

MiaSolé FLEX SERIES—03NL 5.9 METER

.35m x 5.9m
270 – 320W

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

KEY FEATURES

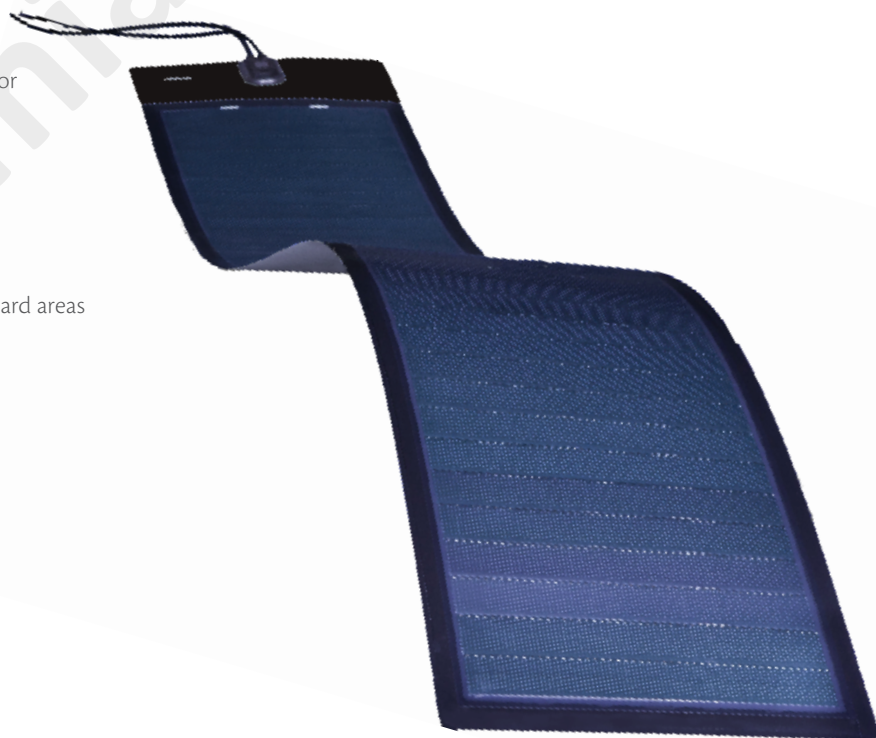
- ▶ Record efficiency levels in a CIGS flexible form factor
- ▶ Low installed weight at less than 2.4 kg/m² (<0.5 lb/ft²)
- ▶ No penetrations, ballast or racking required
- ▶ Applicable for high wind load and high seismic hazard areas
- ▶ Bypass diodes reduce PV system shading losses
- ▶ Directly bonds to many approved surfaces

RELIABILITY AND SAFETY

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

WARRANTY

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



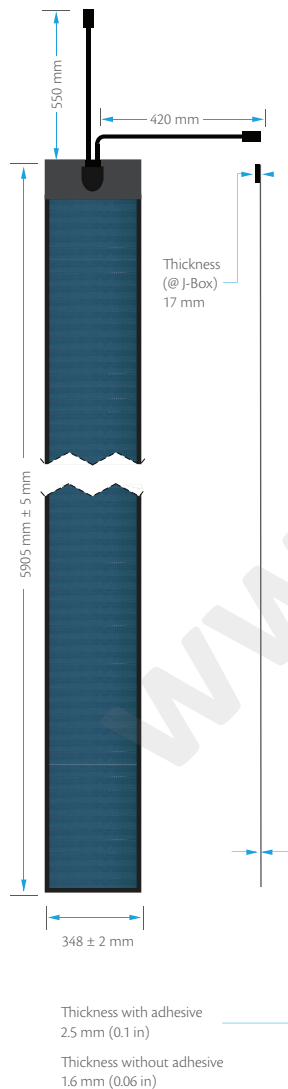
MiaSolé FLEX SERIES

FLEX-03NL 5.9 METER SERIES CIGS MODULE

ELECTRICAL PERFORMANCE AT

			FLEX-03 260NL	FLEX-03 270NL	FLEX-03 280NL	FLEX-03 290NL	FLEX-03 300NL	FLEX-03 310NL	FLEX-03 320NL	FLEX-03 330NL
Nominal Power	P_{MPP}	[W]	260	270	280	290	300	310	320	330
Nominal Efficiency	η	[%]	14.4%	15.0%	15.5%	16.1%	16.7%	17.2%	17.8%	18.3%
Power Output Tolerance		[W]	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0	+10/-0
Maximum Power Voltage	V_{MPP}	[V]	67.2	69.0	70.8	72.6	74.5	76.3	78.1	80.0
Maximum Power Current	I_{MPP}	[A]	3.89	3.93	3.96	4.00	4.03	4.07	4.10	4.14
Open Circuit Voltage	V_{OC}	[V]	85.6	87.1	88.7	90.2	91.8	93.3	94.9	96.4
Short Circuit Current	I_{SC}	[A]	4.66	4.62	4.59	4.55	4.51	4.48	4.44	4.41
Maximum Series Fuse Rating		[A]	10							
Maximum System Voltage	IEC/UL	[V]	1000/1000							

*Standard 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	5905 mm (232.5 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)	3.4 kg (7.5 lb)
Weight (Module with adhesive)	4.9 kg (10.8 lb)
Weight/Area (Module without adhesive)	1.6 kg/m ² (0.3 lb/ft ²)
Weight/Area (Module with adhesive)	2.4 kg/m ² (0.5 lb/ft ²)
Junction Box Type	IP68
Cable Connections	Helios H4 (S&F)
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, 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



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