

# MiaSolé FLEX SERIES -02NL

## 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 diodes reduce PV system shading losses
- ▶ Directly bonds to many approved surfaces

### RELIABILITY AND SAFETY

- ▶ IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA
- ▶ UL 1703, ULC ORD C1703, UL 2703

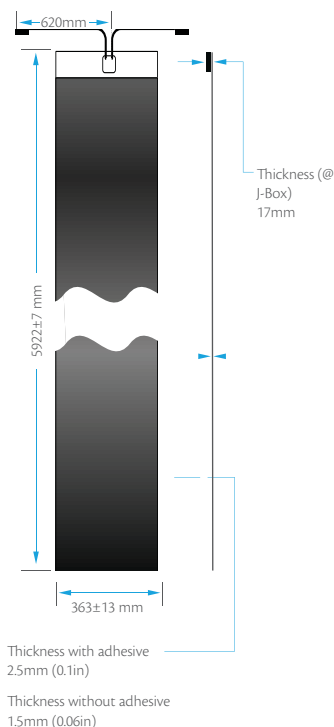
### WARRANTY

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



# MiaSolé FLEX SERIES

## FLEX-02NL SERIES CIGS MODULE



### ELECTRICAL PERFORMANCE AT STC†

			FLEX-02 265NL <sup>1</sup>	FLEX-02 275NL <sup>2</sup>	FLEX-02 285NL <sup>3</sup>	FLEX-02 295NL <sup>4</sup>	FLEX-02 305NL <sup>5</sup>
Nominal Power	$P_{MPP}$	[W]	265	275	285	295	305
Nominal Efficiency	$\eta$	[%]	14.7%	15.3%	15.8%	16.4%	16.9%
Power Output Tolerance		[W]	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0
Maximum Power Voltage	$V_{MPP}$	[V]	69.0	70.7	72.3	73.8	75.3
Maximum Power Current	$I_{MPP}$	[A]	3.84	3.89	3.94	4.00	4.05
Open Circuit Voltage	$V_{OC}$	[V]	87.9	89.0	90.0	91.0	92.1
Short Circuit Current	$I_{SC}$	[A]	4.51	4.52	4.54	4.55	4.57
Maximum Series Fuse		[A]	10				
Maximum System Voltage	IEC/UL	[V]	1000/600				

<sup>†</sup>Results based on preliminary testing

### 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<sup>1</sup>

Length	5922±7 mm (233.1±.3 in)
Width	363±13 mm (14.29±.5 in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in)
Weight (Module without adhesive)	4.3 kg (9.5 lb)
Weight (Module with adhesive)	5.9 kg (13.1 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 Technology Shenzhen (E346053)
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

<sup>†</sup>Results based on preliminary testing

\*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

#### Corresponding UL/IEC Model Numbers:

<sup>1</sup> FLEX-02 265N C132

<sup>2</sup> FLEX-02 275N C132

<sup>3</sup> FLEX-02 285N C132

<sup>4</sup> FLEX-02 295N C132

<sup>5</sup> FLEX-02 305N C132



Santa Clara, California, USA  
info@miasole.com

1.408.940.9658  
miasole.com

FLEX modules are manufactured in the United States and China

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