PowerFLEX™ BIPV - 250/275/300W

The Most Powerful Rooftops on the Planet

Designed specially for rooftops

Integrates with roofing surface
- No mounting hardware
- No roof penetrations
- No wind load
- Low profile

Flexible module
- Fits many roof types
- Durable, non-breakable

Light weight
- 3.3 kg/m^2 (0.68 lb/ft^2) with adhesive

More energy per roof

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

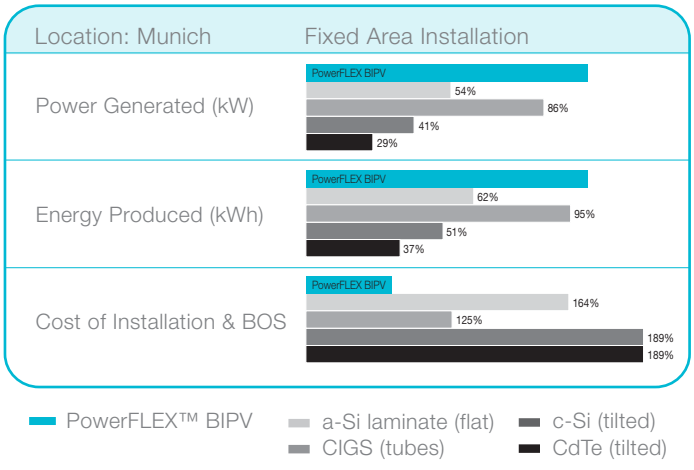
High performance
- Performs in all light conditions
- Shade tolerant

Covers entire roof area
- Lays flat. No tilt required
- Minimum module spacing required

Lower installed system costs

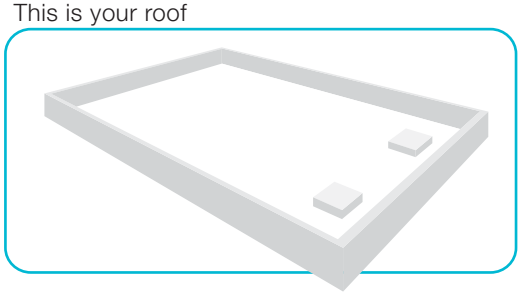
Large format module
- 250-300 Watts
- 5.7m x 0.49m dimensions
- 30% to 40% savings in BOS & installation costs

How PowerFLEX™ BIPV compares

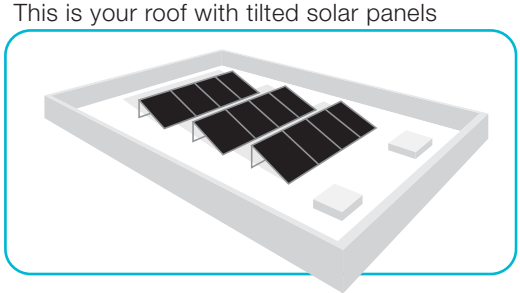


More power per roof with lower BOS & installation costs

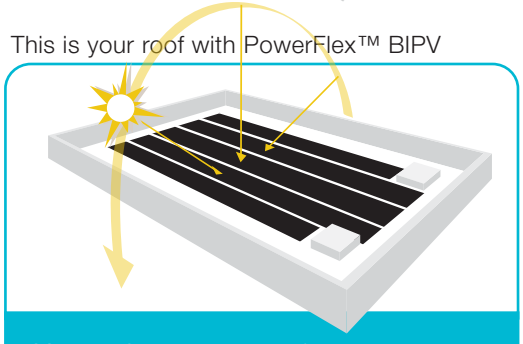
This is your roof



This is your roof with tilted solar panels



This is your roof with PowerFlex™ BIPV



More surface area covered
plus higher performance equals
more power and energy to you

PowerFLEX™ BIPV 250/275/300W

Electrical Specifications*

Capacity rating	Pmax	300 W	275 W	250 W
Tolerance of Pmax	%	+10 / -7%	+10 / -7%	+10 / -7%
Module aperture area efficiency	%	12.6%	11.5%	10.5%
Rated voltage	Vmpp	54.3 V	51.5 V	48.6 V
Rated current	Impp	5.5 A	5.3 A	5.1 A
Open circuit voltage	Voc	69.7 V	67.6 V	65.4 V
Short circuit current	Isc	6.4 A	6.3 A	6.2 A

Note 1: Standard Test Conditions (STC): Cell Temperature at 25°C; Solar irradiance intensity of 1000 W/m²; AM1.5 solar reference spectrum (ASTM E892)
Note 2: Average efficiency is calculated using the 2.38 m² aperture area of the module **Note 3:** Electrical parameters are +/-10% unless stated otherwise

Temperature Coefficients

Maximum power	Pmax	-0.43%/°C
Voltage at Maximum Power	Vmax	-0.38%/°C
Open circuit voltage	Voc	-0.33%/°C
Short circuit current	Isc	-0.03%/°C

Note: Relative to Standard Test Conditions (STC): Solar irradiance intensity of 1000 W/m²; AM1.5 solar reference spectrum (ASTM E892)

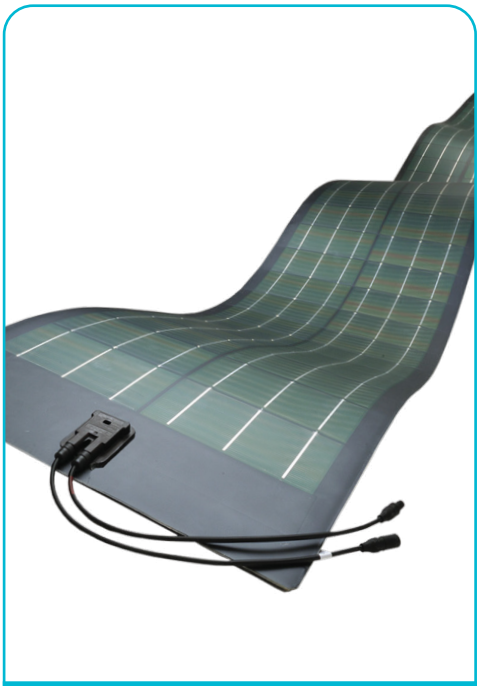
Low-Light Performance

Intensity	Relative Efficiency
1000 W/m²	100%
500 W/m²	99%
200 W/m²	91%

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

Mechanical Specifications

Dimensions	5745 x 494 x 3 mm (226 x 19.4 x <0.12 in)
Weight	7.2 kg without adhesive (2.5 kg/m²) ± 5% 9.3 kg with adhesive (3.3 kg/m²) ± 5%
Junction Box - Top Mounted	TE Connectivity SOLARLOK™ Micro Junction Box
Cables	4 mm² dual rated with SOLARLOK™ connectors
Junction Box - Bottom-mounted	MC-JM/FM (MC4 Connectors)
Front Sheet	Non-stick ETFE
Solar Cells	108 CIGS cells (210 x 100 mm)
Adhesive	ADCO HelioBond™ PVA 600BT butyl mastic
Hot Spot Protection	Bypass diodes at each cell; 1 at junction box
Materials	Lead free and exempt from RoHS requirements
Maximum Series Fuse Rating	10 Amp
Color Options	Black (B) or White (W) backsheet behind cells



Also available in
2.0m x 0.5m or 4.0m x 0.5m modules

Operating Conditions

Temperature Range	-40°C to + 85°C
Maximum System Voltage	1000VDC IEC, 600VDC UL

Certifications and Warranty*

EN 61646, EN 61730, UL 1703
Materials and workmanship - 5 years
Power output - 25 years (90% @ 10 yrs; 80% @ 25 yrs) Limited Warranty

*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 a plant in Tucson (Arizona, USA), Global Solar® operates with a total of 40MW of production capacity. An average cell efficiency above 12.5% makes the company the world leader in CIGS efficiency on flexible substrate in large scale production. Sold 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.

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