

PowerFLEX™ BIPV The Most Powerful Rooftops on the Planet

Designed specially for rooftops

Integrates with roofing surface

- · No mounting hardware
- · No roof penetrations
- · No wind load

Flexible module

- · Fits all roof types and shapes
- · Durable, non-breakable

Light weight

- · 2.5 kg/m² (0.5 lb/ft²) with adhesive
- · No structural reinforcement required

More energy per roof

High efficiency CIGS

- · 10.5% to 12.6% aperture efficiency
- · 50% more efficient than flexible a-Si

High performance

- · Performs in all light conditions
- · Shade tolerant

Covers entire roof area

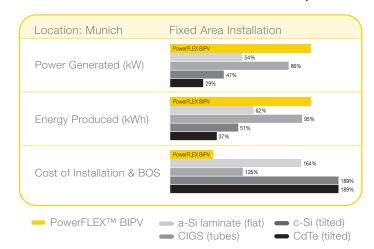
- · Lays flat. No tilt required
- · Minimum module spacing required

Lower installed system costs

Large format module

- · 250-300 Watts
- · 5.74m x 0.49m dimensions
- · 30% to 40% savings in BOS & installation costs

How PowerFLEX™ BIPV compares



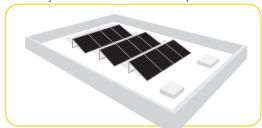


More power per roof with lower BOS & installation costs

This is your roof



This is your roof with tilted solar panels





Electrical Specifications*

Capacity rating	Pmax	100 W	90 W
Tolerance of Pmax	%	± 5%	± 5%
Module aperture area efficiency	%	12.7%	11.4%
Rated voltage	Vmpp	17.5 V	16.4 V
Rated current	Impp	5.7 A	5.5 A
Open circuit voltage	Voc	23.7 V	23.6 V
Short circuit current	Isc	6.4 A	6.3 A

^{*}Measured at (STC) Standard Test Conditions: 25°C, 1 kW/m² insolation, AM 1.5

Temperature Coefficients

	Maximum power	-0.43%/°C
	Maximum voltage	-0.38%/°C
	Open circuit voltage	-0.33%/°C
Ū	Short circuit current	-0.03%/°C

Mechanical Specifications

Dimensions	2013x494x3.5 mm (79x19.4x0.13 in)
Weight	2.2 kg (nominal weight with adhesive)
	2.2 kg/m² (nominal weight with adhesive)
Junction Box	Junction box with bypass diode
Cables	Locking
Front Sheet	ETFE
Solar Cells	36 CIGS cells (210x100 mm)
Frame	None

Operating Conditions

Temperature Range	-40°C to + 85°C
Maximum System Voltage	1000 V

Certifications* and Warranty**

UL 1703, IEC 61646 / 61730, JEC, ICC-ES AC365	
Materials and workmanship - 5 years	
Power output - 25 years (90% @ 10 yrs; 80% @ 25 yrs)	

^{*}Early 2011 **Contact GSE for complete warranty terms



Global Solar® is a leading manufacturer of Copper Indium Gallium diSelenide (CIGS) thin-film solar on a flexible substrate. With plants in Tucson (Arizona, USA) and Berlin (Germany), Global Solar® operates with a total of 75MW of production capacity. An average cell efficiency above 11% makes the company the world leader in CIGS efficiency on flexible substrate in large scale production. Global Solar® has set several records for CIGS cell efficiency above 15%. Global Solar's® high efficiency material is sold to customers worldwide in multiple applications, including flexible laminates, solar shingles, glass modules and portable chargers.

Call Global Solar® to find out if PowerFLEX™ BIPV is right for you.



Global Solar® Energy, Inc. 8500 South Rita Road

Tucson, Arizona, 85747, USA Phone: +1 (520) 546-6313 Fax: +1 (520) 546-6318 info@globalsolar.com www.globalsolar.com

Global Solar® Energy Deutschland GmbH

Am Studio 16 12489 Berlin, Germany Phone: +49 (30) 81879-9200 Fax: +49 (30) 81879-9222 info@de.globalsolar.com www.globalsolar.com