

# MiaSolé FLEX SERIES—03NS

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

### KEY FEATURES

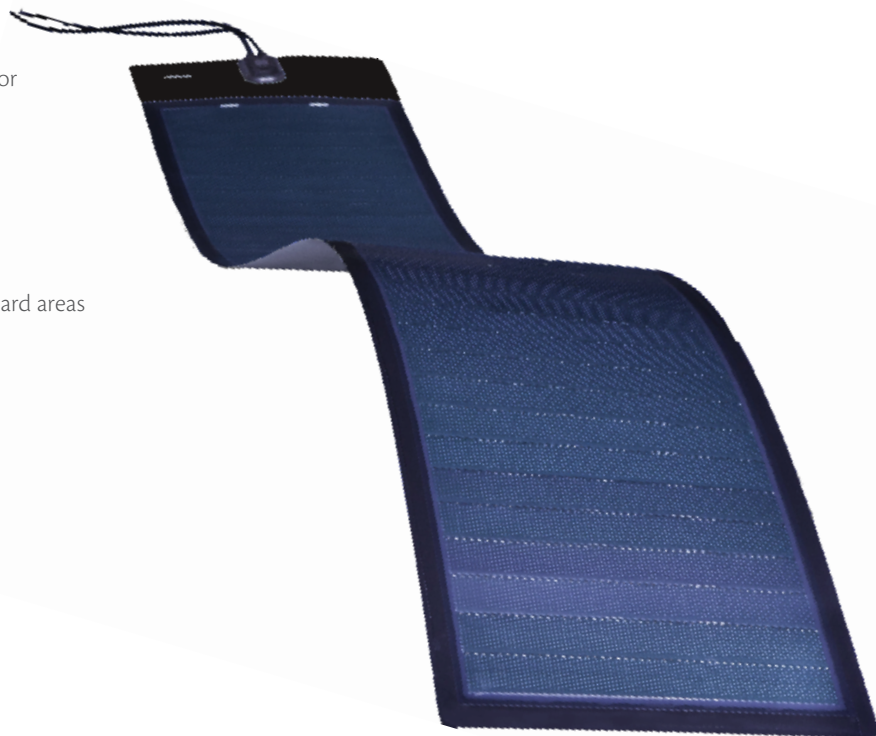
- ▶ Record efficiency levels in a CIGS flexible form factor
- ▶ Low installed weight at less than 2.2 kg/m<sup>2</sup> (<0.5 lb/ft<sup>2</sup>)
- ▶ No penetrations, ballast or racking required
- ▶ Applicable for high wind load and high seismic hazard areas
- ▶ Bypass diodes reduce PV system shading losses
- ▶ Directly bonds to many approved surfaces

### RELIABILITY AND SAFETY

- ▶ IEC 61646 & IEC 61730
- ▶ UL 1703

### WARRANTY

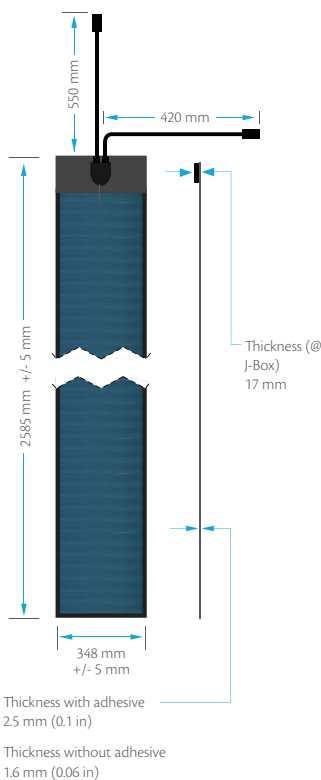
- ▶ 5 year workmanship
- ▶ 10/25 year warranty against power loss



# MiaSolé FLEX SERIES

## FLEX-03N SERIES CIGS MODULE

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



			FLEX-03 70NS	FLEX-03 75NS	FLEX-03 80NS	FLEX-03 85NS
Nominal Power	$P_{MPP}$	[W]	70	75	80	85
Aperture Efficiency	$\eta$	[%]	14.3%	15.3%	16.3%	17.3%
Power Output Tolerance		[W]	+5/-0	+5/-0	+5/-0	+5/-0
Maximum Power Voltage	$V_{MPP}$	[V]	18.3	18.8	19.3	19.8
Maximum Power Current	$I_{MPP}$	[A]	3.85	4.00	4.15	4.30
Open Circuit Voltage	$V_{OC}$	[V]	23.5	23.7	24.0	24.3
Short Circuit Current	$I_{SC}$	[A]	4.70	4.70	4.70	4.70
Maximum Series Fuse Rating		[A]	10			
Maximum System Voltage (IEC/UL)		[V]	1000/1000			

<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	1710 mm (67.3 in)
Width	348 mm (13.7 in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in), 2.5 mm (0.1 in)
Weight (Module without adhesive)	1.1 kg (2.4 lb)
Weight (Module with adhesive)	1.3 kg (2.9 lb)
Weight/Area (Module without adhesive)	1.8 kg/m <sup>2</sup> (0.4 lb/ft <sup>2</sup> )
Weight/Area (Module with adhesive)	2.2 kg/m <sup>2</sup> (0.5 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	10 modules per crate, 80 modules per pallet

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

\*\*1.6 mm (0.06 in) for the rest of module without adhesive

\*\*Please see full warranty for details



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