



BIPYC U
The Building Integrated Photovoltaic Company

DATA SHEET

NOVEMBER 2023

**FLEXIBLE, PEEL AND STICK** 

FLEXTRON is a lightweight, integrated peel-and-stick solar PV module.

FLEXTRON can be applied to a range of approved roofing substrates to create an integrated PV solar roof system.

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

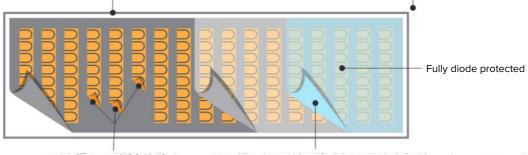


- Cell efficiency, up to 17%
- · Industry-leading thin film technology
- · No ballast, penetrations or racking required
- · Low installed weight of less than 3kg/m2
- · Improved aesthetics
- Multiple bypass diode design to improve performance in shading and low light
- 10-year product warranty & 25-year performance

## **MODULE LAYERS**

Cells held in place by pressure, no soldering needed

Multiple cell interconnects, improved energy harvesting



High efficiency CIGS PV Cells

Matted top sheet, pixelated for enhanced light collection

The information contained within this document is correct at the time of publication. BiPVco does not accept liability for errors or information found to be misleading. The company reserves the right to change product details and specifications without prior notice.













# TECHNICAL CHARACTERISTICS



#### **ELECTRICAL PERFORMANCE AT STC**

ONE CELL WIDTH MODULES - 356MM		MIN	MAX	
Module Length		mm	1030	5067
Nominal Power	Pmax	[W]	40	245
Power Output Tolerance		[W]	+ / - 5%	
Maximum Power Voltage	Vmp	[V]	11.00	61.60
Maximum Power Current	Imp	[A]	3.85	
Open Circuit Voltage	Voc	[V]	13.35	74.77
Short Circuit Current	Isc	[A]	4.42	
Maximum Series Fuse Rating		[A]	10	
Maximum System Voltage		[V]	1000	
Cell Efficiency		%	15.70%	
Watts Per Square Meter		W/m²	108	135
Cells / Bypass Diodes Per Module		20/10	112/56	

TWO CELL WIDTH MODULES - 674MM			MIN	MAX
Module Length		mm	592	3837
Nominal Power	Pmax	[W]	40	355
Power Output Tolerance		[W]	+ / - 5%	
Maximum Power Voltage	Vmp	[V]	11.00	92.40
Maximum Power Current	Imp	[A]	3.85	
Open Circuit Voltage	Voc	[V]	13.35	112.15
Short Circuit Current	Isc	[A]	4.42	
Maximum Series Fuse Rating		[A]	10	
Maximum System Voltage		[V]	1000	
Cell Efficiency		%	15.70%	
Watts Per Square Meter		W/m²	100	137
Cells / Bypass Diodes Per Module		20/10	168/84	

Standard Test Conditions (STC): 1000W/m2, 25  $^{\circ}$  C cell temperature, AM 1.5 spectrum.



THREE CELL WIDTH MODULES - 990MM		MIN	MAX	
Module Length		mm	504	2609
Nominal Power	Pmax	[W]	50	355
Power Output Tolerance		[W]	+ / - 5%	
Maximum Power Voltage	Vmp	[V]	13.20	92.40
Maximum Power Current	Imp	[A]	3.85	
Open Circuit Voltage	Voc	[V]	16.02	112.15
Short Circuit Current	Isc	[A]	4.42	
Maximum Series Fuse Rating		[A]	10	
Maximum System Voltage		[V]	1000	
Cell Efficiency		%	15.70%	
Watts Per Square Meter		W/m²	100	137
Cells / Bypass Diodes Per Module		24/12	168/84	

#### THERMAL CHARACTERISTICS

Nominal Power	[°C]	56.2
Temperature Coefficient of P	[%/°C]	-0.268
Temperature Coefficient of V	[%/°C]	-0.209
Temperature Coefficient of I	[%/°C]	-0.0007
Module Operating Range	[°C]	-40 to +84

### **PHYSICAL CHARACTERISTICS**

Thickness, maximum and J-Box, module	mm	19	
Thickness, laminate without adhesive	mm	2.5	
Thickness, laminate with adhesive	mm	3.5	
Weight/area (module without adhesive)	kg/m²	2.23	
Weight/area (module with adhesive)	kg/m²	3.81	
Junction box type	kg/m²	IP67	
Cell type	IP68		
Certification	IEC 61730-1, IED 61730-2, IEC 61646, KIWA		
MCS	MCS 017 (TUV SUD / BABT)		
Quality system	ISO 9001 (SGS)		
Warranty	10-year product warranty and 25-year performance		