

MiaSolé FLEX SERIES—TRANSPORTATION

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

The FLEX Series module is a CIGS-based flexible thin-film solar module that is thin, flexible, shatterproof and provides one of the highest efficiencies on the market today, at up to 17%.

FLEX modules provide the following benefits for transportation:

- ▶ Adhere directly to the roof with no roof penetrations, eliminating the risk of leaks
- ▶ Thin modules offer superior wind resistance
- ▶ Shatterproof and durable
- ▶ Low installed weight at less than 2.0 kg/m² (<0.5 lb/ft²)
- ▶ Bypass diodes reduce PV system shading losses

RELIABILITY AND SAFETY

- ▶ IEC 61646, IEC 61730, IEC 62716, Australia CEC
- ▶ UL 1703, cUL 1703
- ▶ UL Class A over TPO - slope up to 2.5"

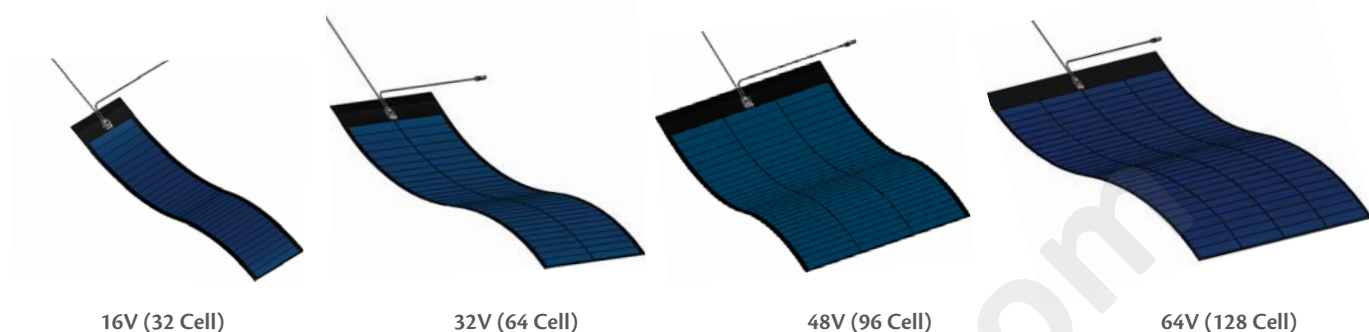
WARRANTY

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



MiaSolé FLEX SERIES

FLEX-03 TRANSPORTATION CIGS MODULE



ELECTRICAL PERFORMANCE AT STC¹

			16V (32 Cells)	32V (64 Cells)	48V (96 Cells)	64V (128 Cells)
Aperature Efficiency	η	[%]	16.5%	16.5%	16.5%	16.5%
Nominal Power	P_{MPP}	[W]	72	144	216	288
Maximum Power Voltage	V_{MPP}	[V]	17.22	34.43	51.64	68.86
Maximum Power Current	I_{MPP}	[A]	4.17	4.17	4.17	4.17
Open Circuit Voltage	V_{OC}	[V]	21.4	42.9	64.3	85.8
Short Circuit Current	I_{SC}	[A]	4.70	4.70	4.70	4.70
Dimensions	mm	[M]	1525 x 363	1525 x 677	1525 x 993	1525 x 1293

¹Standard Test Conditions (STC): 1000 W/m², 25°C cell temperature, AM 1.5 spectrum

PHYSICAL AND MECHANICAL SPECIFICATIONS

Thickness, Maximum at J-Box*, Module	17 mm (0.7 in), 2.5 mm (0.1 in)
Weight (Module without adhesive)	5.1 kg (11.1 lb)
Weight (Module with adhesive)	6.2 kg (13.7 lb)
Weight/Area (Module without adhesive)	1.7 kg/m ² (0.3 lb/ft ²)
Weight/Area (Module with adhesive)	2.0 kg/m ² (0.4 lb/ft ²)
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, IEC 61646, IEC 61730, UL Class A over TPO - slope up to 1", cUL 1703, IEC 62716, Australia CEC

*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

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

Made in the USA and China



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