210W.220W.230W.240W Flex-03M-1.7M CIGS Flexible Solar Panel









FLEX-03M CIGS Flexible Solar Panel 210W.220W.230W.240W

Model No.: 03M-210W, 03M-220W, 03M-230W, 03M-240W

Technology

Our flexible solar panel adopts CIGS technology, which has an aperature efficiency as high as 17%, rivaling that of rigid glass panels.

General production process
We begin with high–grade stainless steel foil and use an advanced semiconductor deposition process, PVD, to produce the most controlled, stable, and powerful flexible stainless steel CIGS cell in the world. Once the cell structure is deposited on the foil, special transparent conductive oxides are applied, and a specialized plastic—cell interconnect mesh—wire system is laminated to the cell, which is in turn protected by special water barrier plastics. The transparent water barrier is key to the longevity of the Flexi module series. The special plastic backsheet has an internal aluminum film to prevent water transmission from eroding the powerful stainless steel CIGS cells.

Benefits:

-Light weight:
Less than 2.4 kg/m(<0.5 lb/ft). Because flexible solar modules are so much lighter than heavy rigid silicon panels mounted with racks, they are best solution for building structures with low dead load and environmental load limitations(such as snow).
The modules are also ideal for other structures, such as autos, trucks, and RVs, that are not constructed to support the weight of traditional solar panels.

-Powerful:
Flex modules are the highest efficiency flexible thin-film CIGS modules in production today, with aperature efficiencies as high as 17%, providing over four times the power generation per kilogram of silicon.

-Easy to install:

Flexible solar modules are peel-and-stick application. This eliminates penetrations into the structure, reducing the chance of leaks.
Peel-and-stick application also allows for installation on surfaces such as autos, trucks and RVs where racks would not feasible, and lowers the balance-of-systems (BOS) costs and complexity when mounting FLEX modules on rooftops.

-Flexible:

FLEX modules conform to curved surfaces, enabling solar power generation on surfaces not suited to traditional rigid silicon panels.

-Resistant to Natural Disasters:

Flexible solar modules are thin (2.5mm) and adhere directly to surfaces, providing excellent wind and seismic resistance.

The modules are also shatterproof, and won't break if struck by debris.

-Reliable:

Flex solar modules' unique redundant interconnect design enables industry—leading reliability.



KEY FEATURES-FLEX Series Modules:

-Record efficiency levels in a flexible form factor

-Low installed weight at less than 2.4 kg/m2(<0.5lb/ft)

-No penetrations, ballast or racking required

-Applicable for high wind load and high seismic hazard areas

-Bypass diodes reduce PV system shading losses

-Directly bonds to many approved surfaces

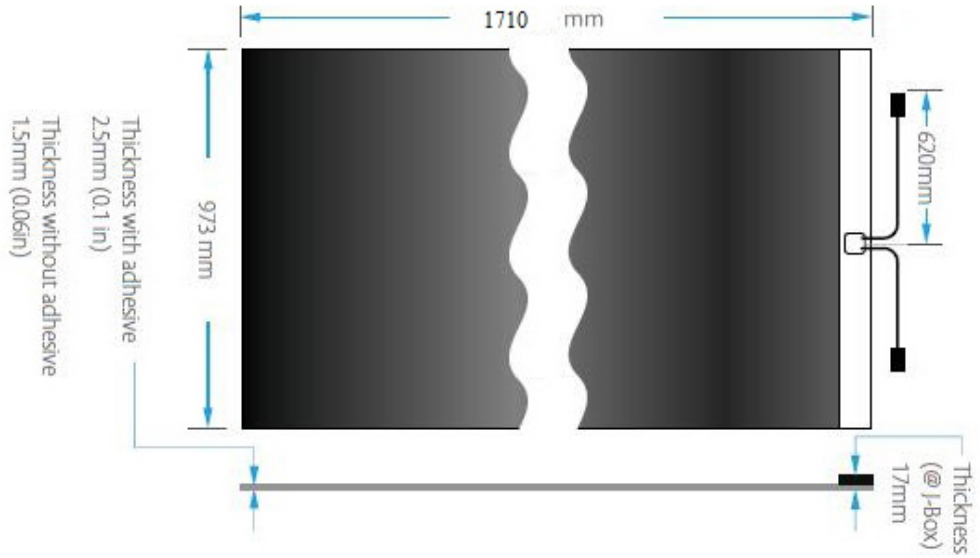
WARRANTY

-5 year workmanship

-10/25 year warranty against power loss

ELECTRICAL AND MECHANICAL DATA:

Capacity rating	**Pmax**	**210W**	**220W**	**230W**	**240W**
Tolerance of Pmax	%	+10 / -0%	+10 / -0%	+10 / -0%	+10 / -0%
Module aperture area efficiency	%	14.2%	14.9%	15.6%	16.3%
Maximum Power Voltage	Vmpp	18.1V	18.8V	19.4V	20.0V
Maximum Power Current	Impp	11.6A	11.8A	11.9A	12.0A
Open circuit voltage	Voc	23.2V	23.7V	24.2V	24.7V
Short circuit current	Isc	14.0A	13.9A	13.7A	13.6A



Model Numbers	FLEX-03M-1.7M SERIES
Length	1710mm
Width	973mm
Thickness, Maximum at J-Box*	17mm
Weight(Module without adhesive)	3.4 kg
Weight(Module with adhesive)	4.0 kg
Weight/Area(Module without adhesive)	2.04 kg/m2
Weight/Area(Module with adhesive)	2.40 kg/m2
Junction Box Type	IP68
Cable connections	Amphenol H4

Cell type	Copper Indium Gallium Diselenide (CIGS)

Download DATA SHEET

Product link：https://www.sinolsolar.com/flex-03m-1-7m-cigs-flexible-solar-panel.html