

# Solar Engineered for Today's Membrane Roof Systems

GSHK FLEX-W Series—the world's most powerful lightweight and flexible thin-film solar modules.

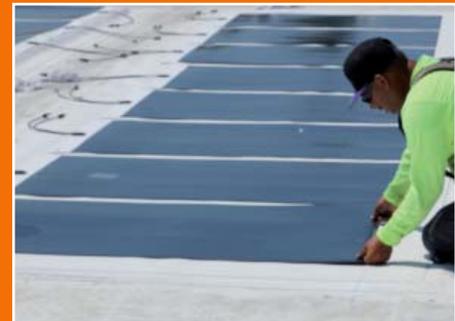


## High Performance Solar Roofing in a Lightweight Format

GSHK FLEX—W modules are designed for low-slope commercial roofs—perfect for today's advanced membrane roof systems. The FLEX modules bond directly onto the membrane roof system, eliminating the need for solar racking, concrete ballasts, and roof penetrations. Integration of the low-profile, thin-film modules onto the membrane roof surface protects against seismic movement and high winds. The GSHK FLEX modules simplify project logistics and reduce labor costs and installation times. The final installed solar solution is lightweight, making it ideal for low-weight-bearing building structures.

## Features and Benefits

- Factory—applied Self—Adhesive—Simple Peel—and—Stick Application
- Aperture Efficiency as High as 17%
- Lightweight—2.0 kg/m<sup>2</sup> (0.4 lb/ft<sup>2</sup>)
- Provides Four Times the Wattage per Kilogram as Silicon
- High Wind Zone Performance
- Low Labor and Balance-of-System (BOS) Costs
- Direct Bonding on Certain Roof Membranes
- Secondary Membrane Panel Option for Older Membrane Roofs



Layout Modules



Clean & Prep Membrane Roof



Peel & Stick Modules to Membrane

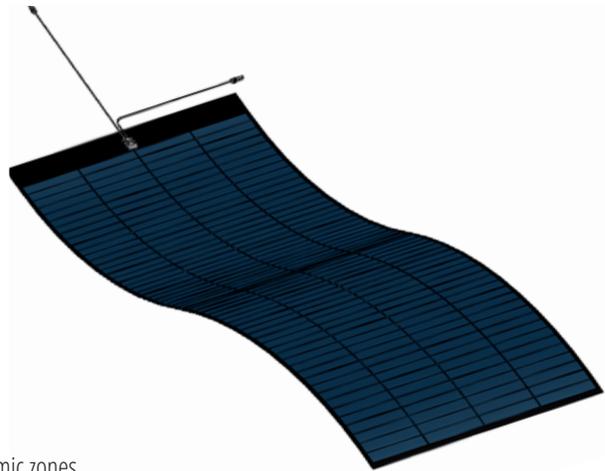
# TECHNICAL INFORMATION

The GSHK FLEX module is a flexible polymer encapsulated thin-film solar module based on GSHK advanced CIGS (Copper Indium Gallium Selenide) technology. The FLEX series modules are the solar industry's highest efficiency flexible CIGS thin-film solar modules on the market today.

Details	Specifications
Product	FLEX—03W Series
Length	2585 mm (101.8 in)
Width	1293 mm (50.9 in)
Module Thickness	2.5 mm (0.1 in)
Weight	6.6 kg (14.6 lb) with adhesive
Weight/Area	2.0 kg/m <sup>2</sup> (0.4 lb/ft <sup>2</sup> ) with adhesive
Junction Box Type	IP68
Cable Connections	MC4 Compatible
Cell Type	Copper Indium Gallium Selenide (CIGS)
Bend Radius	508 mm (20 in) minimum
Warranty*	5 year workmanship; 10/25 year power output
Certifications	UL 1703, IEC 61646, IEC 61730, UL Class A over TPO - slope up to 1", cUL 1703, IEC 62716, Australia CEC, IEC 61701 (Salt Spray)
Packaging Info	10 modules per crate, 40 modules per pallet, 320 modules per 20' ISO container, 640 modules per 40' ISO container

\*Please see full warranty for details.

The GSHK flexible, thin-film cell enables a number of product applications that standard silicon panels cannot offer.



- Low weight
- No ballast or racking
- No module grounding
- Non-penetrating
- Building-integrated PV module
- Designed for high wind and seismic zones

**HIGH EFFICIENCY**  
**LIGHTWEIGHT FORM**



## FLEX—03W Series

FLEX-03 S470W	470 WATTS
FLEX-03 480W	480 WATTS
FLEX-03 490W	490 WATTS
FLEX-03 500W	500 WATTS
FLEX-03 510W	510 WATTS

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