BIPVco
The Building Integrated Photovoltaic Company

FLEXTRON
Flexible Photovoltaic Roofing Solution

Flexible, Peel & Stick

BIPVco is a British manufacturer of solar integrated roofing products, utilising market leading technology and processes to make Building Integrated Photovoltaics (BIPV) from conventional building materials; the BIPV functionalised roof works as a building product, whilst converting the building envelope from a liability into an asset by using the roof to generate low carbon electricity.

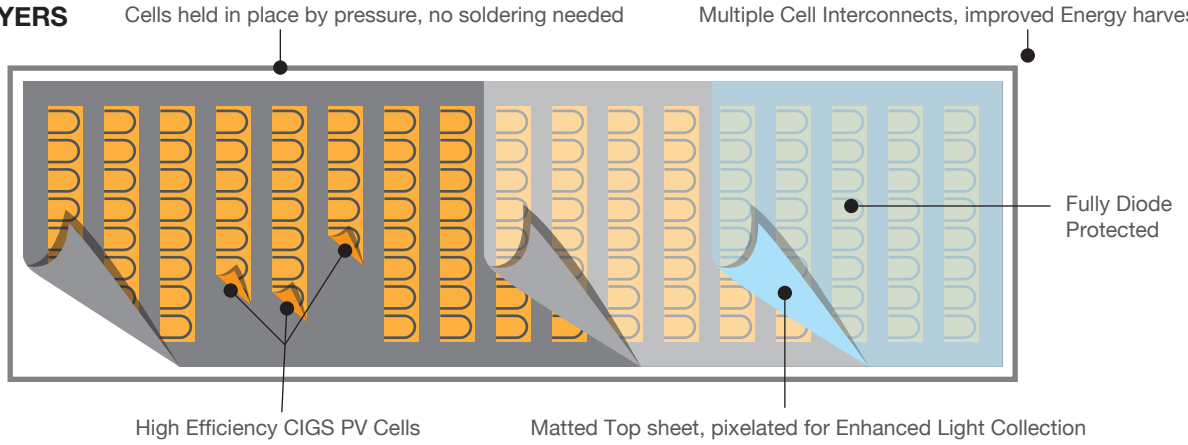
FLEXTRON is a 'peel and stick' module with integrated solar cells. Modules are attached to the approved substrate to create a roofing system that can be installed in the same way as a conventional roof.

FLEXTRON modules can be sold independently or with a roof system as a package.

Key Features

- Cell Efficiency, up to 17%
- Best in class thin film technology
- No ballast, penetrations or racking required
- Low installed weight of less than 3kg/m2
- Improved aesthetics
- Multiple Bypass Diode design to improve performance in shading/low light
- 5 year product warranty & 25 year performance warranty

MODULE LAYERS



FLEXTRON DATA SHEET

Technical Characteristics

Copper Indium Gallium Diselenide thin film flexible solar module desiged to be fitted to approved roofing panels. The modules are delivered with our front or rear mounted junction boxes with IP67 rated terminals housing assembly and quick connect terminals.

Electrical Performance at STC

Front Contact		F13F125B1	F15F245B1	F33F370B1
Rear Contact		F13R125B1	F15R245B1	F33R370B1
Nominal Power	[W]	125	245	370
Power Output Tolerance	[W]		+ / -3%	
Maximum Power Voltage	[V]	31.75	63.50	95.25
Maximum Power Current	[A]	3.86	3.86	3.86
Open Circuit Voltage	[V]	38.92	77.84	116.76
Short Circuit Current	[A]	4.38	4.38	4.38
Maximum Series Fuse Rating	[A]		10	
Maximum System Voltage	[V]		1000	
Cell Efficiency	%		15.5%	
Watts Per Square Metre	W/m²	128	132	139
Cells / Bypass Diodes Per Module		56 / 28	112 / 56	168 / 84

Standard Test Conditions (STC): 1000 W/m2, 25°C cell temperature, AM 1.5 spectrum.

Thermal Characteristics

NOCT	[°C]	56.2
Temperature Coefficient of P_{MPP}	[% / °C]	-0.268
Temperature Coefficient of V_{OC}	[% / °C]	-0.209
Temperature Coefficient of I_{SC}	[% / °C]	-0.0007
Module operating range	[°C]	-40 to +85

Physical & Mechanical Specifications

Length	mm	2609	5067	2609
Width	mm	358	358	990
Module Area	m²	0.934	1.81	2.58
Thickness, Maximum at J-Box, Module	mm		19	
Thickness, laminate without adhesive	mm		2.5	
Thickness, laminate with adhesive	mm		3.5	
Weight (Module without adhesive)	kg	2.08	4.05	5.76
Weight (Module with adhesive)	kg	3.56	6.91	9.84
Weight / Area (Module without adhesive)	kg / m²		2.23	
Weight / Area (Module with adhesive)	kg / m²		3.81	
Junction Box Type			IP67	
Cell Type		Copper Indium Gallium Diselenide (CIGS)		
Certification		IEC 61730-1, IEC 61730-2, IEC 61646, KIWA		
MCS		MCS 017 (TUV SUD / BABT)		
Quality System		ISO 9001 (SGS)		
Warranty		5 year product, 10 / 25 year performance		

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APPROVED PRODUCT MCS BABT

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