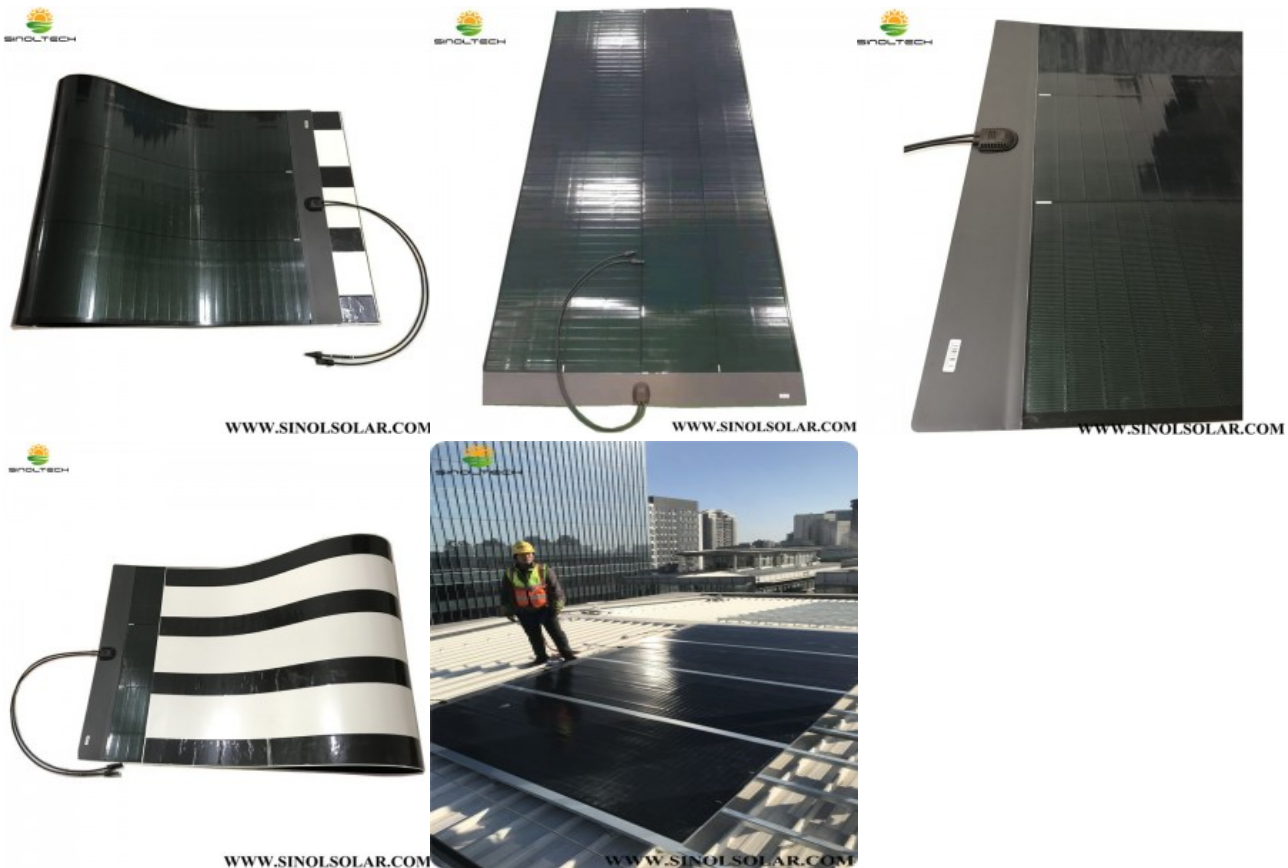


500W FLEX-03W-2.6M CIGS Flexible Solar Panel



FLEX-03W-2.6M CIGS Flexible Solar Panel 500W

Model No.: 03W-2.6M-500W

Technology

Our flexible solar panel adopts CIGS technology, which has an aperture 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 aperture 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 be 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.

MODEL: FLEX-03W-2.6M

Electrical Specifications

Capacity rating	P _{max}	500W
Tolerance of P _{max}	%	+10 / -0%
Module aperture area efficiency	%	16.4%
Maximum Power Voltage	V _{mpp}	62.4V
Maximum Power Current	I _{mpp}	8.03A
Open circuit voltage	V _{oc}	77.2V
Short circuit current	I _{sc}	9.07A

Standard Test Conditions (STC): Cell Temperature at 25° C; Solar irradiance intensity of 1000 W/m²; AM1.5 solar reference spectrum (ASTM E892)

Thermal Characteristics

NOCT	[°C]	48
Temperature Coefficient of P _{MPP}	V _{max}	-0.38 %°C
Temperature Coefficient of V _{OC}	V _{oc}	-0.28 %°C
Temperature Coefficient of I _{SC}	I _{sc}	0.008 %°C

Note: Relative to Standard Test Conditions(STC):
Solar irradiance intensity of 100W/m²;
AM1.5 Solar reference spectrum (ASTM E892)

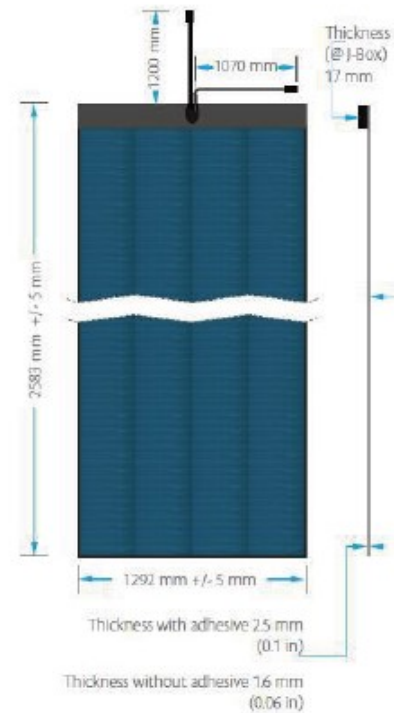
Low-Light Performance

Intensity	Relative Efficiency
1000 W/m ²	100%
500 W/m ²	99%
200 W/m ²	91%

Note: Relative to Standard Test Conditions(STC): Cell Temperature at 25°C; AM1.5 solar reference spectrum(ASTM E892)

Mechanical Specifications

Model Numbers	FLEX-03W-2.6M SERIES
Length	2583mm
Width	1292mm
Thickness, Maximum at J-Box*	17mm
Weight(Module without adhesive)	5.5 kg
Weight(Module with adhesive)	6.6 kg
Weight/Area(Module without adhesive)	1.7 kg/m ²
Weight/Area(Module with adhesive)	2.0 kg/m ²
Junction Box Type	IP68
Cable connections	MC4 Compatible
Cell type	Copper Indium Gallium Diselenide (CIGS)



Operating Conditions

Temperature range	-40 to + 85 °C
Maximum System Voltage	1000 VDC IEC, 600VDC UL
Maximum Series Fuse Rating	10A

Certifications and Warranty

EN 61646, EN 61730, UL 1703
Warranty: 5 years workmanship; (90% @10 yrs; 80% @ 25 yrs) Limited Guarantee
Package: 5 modules per crate, 40 modules per pallet, 320 modules per 20' ISO container, 640 modules per 40' ISO container

Product link : <https://www.sinolsolar.com/flex-03w-2-6m-500w-cigs-flexible-solar-panel.html>