

Global Solar Energy Flexible/Foldable Module Characteristics Chart

Type	Sunling	Sunling	Sunling	P3	P3
Pmax	6.5 Watt	12 Watt	25 Watt	30 Watt	62 Watt
Rating tolerance	+/- 15%	+/- 15%	+/- 15%	+/- 15%	+/- 15%
Origin	U.S.A.	U.S.A.	U.S.A.	U.S.A.	U.S.A.
Module efficiency	7.80%	6.50%	6.20%	6.30%	7.50%
Cell manufacturer	Global Solar Energy	Global Solar Energy	Global Solar Energy	Global Solar Energy	Global Solar Energy
Cell type	CIGS	CIGS	CIGS	CIGS	CIGS
Cell shape	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular
Cell efficiency	9.70%	9.70%	8.50%	9.70%	9.80%
Cells per Module	40 1/4-cells	40 1/2-cells	48 Full Cells	60 Full Cells	108 Full Cells
Price	\$99.00 MSRP	\$195.00 MSRP	\$399.00 MSRP	\$539.00 MSRP	\$959.00 MSRP
Delivery time	3-5 days	3-5 days	3-5 days	3-5 Days	3-5 Days
Power guarantee	80%	80%	80%	80%	80%
Product guarantee	1 Year limited	1 Year limited	1 Year limited	2 Year limited	2 Year limited
Distribution	Worldwide	Worldwide	Worldwide	Worldwide	Worldwide
Internet	www.globalsolarenergy.com	www.globalsolarenergy.com	www.globalsolarenergy.com	www.globalsolarenergy.com	www.globalsolarenergy.com
Produced from	2005	2005	2005	2002	2002
Produced until	currently	currently	currently	currently	currently
Approvals	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS, Mil-Std-810	CE, RoHS, Mil-Std-810
Length unfolded	29.5" (749 mm)	29.5" (749 mm)	41.26" (1048 mm)	44.02" (1118 mm)	52.50" (1333mm)
Width unfolded	9" (229 mm)	18" (457 mm)	21.50" (546 mm)	21" (533)	30" (762 mm)
Thickness unfolded	no frame: .03" (0.762mm)	no frame: .03" (0.762mm)	no frame: .03" (0.762mm)	no Frame: .10" (2.5 mm)	no Frame: .10" (2.5 mm)
Thickness with box	3.15" (80 mm) includes cable accessories	3.15" (80 mm) includes cable accessories	3.15" (80 mm) includes cable accessories	not applicable	not applicable
Module Folded	5" x 9" (127mm x 229mm)	5" x 9" (127mm x 229mm)	8.5" x 10.5" (216mm x 267mm)	8.5" x 10.5" (216mm x 267mm)	8.5" x 14.5" (216mm x 368)
Thickness Module Folded	.03" (.762mm)	.03" (.762mm)	.03" (.762mm)	.10" (2.5mm)	.10" (2.5mm)
Frame type	n/a: foldable format	n/a: foldable format	n/a: foldable format	n/a: foldable format	n/a: foldable format
Composition	Rip-Stop Nylon	Rip-Stop Nylon	Rip-Stop Nylon	Rip-Stop Nylon	Rip-Stop Nylon
Connection type	plug'n'play adapters	plug'n'play adapters	plug'n'play adapters	Optional: plug'n'play adapters	Optional: plug'n'play adapters
Weight	7 ounces or 200 grams	11 ounces or 312 grams	1.63lbs Or 737 grams	2.2lbs or 1007 grams	3.44lbs or 1560 grams
Voc	15.6 V	15.6 V	25.0 V	28.0 V	28/56 V
Isc	.5a	1.0a	2.1a	2.2a	4.2a/2.1a
Voc at -10C°	15.6 V	15.6 V	28.4 V	31.8 V	31.8/63.6 V
Vmpp at 70C°	12.8 V	12.8 V	13.5 V	15.6 V	15.6/31.2 V
Coefficient of voltage	-0.49%/C relative to 25C	-0.49%/C relative to 25C	-0.49%/C relative to 25C	-0.49%/C relative to 25C	-0.49%/C relative to 25C
Coefficient of VOC	-0.39%/C relative to 25C	-0.39%/C relative to 25C	-0.39%/C relative to 25C	-0.39%/C relative to 25C	-0.39%/C relative to 25C
Coefficient of current	-0.13%/C relative to 25C	-0.13%/C relative to 25C	-0.13%/C relative to 25C	-0.13%/C relative to 25C	-0.13%/C relative to 25C
Coefficient of power	-0.59%/C relative to 25C	-0.59%/C relative to 25C	-0.59%/C relative to 25C	-0.59%/C relative to 25C	-0.59%/C relative to 25C
NOCT	30 degrees C above ambient	30 degrees C above ambient	30 degrees C above ambient	30 degrees C above ambient	30 degrees C above ambient
Max system voltage EU	12 V	12 V	12 V	12 V	12/24 V
Max system voltage US	12 V	12 V	12 V	12 V	12/24 V
Vmpp at 1000W/m2	14 V	14 V	16.5 V	18.8 V	20.0/40.0 V
Impp at 1000W/m2	.4a	.8a	1.5a	1.6a	3.1/1.6a
Is the module sharp-edged?	No	No	No	No	No
Is the module weather resistant?	Yes	Yes	Yes	Yes	Yes
Is the module break-proof?	Yes	Yes	Yes	Yes	Yes
Is the module flexible?	Yes	Yes	Yes	Yes	Yes

