

# The Vanopy's Flexible Solar Panel Specs

## MiaSolé FLEX SERIES -02N

### CIGS Flexible Modules: High Power Density in a Flexible Form Factor

#### KEY FEATURES

- ▶ Record efficiency levels in a CIGS flexible form factor
- ▶ Low installed weight at less than 2.9kg/m<sup>2</sup> (<0.6lb/ft<sup>2</sup>)
- ▶ No penetrations, ballast or racking required
- ▶ Applicable for high wind load and high seismic hazard areas
- ▶ Bypass diode every two cells reduces PV system shading losses
- ▶ Directly bonds to many approved surfaces

#### RELIABILITY AND SAFETY

- ▶ IEC 61646 & IEC 61730
- ▶ UL 1703

#### WARRANTY

- ▶ 5 year workmanship
- ▶ 10/25 year warranty against power loss

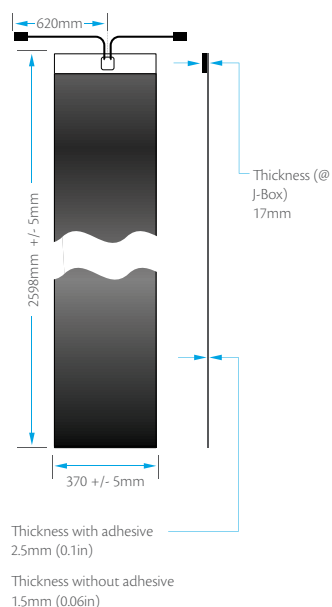


VANOPY

MiaSolé.

# MiaSolé FLEX SERIES

## FLEX-02N SERIES CIGS MODULE



### ELECTRICAL PERFORMANCE AT STC<sup>1</sup>

			FLEX-02 110N	FLEX-02 115N	FLEX-02 120N	FLEX-02 125N	FLEX-02 130N
Nominal Power	$P_{MPP}$	[W]	110	115	120	125	130
Aperture Efficiency	$\eta$	[%]	14.4%	15.0%	15.7%	16.4%	17.0%
Power Output Tolerance		[W]	+5/-0	+5/-0	+5/-0	+5/-0	+5/-0
Maximum Power Voltage	$V_{MPP}$	[V]	28.9	29.7	30.5	31.3	32.0
Maximum Power Current	$I_{MPP}$	[A]	3.81	3.87	3.93	4.00	4.06
Open Circuit Voltage	$V_{OC}$	[V]	37.1	37.6	38.1	38.6	39.1
Short Circuit Current	$I_{SC}$	[A]	4.50	4.52	4.53	4.55	4.57
Maximum Series Fuse Rating		[A]	10				
Maximum System Voltage (IEC/UL)		[V]	1000/600				

<sup>1</sup>Standard Test Conditions (STC): 1000 W/m<sup>2</sup>, 25°C cell temperature, AM 1.5 spectrum

### THERMAL CHARACTERISTICS

NOCT	[°C]	48
Temperature Coefficient of $P_{MPP}$	[%/°C]	-0.38
Temperature Coefficient of $V_{OC}$	[%/°C]	-0.28
Temperature Coefficient of $I_{SC}$	[%/°C]	0.008

### PHYSICAL AND MECHANICAL SPECIFICATIONS

Length	2598 mm (102.3 in)
Width	370 mm (14.6 in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in), 2.5 mm (.1 in)
Weight (Module without adhesive)	2.0 kg (4.3 lb)
Weight (Module with adhesive)	2.7 kg (5.9 lb)
Weight/Area (Module without adhesive)	2.0 kg/m <sup>2</sup> (0.4 lb/ft <sup>2</sup> )
Weight/Area (Module with adhesive)	2.9 kg/m <sup>2</sup> (0.6 lb/ft <sup>2</sup> )
Junction Box Type	IP68
Cable Connections	Amphenol H <sub>4</sub>
Cell Type	Copper Indium Gallium Diselenide (CIGS)
Warranty**	5 year workmanship; 10/25 year power output
Certifications	UL 1703, IEC 61646, IEC 61730
Packaging Info	15 modules per crate, 150 modules per pallet, 600 modules per 20' ISO container, 2400 modules per 40' ISO container

\*2.5 mm (0.1 in) for the rest of the module with adhesive

\*\*1.5 mm (0.06 in) for the rest of module without adhesive

\*\*Please see full warranty for details



2590 Walsh Avenue, Santa Clara, California 95051, USA  
1.408.919.5700 info@miasole.com www.miasole.com

MiaSolé and the MiaSolé logo are registered trademarks.  
©2016 MiaSolé. All rights reserved. Specifications included in this datasheet are subject to change without notice.  
MiaSolé Approved for Public Release.  
Part Number 990-187776-00\_4