	260	255	255	250	250	200	200	200	200	195	195	195	190	190	190	185	185	185	180	180	180	175	175	175	170	170	170
Voc (V)	46.26	46.24	46.21	46.18	46.15	46.08	45.94	45.65	44.55	44.32	43.77	43.62	44.72	44.49	44.77	37.84	44.66	37.71	44.44	37.55	29.28	43.65	32.65	22.50	44.65	32.55	23.10	44.40	33.40	23.00	44.30	33.30	22.90	44.15	33.20	22.80	44.00	33.10	22.70	43.90	33.00	22.60
Isc (A)	9.4	9.3	9.18	9.06	8.91	8.76	8.65	8.56	8.69	8.61	8.56	8.44	8.08	7.98	7.60	8.94	7.52	8.81	7.43	8.71	8.98	6.08	8.10	11.85	5.69	7.99	11.26	5.58	7.59	11.02	5.47	7.41	10.77	5.35	7.23	10.53	5.30	7.05	10.28	5.16	6.87	10.29
Vmax (V)	37.81	37.62	37.41	37.20	36.92	36.86	36.75	36.52	37.21	36.88	36.79	36.75	37.41	37.11	36.90	31.00	36.80	30.77	36.71	30.58	24.48	36.21	26.74	18.40	37.57	26.64	18.50	37.41	27.40	18.40	37.30	27.30	18.30	36.96	27.20	18.20	36.80	27.10	18.10	36.70	27.00	18.00
I _{max} (A)	8.86	8.77	8.69	8.61	8.55	8.41	8.30	8.22	7.93	7.87	7.75	7.62	7.35	7.28	7.04	8.39	6.93	8.29	6.82	8.18	8.17	5.53	7.48	10.87	5.19	7.32	10.54	5.08	6.93	10.33	4.96	6.78	10.11	4.87	6.62	9.89	4.76	6.46	9.67	4.63	6.30	9.44
Module Efficiency (%)	17.27	17	16.75	16.49	16.23	15.98	15.72	15.46	15.20	14.95	14.69	14.43	14.17	14.00	15.96	15.88	15.66	15.66	15.35	15.35	15.25	16.03	16.03	16.03	15.63	15.63	15.63	15.23	15.23	15.23	14.83	14.83	14.83	14.43	14.43	14.43	14.03	14.03	14.03	13.63	13.63	13.63
Dimension (L X W X H) (mm)	1960 x 990 x 40								1960 x 990 x 40						1645 x 990 x 35						1325 x 990 x 35			1260 x 990 x 35			1260 x 990 x 35															
Mounting (mm)	1140								1140						1125						600			600			600															
Weight (Kg.)	23.00								23.00						21.00						13.85			13.00			13.00															
No. Of Cells	72								72						72						48			72			72															
No. of Bypass Diode	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cells Configuration	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	12x6	10x6	10x6	12x6	10x6	12x6	10x6	8x6	12x6	9x6	12x6	12x6	9x6	12x6	12x6	9x6	12x6	12x6	9x6	12x6	12x6	9x6	12x6	12x6	9x6	12x6	12x6	9x6	12x6

Energia Module Range	160 Wp - 120 Wp						110 Wp - 90 Wp						85 Wp - 74 Wp						70 Wp - 20 Wp						15 Wp - 5 Wp														
Model Name	E160	E150	E145	E140	E125	E120	E110	E105	E100	E095	E090	E085	E080	E075	E074	E070	E065	E060	E050	E045	E040	E037	E030			E020			E015	E010	E005	E005							
Pmax (W)	160	150	145	140	125	120	110	105	100	95	90	85	80	75	74	70	65	60	50	45	40	37	30			20			15	10	5	5							
Voc (V)	22.60	22.58	22.29	22.25	21.65	21.54	22.78	22.35	21.84	21.74	21.64	21.54	22.24	22.20	22.17	22.15	22.13	21.66	21.77	21.67	21.95	21.90	21.62			21.44			21.34	21.30	21.00	10.98							
Isc (A)	9.25	8.70	8.54	8.30	7.60	7.45	6.40	6.22	6.11	5.83	5.55	5.26	4.76	4.51	4.45	4.21	3.85	3.67	3.04	2.78	2.44	2.25	1.88			1.27			0.94	0.63	0.32	0.61							
Vmax (V)	17.85	17.85	17.79	17.74	17.90	17.45	18.40	18.20	18.00	18.15	18.10	18.00	18.09	18.05	18.02	18.00	18.12	18.04	17.89	17.75	17.84	17.80	17.34			17.15			17.10	17.05	17.00	9.18							
I _{max} (A)	8.96	8.41	8.16	7.90	6.99	6.88	5.99	5.78	5.57	5.23	4.97	4.72	4.43	4.16	4.11	3.89	3.60	3.33	2.80	2.54	2.25	2.08	1.74			1.18			0.88	0.59	0.29	0.55							
Module Efficiency (%)	16.17	15.14	14.63	14.13	15.40	14.80	16.80	16.02	15.27	14.50	13.74	16.38	15.42	14.46	14.27	15.04	13.96	12.89 / 14.66	12.23	12.30	14.15	13.09	11.28			10.75			6.94	9.52	9.32	9.32							
Dimension (L X W X H) (mm)	1490 x 665 x 35				1145 x 665 x 35		985 x 665 x 35						780 x 665 x 30						700 x 665 x 25 / 615 x 665 x 30			520 x 665 x 30			425 x 665 x 30			400 x 665 x 25 / 340 x 665 x 25			325 x 665 x 18 / 280 x 665 x 18			300 x 350 x 18		290 x 185 x 18			
Mounting (mm)	600				600		600						500						430			430			430			365			365			365		145		145	
Weight (Kg.)	11.50				10.75		8.20						6.40						5.50 / 4.80			4.00			3.20			2.75			2.45 / 2.0			1.45		0.50		0.60	
No. Of Cells	72	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36			36			36	36	36	18							
No. of Bypass Diode	2	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			NIL			NIL	NIL	NIL	NIL							
Cells Configuration	18x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4	9x4			9x4			9x4	9x4	18x2	9x2							

Electrical Parameter Tolerance

NOCT
 STC
 Max. System Voltage
 Temp Co efficient of Pmax (% /°C)
 Temp Co efficient of Voc (% /°C)
 Temp Co efficient of Isc (% /°C)
 Warranty

For Pmax 0 to +4.99 Wp & Remaining all Electrical Parameters ±3%
 45°C±2°C (irradiance 800 w/m², ambient temperature 20°C, wind speed 1 m/sec)
 1000 W/m², 25°C, AM 1.5
 1000 V (TUV)
 -0.4048
 -0.2391
 -0.07
 1 Years for limited product warranty, 12 years limited warranty on 90% power output and 25 years on 80% power output for Energia 10Wp to Energia 285 Wp, IEC 61215, OEC 61730 & MNRE Channel partner.

Certification

NOTE:

- CAUTION :** Read Safety and Installation instructions before using the products.
- Refer to **Modern Solar** warranty document for terms and conditions.
- Specifications included in this data sheet are subject to be changed without notice.
- Electrical data without guarantee.