

# 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 61730-1 & -2, IEC 61701, IEC 62716
- ▶ UL 1703, ULC ORD C1703, UL 2703

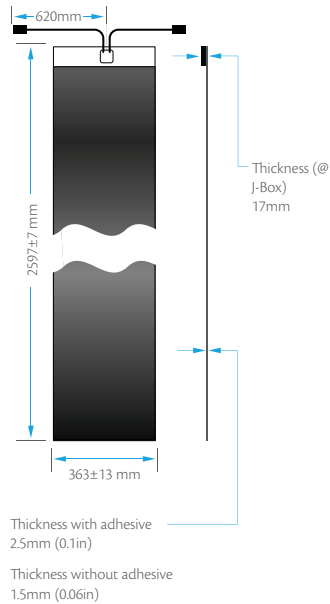
### WARRANTY

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



# 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	2597±7 mm (102.2±.3 in)
Width	363±13 mm (14.3±.5 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, ULC ORD C1703, UL 2703, IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA
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

FLEX modules are manufactured in the United States and China



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