

MiaSolé FLEX SERIES—03NL

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

KEY FEATURES

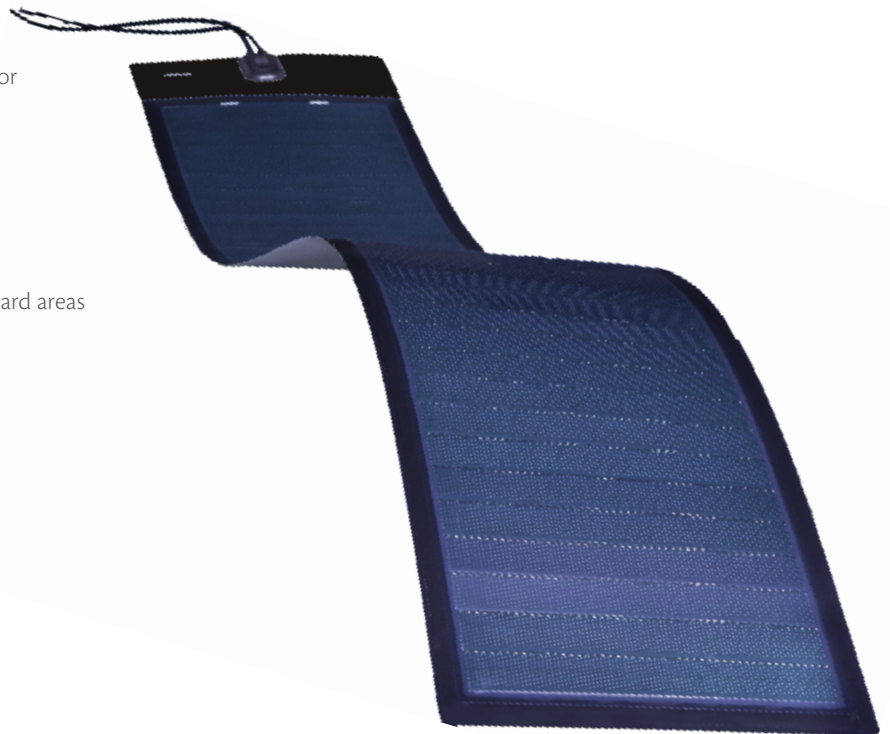
- ▶ Record efficiency levels in a CIGS flexible form factor
- ▶ Low installed weight at less than 2.1 kg/m² (<0.43 lb/ft²)
- ▶ No penetrations, ballast or racking required
- ▶ Applicable for high wind load and high seismic hazard areas
- ▶ Bypass diodes reduce PV system shading losses
- ▶ Directly bonds to many approved surfaces

RELIABILITY AND SAFETY

- ▶ IEC 61646, IEC 61730, IEC 62716, Australia CEC, IEC 61701 (Salt Spray)
- ▶ UL 1703, cUL 1703

WARRANTY

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



MiaSolé FLEX SERIES

FLEX-03NL SERIES CIGS MODULE

ELECTRICAL PERFORMANCE AT STC¹

			FLEX-03 260NL	FLEX-03 270NL	FLEX-03 280NL	FLEX-03 290NL	FLEX-03 300NL	FLEX-03 310NL
Nominal Power	P_{MPP}	[W]	260	270	280	290	300	310
Nominal Efficiency	η	[%]	14.4%	15.0%	15.5%	16.1%	16.7%	17.2%
Power Output Tolerance		[W]	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0
Maximum Power Voltage	V_{MPP}	[V]	67.3	68.3	69.3	70.3	71.3	72.3
Maximum Power Current	I_{MPP}	[A]	3.88	3.96	4.04	4.13	4.21	4.29
Open Circuit Voltage	V_{OC}	[V]	86.2	86.8	87.3	87.9	88.4	89.0
Short Circuit Current	I_{SC}	[A]	4.70	4.70	4.70	4.70	4.70	4.70
Maximum Series Fuse Rating		[A]	10					
Maximum System Voltage	IEC/UL	[V]	1000/1000					

¹Standard Test Conditions (STC): 1000 W/m², 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

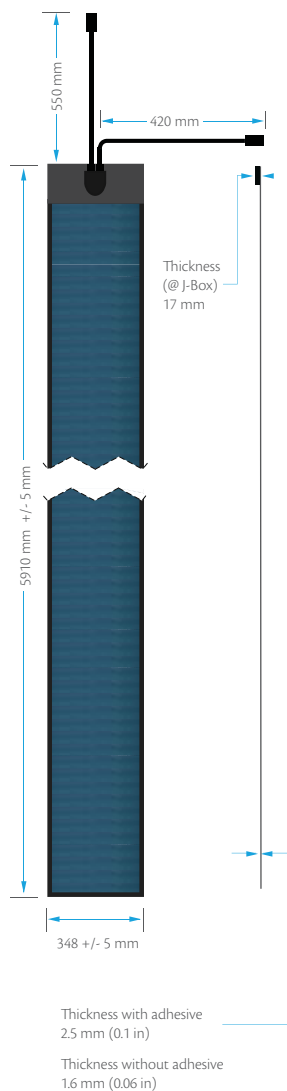
PHYSICAL AND MECHANICAL SPECIFICATIONS

Length	5910 mm (232.7 in, 19ft 4.7in)
Width	348 mm (13.7 in, 1ft 1.7in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in)
Weight (Module without adhesive)	3.6 kg (7.9 lb)
Weight (Module with adhesive)	4.3 kg (9.5 lb)
Weight/Area (Module without adhesive)	1.7 kg/m ² (<0.4 lb/ft ²)
Weight/Area (Module with adhesive)	2.1 kg/m ² (0.4 lb/ft ²)
Junction Box Type	IP68
Cable Connections	MC4 Compatible
Cell Type	Copper Indium Gallium Diselenide (CIGS)
Warranty**	5 year workmanship; 10/25 year power output
Certifications	UL 1703, IEC 61646, IEC 61730, cUL 1703, IEC 62716, Australia CEC, IEC 61701 (Salt Spray)
Packaging Info	5 modules per crate, 40 modules per pallet, 800 modules per 20' ISO container, 1760 modules per 40' ISO container

*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



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 990-191944-00_4